



Drug Recognition Expert 7-Day School

# INSTRUCTOR GUIDE

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# DRE

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## ADMINISTRATOR GUIDE

# Drug Recognition Expert Course

## Instructor Guide

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#### 02/2023 Curriculum

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## A. ACKNOWLEDGEMENTS

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## B. PREFACE

The DRE course is a series of three training phases that, collectively, prepare police officers and other qualified persons to serve as DREs. Throughout this guide, the terms “drug recognition expert” and “DRE” are used to designate an individual who is specially trained and has continued training to conduct examinations of suspected drug-impaired drivers. This training, developed as part of the Drug Evaluation and Classification (DEC) Program under the auspices and direction of NHTSA and IACP has experienced remarkable success since its inception in the 1980s.

As in any educational training program, an instruction guide is considered a “living document” that is subject to updates and changes based on advances in technology and science. A thorough review is made of information by the IACP Technical Advisory Panel (TAP) with contributions from many sources in health care science, toxicology, optometry, jurisprudence, and law enforcement. Based on this information, any appropriate revisions and modifications in background theory, facts, examination, and decision-making methods are made to improve the quality of the instruction as well as the standardization of guidelines for the implementation of the DRE training curriculum. The reorganized guides are then prepared and disseminated, both domestically and internationally, to the DEC Program State Coordinators. Changes will take effect after approval by TAP, unless otherwise specified or when so designated.

The material in this curriculum is to help DREs interpret what is most likely to be seen when performing a drug influence evaluation. When it comes to the signs and symptoms of drug impairment, what is expected to be seen does not guarantee every indicator will be present during each drug influence evaluation. There may be variations due to individual reaction, dose taken, and drug interactions.

**Prior to initiating training, all States and equivalents must ensure they comply with DRE section six in the International Standards of Impaired Driving Programs.**

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- Pupil Size Chart (Session 5)
- Understanding the Terms “Normal” vs. “Average” in the DRE Opinion and Decision Making Process (Session 6)
- Questions for Physiological Pursuit (Session 6)
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  - Lucy Ludes
  - Dudley R. Downers
  - Mickey Flynn
- Classification Exemplars (Session 10)
  - Crystal Rocke
  - Ira Tweeker
  - Christy Crank
- Eye Examinations Data Sheet (Session 11)
- Comparison of DRE Symptomatology with Cross Section of Drug Symptomatology Sources (Session 13)
- Classification Exemplars (Session 14)
  - Brad Tripp
  - Angel Trumpet
  - Candi R. Flipping
- Drug Influence Evaluation Exemplars (Session 15)
  - Adams
  - Baker
  - Charles
  - Dodge
  - Edwards
- Classification Exemplars (Session 16)
  - Delbert R. Dexing
  - Shelly Sherms
  - K.J. Krystal
- Classification Exemplars (Session 17)
  - Charley J. Schmack
  - Hara Wynn
  - Ozzie Cottin
- Drug Influence Evaluation Exemplars (Session 18)
  - Martinez
  - Groves
  - Hatos
  - Jackson
  - Stevens

- Classification Exemplars (Session 19)
  - Walter L. Whippets
  - Jack B. Poppers
  - Misty K. Huffer
- Vital Signs Examinations Data Sheet (Session 20)
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  - Mary Jane Blunt
  - Bud Toker
  - Sharon A. Duby
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  - Brown
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## A. PURPOSE OF THIS DOCUMENT

This Administrator Guide provides an introduction to and an overview of the 7-day classroom training course on DEC Program. This course is perhaps better known as **The DRE School**. It is the second in a series of three phases of training that, collectively, prepare police officers and other qualified persons to serve as DREs.

Throughout this guide, the term “DRE” is used to designate an individual who is specially trained to conduct evaluations of drug-impaired drivers. In some participating agencies, the term stands for “Drug Recognition Expert”; in others, it means “drug recognition evaluator”, and in others, “drug recognition examiner”. In addition, some agencies use the term “DRT” – Drug Recognition Technician – and others prefer “DRS” – Drug Recognition Specialist. All of these and similar terms are acceptable and considered synonymous. IACP has adopted “DRE” as the generic title for those who have completed the training and been certified by their state and credentialed by the IACP.

It is worth repeating that this 7-day DRE School is neither the beginning nor the end of an officer’s preparation to serve as a DRE. No one can be admitted to this course unless he or she has successfully completed the program titled “Preliminary Training for Drug Evaluation and Classification” (the “Pre-School”). The fact that an officer successfully completes this 7-day program does not qualify him or her to serve as a DRE. The officer must also complete the Certification Phase. Under in-person observation and supervision of duly authorized DRE instructors, the DRE trainee conducts evaluations of persons suspected of drug impairment.

This 7-day course, then, is only the middle phase of DRE training, but it is a very important phase. It is during this phase that the participant will learn to conduct systematic and standardized evaluations of persons suspected of drug impairment to determine:

- 1) Whether the subject actually is impaired; and if so,
- 2) Whether the impairment is drug or medically related, and if drugs,
- 3) The category or combination of categories of drugs that is the likely cause of the observed impairment.

This Administrator Guide is concerned only with the second phase of training. During this phase, the participant becomes familiar with the various types of drugs that people use and – too often – abuse. The participant learns how the different drugs affect people and especially how they affect a person’s ability to operate a vehicle. The participant learns how the different drugs manifest their presence in an individual. In particular, the participant learns how to examine a subject’s eyes and vital signs to detect evidence of various kinds of drugs.

By the time the participant successfully completes the training, he or she is able to conduct a complete drug influence evaluation. He or she is able to describe the evidence that the evaluation will disclose to help determine if the subject suffers a medical condition or if a subject is under the influence of a particular category or combination of categories of drugs.

This Administrator Guide is intended to facilitate planning and implementation of the DEC Program training. The Guide overviews the 7-day course of instruction and the documents and other materials that make up the curriculum package for the course. It describes course administrative requirements and offers guidelines for discharging those requirements

satisfactorily. It outlines the preparatory work that must be accomplished by a law enforcement agency before the course can be offered to that agency's personnel. And it outlines the follow up work that should be undertaken to ensure that the highest possible quality of instruction continues to be delivered during all phases of a DRE's training.

Before addressing the details of this classroom training in the DEC Program procedures, a few words are appropriate concerning the procedures themselves. In particular, it is important to make clear what the DEC Program procedures are not:

- These procedures are not a field test or a pre-arrest investigative tool. It is highly unlikely that they could be conducted with adequate care in an outdoors, scene-of-investigation setting. In any event, they are not designed to provide probable cause for a subject's arrest. Rather, they are a post arrest investigative tool, intended for application to arrestees for whom there is at least some articulable suspicion of drug use or drug impairment.
- These procedures do not, generally speaking, disclose what specific drug or drugs the subject has used. What the procedures will do, however, is disclose (with reasonable accuracy) the category or combination of categories that produce distinguishable indicators. Some of the categories include relatively few individual drugs. Others include many drugs. The DRE can tell, usually, if a particular category is present. Except in special circumstances, he or she cannot tell which individual drug of that category is in question. For example, a DRE usually will not be able to distinguish between:
  - A person impaired by Diazepam from a person impaired by Secobarbital
  - A Codeine-impaired subject and someone under the influence of Vicodin
  - Someone under the influence of Peyote and someone under the influence of Psilocybin
- The procedures are not a substitute for chemical testing. Laboratory analysis of toxicological samples by qualified personnel remains an important step in the acquisition of evidence in drug related cases. The DEC Program procedures provide articulable bases for requesting a subject to supply a toxicological sample, guide the laboratory technicians toward the general categories of drugs they can expect to find in the sample, and disclose important evidence to supplement the laboratory analysis. But the DRE does not eliminate the need for the laboratory technician.

None of the foregoing remarks is intended to lessen the importance of the DEC Program procedures. A cadre of skilled DREs definitely will enhance a department's ability to recognize and convict persons under the influence of drugs. The DRE is a very important "tool" in law enforcement's impaired driving enforcement toolbox.

One final word of introduction: the primary orientation of this course is toward traffic safety. Although the skills acquired in this training have many non traffic applications, it is the traffic applications that will receive most of the participant's attention. Persons under the influence of drugs endanger society in many ways, but the danger they cause as drivers of motor vehicles is the principal focus of this course. This course assumes the DRE will devote his or her skills in large part to conducting evaluations of suspected impaired drivers.

## B. Overview of the Course

### Intended Audience

This training definitely is not intended for just anyone. The candidate DRE isn't just any qualified person, but one who already has some very special knowledge and skills and a very definite commitment to DWI and drugged driving enforcement.

The following lists the prerequisites and desirable characteristics of the participants for whom this training is intended, of the departments that employ those participants, and of the communities served by those departments.

### Participant Prerequisites

To be considered a qualified candidate for this training, the proposed participant must meet the qualifications listed in the International Standards for Impaired Driving Programs DRE 1.1, and must:

- Have achieved the learning objectives of the Pre-School
- Have demonstrated proficiency in the use of the Standardized Field Sobriety Tests (SFSTs)
- Have good communications skills and a demonstrated ability to testify in court
- Be willing to continue to serve as a DRE for at least two years following completion of the training

It is highly desirable, although not essential, that the proposed participant have prior knowledge of drug symptomatology and experience in impaired driving enforcement. Some states may have additional prerequisites.

### Purpose of the Course

The ultimate goal of this course is to help prevent crashes, deaths, and injuries by improving enforcement of drug-impaired driving offenses.

### Benefits of the Training

The classroom training course is designed to help the participants achieve four goals and eight specific learning objectives.

Goals: The participant who successfully completes this phase of DRE training will be able to:

- Determine if the subject is impaired
- Determine if the impairment is resulting from an injury, illness, or drugs
- Determine, if drug-related, what category (or categories) of drugs is (or are) the likely cause of the subject's impairment
- Progress to the Certification Phase of the training

Objectives: In order to pass this course, the participant must be able to:

- Describe the involvement of drugs in impaired-driving incidents
- Name the seven categories of drugs and recognize their effects
- Describe and properly administer the psychophysical examinations used in the DEC Program procedures
- Document the results of the DRE evaluation
- Properly interpret the results of the evaluation
- Prepare a narrative drug influence report
- Discuss appropriate procedures for testifying in a DRE case
- Maintain an up to date relevant Curriculum Vitae (CV)

## Course Content

The course focuses primarily on two topics:

- 1) The examinations, observations, measurements, etc. that constitute the DEC Program procedures
- 2) The nature, effects, signs, and symptoms of each of the seven categories of drugs and of the combination of categories

More specifically, the course provides formal presentations on:

- Drugs in Society and in Motor Vehicle Operation
- Development and Effectiveness of the DEC Program Procedures
- An Overview of Physiology and Drugs
- An Overview of the DEC Program Procedures
- Eye Examinations (HGN, Vertical Gaze Nystagmus (VGN), Lack of Convergence (LOC), Estimation of Pupil Size, and Pupil Reaction to Light)
- Vital Signs Examinations (Pulse Rate, Blood Pressure, and Temperature)
- DRE Reference Resources
- The Seven Categories of Drugs (Central Nervous System (CNS) Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, and Cannabis)
- Drug Combinations
- Drug Influence Evaluation (DRE Facesheet and Narrative Report)
- Case Preparation and Testimony
- Curriculum Vitae (CV) Preparation and Maintenance

## Training Activities

Formal presentations, or lectures, occupy approximately one-half of the course. These presentations cover the content topics outlined earlier. The presentations are supplemented by video segments and by reading material contained in the Participant Guide.

Most of the remainder of the course is devoted to demonstrations and hands on practice of the DEC Program procedures. Participants practice in teams, developing and sharpening their skills in administering eye examinations, vital signs examinations, and other components of the DRE process. They also participate in several test interpretation practice sessions in which they review sample DRE reports and identify the category or categories of drugs responsible for the evidence described in the reports.

The remaining major activity is testing of the participants' knowledge and proficiency. A written knowledge examination is administered at the end of the course. An assessment of each participant's skill in administering the DEC Program procedures is conducted during the next to last session.

The International Association of Chiefs of Police (IACP) Technical Advisory Panel (TAP) understands that restrictions in place in response to pandemic outbreaks present unique challenges to agencies and academies regarding training and certification. However, because of the unique activities and learning elements inherent to the DRE Preliminary School and the DRE 7-Day School, all of this learning must occur in-person (not virtually).

## Length of Training

This classroom training course occupies seven training days. The course is divided into 30 sessions and two optional review sessions, conducted after normal class hours. No participant can progress to the Certification Phase of training until he or she has attended all sessions. In the event that some emergency causes a participant to miss all or a portion of a session, after-hours tutoring must be conducted for that participant prior to his or her enrollment in Certification Training.

## DRE Schedule

The titles, durations and sequence of the sessions are given below. (The times listed are based upon a class size of 20 participants. Actual times may vary.)

Session	Title	Duration
1	Introduction and Overview	1 Hour, 50 Minutes
2	Drugs in Society and in Motor Vehicle Operation	50 Minutes
3	Development and Effectiveness of the DEC Program	50 Minutes
4	Overview of Drug Recognition Expert Procedures	2 Hours, 30 Minutes
5	Eye Examinations	1 Hour, 45 Minutes
6	Physiology and Drugs: An Overview	2 Hours
7	Examination of Vital Signs	2 Hours
8	Demonstration of the Evaluation Sequence	1 Hour, 45 Minutes
9	Central Nervous System Depressants	1 Hour, 45 Minutes
10	Central Nervous System Stimulants	1 Hour, 45 Minutes
11	Practice: Eye Examinations	1 Hour
12	Alcohol Workshop	1 Hour, 45 Minutes
13	DRE Reference Sources	30 Minutes
14	Hallucinogens	1 Hour, 45 Minutes
15	Practice: Test Interpretation	45 Minutes
16	Dissociative Anesthetics	1 Hour, 40 Minutes
17	Narcotic Analgesics	3 Hours
<b>Review</b>	Mid-Course Review	2 Hours, 30 Minutes
18	Practice: Test Interpretation	45 Minutes
19	Inhalants	1 Hour, 35 Minutes
20	Practice: Vital Signs Examinations	1 Hour
21	Cannabis	1 Hour, 25 Minutes
22	Overview of Signs and Symptoms	1 Hour
23	Curriculum Vitae Preparation and Maintenance	50 Minutes
24	Drug Combinations	1 Hour, 50 Minutes
25	Practice: Test Interpretation	45 Minutes
26	Preparing the Narrative Report	50 Minutes
27	Practice: Test Administration	1 Hour, 30 Minutes
28	Case Preparation and Testimony	1 Hour, 30 Minutes
<b>Review</b>	Review of the DRE School	2 Hours, 30 Minutes
29	Classifying a Suspect (Role Play)	2 Hours
30	Transition to the Certification Phase of Training	2 Hours, 30 Minutes

**NOTE: All learning objectives of this course are absolutely essential. No shortcuts are permissible.**

A model schedule for the 7-day course is given on the next page. An alternate model schedule combining the Pre-School and 7-Day School is also included.

Other approved alternative schedules are available through the IACP.

## THE DRE SCHOOL – SCHEDULE (page 1)

WEDNESDAY	THURSDAY	FRIDAY
0800-0850 SESSION 1: Intro & Overview	0800-0850 SESSION 5: (cont)	0800-0850 SESSION 9: CNS Depressants
0850-0900 BREAK	0850-0900 BREAK	0850-0900 BREAK
0900-1000 SESSION 1: (cont)	0900-1005 SESSION 6: Physiology and Drugs	0900-1000 SESSION 9: (cont)
1000-1010 BREAK	1005-1015 BREAK	1000-1010 BREAK
1010-1030 Pre-Test	1015-1110 SESSION 6: (cont)	1010-1100 SESSION 10: CNS Stim.
1030-1120 SESSION 2: Drugs In Soc.	1110-1120 BREAK	1100-1110 BREAK
1120-1130 BREAK	1120-1200 SESSION 7: Vital Signs	1110-1200 SESSION 10: (cont)
1130-1230 SESSION 3: Development of DEC Program	1200-1300 LUNCH	1200-1300 LUNCH
1230-1330 LUNCH	1300-140 SESSION 7: (cont)	1300-1400 SESSION 11: Eye Examinations
1330-1440 SESSION 4: Overview of DEC Procedures	1400-1410 BREAK	1400-1415 BREAK
1440-1450 BREAK	1410-1430 SESSION 7: (cont)	1415-1700 SESSION 12: Alcohol Workshop
1450-1550 SESSION 4: (cont)	1430-1515 SESSION 8: Demo of the Evaluation Sequence	
1550-1600 BREAK	1515-1530 BREAK	
1600-1630 SESSION 4: (cont)	1530-1605 SESSION 8: (cont)	
1630-1730 SESSION 5: Eye Examinations	1605-1635 QUIZ NUMBER ONE	

## THE DRE SCHOOL – SCHEDULE (page 2)

MONDAY	TUESDAY	WEDNESDAY	THURSDAY
0800-0830 SESSION 13: DRE Reference Sources	0800-0820 Quiz Number Two	0800-0930 SESSION 24: Drug Combinations	0800-1000 Final Exam
0830-0915 SESSION 14: Hallucinogens	0820-0850 SESSION 17: (cont.)	1005-1050 SESSION 25: Practice Test Interpretation	1000-1015 BREAK
0915-0930 BREAK	0850-0900 BREAK	1050-1100 BREAK	1015-1200 SESSION 29: Classifying a Suspect-Role Play
0930-1030 SESSION 14: (cont.)	0900-0945 SESSION 18: Practice Test Interpretation	1100-1150 SESSION 26: Narrative Report	1200-1300 LUNCH
1030-1045 BREAK	0945-1020 SESSION 19: Inhalants	1150-1210 Quiz Number Four	1300-1600 Administration of the Test Validation
1045-1130 SESSION 15: Test Interpretation	1020-1030 BREAK	1210-1310 LUNCH	1600-1630 SESSION 30: Transition to Certification Training
1130-1200 SESSION 16: Dissociative Anesthetics	1030-1130 SESSION 19: (cont.)	1310-1440 SESSION 27: Practice Test Administration	1630-1700 Course Critique, Closing Remarks, and Certificates
1200-1300 LUNCH	1130-1145 BREAK	1440-1450 BREAK	
1300-1410 SESSION 16: (cont.)	1145-1300 SESSION 20: Vital Signs and Exams	1450-1535 SESSION 28: Case Preparation and Testimony	
1410-1420 BREAK	1300-1400 LUNCH	1535-1545 BREAK	
1420-1515 SESSION 17: Narcotics	1400-1530 SESSION 21: Cannabis	1545-1630 SESSION 28: (cont.)	
1515-1530 BREAK	1530-1540 BREAK	1630-1700 Quiz Number Five	
1530-1630 SESSION 17: (cont.)	1540-1640 SESSION 22: Overview of Signs and Symptoms	1700-1800 BREAK	
1630-1730 SESSION 17: (cont.)	1640-1650 BREAK	1800-2000 Optional Review – Session #2	
1730-1800 BREAK	1650-1730 SESSION 23: C.V. Preparation and Maintenance		
1800-2030 Optional Review – Session #1	1730-1800 QUIZ NUMBER THREE		

**ALTERNATE SCHEDULE #1: COMBINED PRE-SCHOOL AND 7-DAY SCHOOL**

Time	Session Title	D-7-day DRE School P-Pre-School	Duration
8:00A – 10:00A	Introduction and Overview	<b>D</b>	2 Hours
10:00A – 11:00A	Drugs and Society	<b>D</b>	1 Hour
11:00A – 12:00P	Development and Effectiveness	<b>D</b>	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 3:30P	Overview of DRE Classification Procedures	<b>D</b>	2 Hours, 30 Minutes
3:30P – 5:00P	Psychophysical Tests	<b>P</b>	1 Hour, 30 Minutes
<b>END OF DAY</b>			
8:00A – 11:00A	Eye Examinations	<b>D</b>	3 Hours
11:00A – 12:00P	Vital Signs	<b>P</b>	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:30P	Vital Signs (cont.)	<b>P</b>	1 Hour, 30 Minutes
2:30P – 4:00P	Overview of Signs and Symptoms	<b>P</b>	1 Hour, 30 Minutes
4:00P – 5:00P	Alcohol as a Drug	<b>P</b>	1 Hour
<b>END OF DAY</b>			
8:00A – 9:30A	Demonstration of the Evaluation Sequence	<b>D</b>	1 Hour, 30 Minutes
9:30A – 12:00P	Physiology of Drugs	<b>D</b>	2 Hours, 30 Minutes
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:30P	Central Nervous System Depressants	<b>D</b>	1 Hour, 30 Minutes

Time	Session Title	D-7-day DRE School P-Pre-School	Duration
2:30P – 5:00P	Alcohol Workshop (All Instructors)	P	2 Hours, 30 Minutes
<b>END OF DAY</b>			
8:00A – 9:00A	Central Nervous System Depressants (cont.)	D	1 Hour
9:00A – 11:30A	Central Nervous System Stimulants	D	2 Hours, 30 Minutes
11:30A – 12:00P	Quiz Number One	D	30 Minutes
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Eye Examinations	D	1 Hour
2:00P – 2:30P	DRE Reference Sources	D	30 Minutes
2:30P – 5:00P	Review and Pre-School Final Examination	P	2 Hours, 30 Minutes
<b>END OF DAY</b>			
8:00A – 10:00A	Hallucinogens	D	2 Hours
10:00A – 11:00A	Practice Test Interpretation	D	1 Hour
11:00A – 12:00P	Dissociative Anesthetics	D	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Dissociative Anesthetics (cont.)	D	1 Hour
2:00P – 4:00P	Mid-Course Review (All Instructors)	D	2 Hours
<b>END OF DAY</b>			
8:00A – 11:00A	Narcotic Analgesics	D	3 Hours
11:00A – 12:00P	Practice Test Interpretation	D	1 Hour

Time	Session Title	D-7-day DRE School P-Pre-School	Duration
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Inhalants	D	1 Hour
2:00P – 3:00P	Practice Vital Signs All Instructors	D	1 Hour
3:00P – 4:00P	Quiz Number Two	D	30 Minutes
<b>END OF DAY</b>			
8:00A – 11:00A	Cannabis	D	3 Hours
11:00A – 12:00P	Overview of Signs and Symptoms	D	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:00P	Curriculum Vitae		1 Hour
2:00P – 3:00P	Drug Combinations	D	1 Hour
3:00P – 3:30P	Quiz Number Three	D	30 Minutes
3:30P – 6:00P	Alcohol Workshop All Instructors	D	2 Hours, 30 Minutes
<b>END OF DAY</b>			
8:00A – 9:00A	Drug Combinations	D	1 Hour
9:00A – 10:00A	Practice Test Interpretation	D	1 Hour
10:00A – 11:00A	Preparing the Narrative Report	D	1 Hour
11:00A – 12:00P	Practice Test Administration All Instructors	D	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 2:30P	Case Preparation and Testimony	D	1 Hour, 30 Minutes

Time	Session Title	D-7-day DRE School P-Pre-School	Duration
2:30P – 3:00P	Quiz Number Four	<b>D</b>	30 Minutes
3:00P – 5:00P	Final Course Review All Instructors	<b>D</b>	2 Hours
<b>END OF DAY</b>			
8:00A – 11:00A	Final Examination All Instructors	<b>D</b>	3 Hours
11:00A – 12:00P	Transition to Certification Training	<b>D</b>	1 Hour
12:00P – 1:00P	Lunch		1 Hour
1:00P – 3:00P	Classifying a Suspect (Role Play) All Instructors	<b>D</b>	2 Hours
3:00P – 4:00P	Graduation		2 Hours

## C. Overview of the Curriculum Package

In addition to this Administrator Guide, the curriculum package consists of the following documents and materials:

- Instructor Guide
- Audio Visual Aids
- Participant Manual
- Set of Drug Evaluation Exemplars

### Instructor Guide

The Instructor Guide is a complete and detailed outline of what the course covers and how it is to be taught. It is organized into 30 sessions with each session corresponding to one of the training sessions and two optional review sessions.

Each session consists of a cover page, an outline page, and the lesson plans themselves.

The cover page presents the session title and the estimated instructional time required to complete the session.

The outline page presents the training objectives for the session, i.e., exactly what the participant will be able to do as a result of successfully completing the session. The outline page also lists the major content segments of the session, as well as the principal instructional activities that take place during the session.

The lesson plans themselves are arranged in a standard, content/instructional notes format. The “content” of each page outlines what is to be taught.

**The Instructional Notes on each page are listed in bold italicized print and serve as reminders of important information the instructor should elicit during the training and relate to the participants.** These notes define how the instructor is to present the material and involve the participants in the presentation and ensure that they understand and assimilate the material.

Typical Instructional Notes include:

- Indications of what visual aids are to be used and when they are to be used
- Questions to be posed to participants to involve them actively in the presentation
- Indications of points requiring special emphasis
- Guidelines for conducting particular demonstrations to clarify how drug evaluations are to be performed
- Specifications of group exercises and other methods of involving participants more actively in the lesson

The Instructor Guide serves, first, as a means of preparing the instructor to teach the course. The instructor should review the entire guide, become familiar with the content, and develop a clear understanding of how the course fits together. The instructor is also expected to become thoroughly familiar with each session assigned to teach, to prepare the visual aids, to assemble all teaching aids and instructional equipment referenced in the lesson plans, and to augment the instructional notes as necessary to ensure that the instructor's teaching style is applied to the content.

Subsequently, the Instructor Guide serves as an in-class reference document for the instructor to help him or her maintain the sequence and pace of presentations and other learning activities.

It is worth emphasizing that the Instructor Guide does not contain the text of a speech. Although its content information is fairly well detailed and comprehensive, it is not to be read verbatim to the participants. This training program is intended to be a dynamic, highly interactive learning experience in which the participants are active participants. It should not be permitted to degenerate into a series of mere lectures.

### Audio Visual Aids

Four types of audio visuals are used in this course:

- Wall charts
- Dry-erase board and/or easel/easel pad presentations
- "Visuals" (PowerPoint)
- Videos

The wall charts are permanently displayed items or information, intended to depict major themes and segments of the training. The wall charts should have text large enough so they may be viewed from any seat in the classroom.

Wall charts should be placed high on the far left and right sides of the classroom's front wall, or on the side walls, where they will be visible without distracting from the screen or dry-erase board.

The dry-erase board and/or easel/easel pad presentations, as recommended in the lesson plans, are self-explanatory.

The "visuals" (PowerPoint slides) are simple displays of graphic and/or narrative material that emphasize key points and support the instructor's presentation. Each "visual" is numbered to indicate the session to which it belongs and its sequence within that session. For example, Visual 7 3 is the third slide used in Session 7.

The videos include a number of segments that demonstrate the DEC Program procedures and the kinds of evidence associated with various categories of drugs. These segments feature subjects who are actually under the influence of drugs.

### Participant Manual

The Participant Manual is the basic textbook and study source for the course. It provides a session-by-session summary of the subject matter and a list of study topics to help the participants assimilate the material.

During the course, the Participant Manual will be primarily useful for previewing the sessions and for studying the subject matter in preparation for the final knowledge and proficiency examinations. After the classroom training is completed, the participant will find the guide is a useful reference document, especially during the Certification Phase of training.

Participants are expected to be familiar with all of the contents of their Participant Manual. Instructors must encourage the participants to study the guide carefully as they progress through the school. Note: Participants are expected to be able to answer the “test your knowledge” review questions that appear at the end of various sections of their Participant Manual.

### Drug Symptomatology Matrix

The Drug Symptomatology Matrix outlines the expected results of the drug influence evaluation for each drug category. Note: For purposes of this course, “symptomatology” and “symptomology” are interchangeable and are referring to effects of drugs on the human body. A completed Matrix is located in Session 24.

Instructors are encouraged to facilitate the participants’ learning of the Matrix throughout this training course. During the Certification Phase, it is expected that the participants recreate the Matrix in its entirety for the Certification Knowledge Exam.

### Set of Drug Evaluation Exemplars

The exemplars are the documented results of simulated DEC Program evaluations. A standardized reporting form is used for the exemplars. This is the same form the participants use as a recording instrument when they practice administering and documenting the DEC Program evaluation.

The exemplars support learning activities that take place during eleven sessions:

- Sessions 9, 10, 14, 16, 17, 19, and 21 cover the seven individual drug categories. Exemplars have been prepared for each session to illustrate the kinds of indicators that can be expected when the evaluation is conducted on a person under the influence of that category. For example, the exemplars designed for Session 9 illustrate the results of typical

evaluations of persons under the influence of CNS Depressants. These exemplars will be found in the Instructor Guide and the Participant Manual.

- Session 15, 18 and 25 are “Test Interpretation Practice” sessions. Participants work in small groups reviewing exemplars and determining, from the documented “evidence” they contain, what category or categories of drugs are present in each case. These exemplars are found in the Instructor’s Guide and the Participant Manual.
- Session 29 is the “role play” practice session. Instructors serve as “test subjects.” Participants work in small groups administering the entire drug influence evaluation to each instructor. Each instructor uses an exemplar to inform the participants as to what data they should record at each stage of the evaluation. For example, as part of the evaluation, the participants will actually measure blood pressure. The instructor will observe the participants’ technique and offer constructive criticism. The instructor will inquire as to the pressure readings that the participants obtain. But the instructor will tell the participants to record the blood pressure readings documented on his or her assigned exemplar. Subsequently, the participants must review their completed exemplars and determine what category or categories of drugs the instructor was “simulating.” These exemplars are found at the end of the lesson plans for Session 29.

## D. General Administrative Requirements

### Facility Requirements

Several types of facilities are needed to support this training. First, a standard classroom is required. This should provide comfortable seating and adequate desk/table space for each participant and should be equipped with a large screen, audio-visual projectors, dry-erase boards and/or easel/easel pads. All visuals should be readily and fully visible from all seating locations. The classroom should also provide adequate unobstructed space to allow the instructors to demonstrate evaluation procedures. When possible, the participants’ tables/desks should be arranged to maximize the learning environment.

A large, open area also is needed to support the hands-on practice sessions. Ideally, it should be possible to control the lighting in this practice facility to the point of total darkness, to demonstrate and practice key elements of the DEC Program procedures that take place in a darkroom.

A separate room must be available, ideally adjacent to the practice facility. This room will serve as the “staging area” for the volunteer drinkers who will participate in the alcohol workshop (Session 12).

Another separate room is recommended to serve as the instructors’ “office,” i.e., the place where they can prepare for their teaching assignments, store materials, etc.

## Special Instructional Equipment and Personnel

For the alcohol workshop, volunteer drinkers must be utilized, and they shall not be members of the class. There should be one volunteer for every three or four participants. Sufficient alcohol, mixers, cups, napkins, ice, etc. must be provided. Adequate breath testing devices must be available to provide for monitoring volunteers' BACs. At least three people must be assigned to monitor and escort the volunteers. Ideally, each volunteer should have his or her own monitor.

Note: Every volunteer must read and sign the "Statement of Informed Consent" prior to receiving any alcohol. Any person who refuses to sign the Statement cannot serve as a volunteer drinker.

For the hands-on practice sessions involving eye examinations, at least one Angle of Onset template should be provided for every two participants. The template should display angles between 30 and 45 degrees, in 5-degree increments. An example template is provided in the Pre-School guide, Session 4.

At the beginning of DRE training, it is essential that every participant have his or her own full complement of DRE equipment. This equipment must include: a sphygmomanometer, stethoscope, penlight, thermometer and probe covers, schematic light, protective gloves, and pupillometer. The pupillometer should be capable of measuring pupil diameters across the range from 1.0 mm to 10 mm, in one half millimeter increments. In addition, access to an ultraviolet light is recommended.

## Instructor Qualifications

The principal instructors for this course must be State-certified, IACP-credentialed DRE instructors under DRE section two in the IACP International Standards for Impaired Driving Programs. Instructors with special credentials for certain blocks of instruction may be enlisted to supplement the DRE instructors. For example, a physician would be well qualified to teach Session 7 (Examination of Vital Signs) and a prosecutor might be a good choice as the instructor for Session 26 (Preparing the Narrative Report) and Session 28 (Case Preparation and Testimony).

In addition to their occupational competencies, all instructors must be qualified trainers. They need to understand, and be able to apply, fundamental principles of instruction.

Perhaps most importantly, they need to be competent coaches. Much of this classroom training is devoted to hands-on practice. The quality of coaching will have a major impact on the success of those practice sessions. For the hands-on practice sessions, there should be at least one instructor for every three participants to permit adequate monitoring and coaching.

## Class Size Considerations

The recommended maximum class size for this course is 24 participants. Larger classes make it difficult to devote sufficient attention to each participant to ensure that he or she develops evaluation skills to a level sufficient to progress to the Certification Phase.

## E. Course Planning and Preparation Requirements

The first step in course planning is to select appropriate candidate DREs in accordance with State Coordinator's guidelines. Make sure each candidate satisfies the participant prerequisites outlined in Section A. Many jurisdictions have initiated an application process to assist in the selection of candidates.

The second step will be for the State Coordinator to appoint a course manager as defined in the IACP International Standards for Impaired Driving Programs and schedule the course. States with well-established DEC Programs are expected to plan and manage their own DRE Schools. IACP supplies digital guides for printing and other standard instructional materials at no charge. For jurisdictions whose DEC Programs are new or developing, NHTSA/IACP may assist with the planning and management of the schools.

The next step is to provide the Preliminary Training for the Drug Evaluation and Classification Program to the candidate DREs. The NHTSA/IACP has developed a curriculum to support preliminary training for potential DREs. The State Coordinator is responsible for appointing a course manager and scheduling this training for candidate DREs. This training enables the candidates to become familiar with, and to start to develop skills in, the vital signs examinations and other elements of the DEC Program procedures.

In general, this classroom training course is conducted at facilities operated by the host agency or at other suitable locations. All DRE Pre-Schools and 7-day Schools must be authorized by that State's DEC Program Coordinator.

## F. Examinations of Participants' Knowledge

It is very important to test the participants' knowledge and skill development. Testing in this course is conducted for two principle reasons: (1) to assess participants' progress and identify deficiencies that need correction; and, (2) as a learning activity for the participants. Knowledge testing starts in the very first session of the course, when a Pre-Test is given. After the participants have finished the Pre-Test, they can use it as a study guide throughout the course. Five formal quizzes also will be given. In addition, a self-study quiz is provided in the Instructor Guide and Participant Manual.

The most important knowledge test is the Final Examination. It is given on the final day of the School. The participant must achieve a score of at least 80% in order to progress to Certification Training. If a participant does not score a minimum of 80% , DRE standard 1.08 of the IACP International Standards for Impaired Driving Programs permit one additional attempt. The additional attempt must be an examination approved for that purpose by IACP and cannot

occur sooner than two weeks, nor later than four weeks, following completion of the DRE School.

A DRE skill examination occurs during the certification phase of DRE training. A Proficiency Examination Checklist (found in Session 30 of this Guide) will be used to evaluate the participants' performance.

## G. Post-Classroom Requirements

Upon completion of the classroom training, participants will transition to the Certification Phase. During Certification Training, the participants are observed and supervised by certified DRE instructors. Under the IACP International Standards for certification, each participant must participate in conducting at least 12 drug evaluations, at least 6 of which he or she must personally administer.

The participant must also identify at least three of the seven drug categories in his or her evaluations. Toxicological specimens must be submitted from at least nine of the examined subjects and analysis of those specimens must corroborate the participant's opinion for at least 75% of the specimens submitted. Most importantly, the numbers and percentages cited here are minimum requirements: no participant can be certified as a DRE until two instructors attest that he or she qualifies for certification.

The appointed Course Manager will compile the information as outlined in the course manager training guide and as needed to support an assessment of the classroom training each time it is conducted. This assessment will include a summary of the (anonymous) Participant's Critique Forms collected during the course.

## H. Guidelines for Preparing Post Course Evaluation

A standard NHTSA/IACP participant's critique form is provided to document participant's feedback of course content, activities, and instructors.

## I. Requests for Information, Assistance or Materials

Departments interested in this program should contact their State Highway Safety Office (SHSO) or the individual State DEC Program Coordinator. Formal requests for this training should come from the SHSO and should be directed to their NHTSA Regional Office or IACP.

# 1 DRE

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## INTRODUCTION AND OVERVIEW

### LEARNING OBJECTIVES

- State the objectives and goals of the course
- Outline the major course content
- Outline the schedule of major course activities
- Outline the participant guide content and organization
- Recognize course administrative matters

### CONTENTS

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### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant-Led Presentations
- Knowledge Examination
- Reading Assignments

### MATERIALS NEEDED FOR THIS SESSION

- Pre-tests
- Participant guide with current training schedule



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

## A. Welcoming Remarks and Goals



***Welcoming Remarks: Welcome to the second phase of Drug Recognition Expert (DRE) training. The DRE training focuses on a set of examination procedures, or steps, that make up the drug influence evaluation. The DRE School provides detailed explanations of the evaluation procedures, careful demonstrations of these procedures, both "live" and via video, and ample opportunities for the participants to practice administering the evaluations.***

***Introductions - Representatives of Host Agencies and Other Dignitaries:***

***Dignitary introductions and their welcoming remarks must be kept brief; no more than 10-minutes can be devoted to this.***

***Faculty Introductions: Lead off instructors introduce the instructor faculty. State names, agency affiliations, and experience. Ask each instructor to stand as they are introduced.***

Session 1: Introduction

## Learning Objectives

- State objectives and goals of the course
- Outline major course content
- Outline schedule of major course activities
- Outline Participant Manual content and organization
- Recognize course administrative matters

DRE 1-3

**Slide 3.**



*During this session, participants will demonstrate current knowledge of basic concepts and terminology relevant to the Drug Evaluation and Classification (DEC) Program process.*

---

## B. Housekeeping

Session 1: Introduction

## Housekeeping

- Paperwork
- Mandatory attendance
- Breaks
- Facility
- Interruptions
  - All electronic devices off



DRE 1-4

**Slide 4.**

Attendance is mandatory at all sessions of this school.



***Paperwork - Completion of registration forms, travel vouchers, etc.***

***Attendance - If a participant misses any portion of this school, he or she must make up the deficiency via after-hours tutoring before beginning certification training.***

***Breaks - Time allotted for breaks and reconvening.***

***Facility - Locations of restrooms, lunchrooms, etc.***

***Interruptions - No texting or email monitoring. Turn off all electronic devices.***

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## C. Participant Introductions

Session 1: Introduction

### Participant Introductions

- Name
- Agency affiliation
- Experience

DRE 1-5

**Slide 5.**



***Whenever possible, consider using creative and innovative icebreaking techniques.***

***At a minimum, instruct each participant to stand and give their name, agency affiliation, and experience.***



*The term "DRE" is used to designate an individual who is specially trained to conduct evaluations of suspected drug-impaired subjects. In some agencies, the term stands for "drug recognition expert," in others, it means "drug recognition examiners," and in others "drug recognition evaluator." In addition, some agencies use the terms "DRT" (for drug recognition technician) or "DRS" (drug recognition specialists). All of these are acceptable and synonymous, but for this training program, the standard term is DRE.*

You have all completed the DRE Pre-School and we look forward to working with you to successfully complete phase two of the certification process. Upon completion of this course, you will be fully proficient in checking vital signs, conducting careful examinations of the eyes, administering divided attention tests, and, in general, carrying out the procedural steps of the DRE's job.

There is one essential learning experience this classroom training cannot provide – the opportunity to practice examining subjects who are under the influence of drugs other than alcohol. For this reason, this classroom training only constitutes Phase II in the process of developing DRE skills. Phase III of the training (which commences upon the successful completion of this course) involves hands-on practice of examining persons who are under the influence of drugs.

Although this DRE School will not conclude with the participant's immediate certification as a DRE, successful completion of this classroom training is highly important. No one can advance to Certification Training until they demonstrate a mastery of basic knowledge of drug categories and their effects on the human mind and body and of the basic skills in administering and interpreting the examinations in the DEC Program process.

Session 1: Introduction

## Course Goal

Prevent crashes, deaths and injuries caused by drug-impaired drivers



DRE 1-7

**Slide 7.**

The ultimate goal of the DEC Program and of this course of instruction is to "help you prevent crashes, deaths, and injuries caused by drug-impaired drivers." No one knows precisely how many people operate motor vehicles while under the influence of drugs or how many crashes, deaths, and injuries these people cause. But even the most conservative estimates suggest drug-impaired drivers kill thousands of people each year and seriously injure tens of thousands of others.



Session 1: Introduction



DRE 1-8

**Slide 8.**



***Play MADD video "No More Victims" (approximately 10 minutes).***

Session 1: Introduction

## Incidence of Drug-Impaired Driving

California - A study of young male drivers fatally injured in crashes found 51% had used drugs other than alcohol



DRE 1-9

**Slide 9.**

A study in California of young (15-34 years old) male drivers killed in crashes in the early 1980's revealed more than half (51%) tested positive for drugs other than alcohol. The most prevalent drug (other than alcohol) was Cannabis at 37%. 30 percent of all cases had both alcohol and Cannabis.



**Source:**

Compton, R. & Anderson, T. (1985). *The Incidence of Driving Under the Influence of Drugs*. National Highway Traffic Safety Administration, Staff Technical Report: DOT HS 806 900

Session 1: Introduction

## Drugged-Driving Incidence

**Maryland Shock Trauma Center Study (1985-1986)**

32% of drivers treated at the Shock Trauma Center had used marijuana prior to their crashes



DRE 1-10

**Slide 10.**

Maryland Shock Trauma Center study (1985 – 1986) states that 32% of drivers treated at the Shock Trauma Center had used marijuana prior to their crashes.

Session 1: Introduction

### University of Tennessee Study (1988)

40% of drivers receiving emergency treatment had used drugs prior to the crash



DRE 1-11

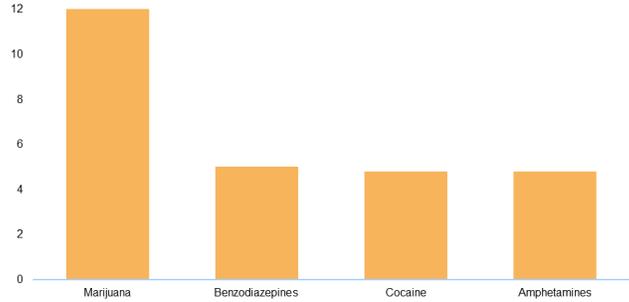
**Slide 11.**

University of Tennessee study (1988) states that 40% of drivers treated at Trauma Center for crash injuries had drugs other than alcohol in them.

Session 1: Introduction

### Washington State (2006)

Results of blood and/or urine tests from 370 fatally-injured drivers :



Drug	Number of Drivers
Marijuana	12
Benzodiazepines	5
Cocaine	4.8
Amphetamines	4.8

DRE 1-12

**Slide 12.**

According to Washington State (Schwilke, et al., 2006), the results of tests of blood and/or urine from 370 fatally injured drivers revealed Marijuana was the most encountered drug (12 %) followed by Benzodiazepines (5%), Cocaine (4.8%), and Amphetamines (4.8%)



In 2015 nationwide Fatality Analysis Reporting System (FARS) annual report file, 57.0% of the fatally injured drivers were tested for drugs.

Of those tested, no drugs were detected in 55.4%, a drug in the FARS list was found in 34.3%, some other drug in 7.4%, and test results were unknown for 2.9%. Over one-third – 35.6% – of the identified drugs were Marijuana in some form, followed by amphetamine at 9.3%.



**Source:**

*Fatality Analysis Reporting System (FARS)*. (n.d.). Retrieved May 17, 2022, from NHTSA: <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

Session 1: Introduction

## Drugged-Driving Incidence

**2013:**

- 12% of high school seniors admitted driving under the influence of Marijuana within the past two weeks
- 9.9 million persons age 12 or older reported driving under the influence of illicit drugs

DRE 1-14

**Slide 14.**

In 2013, 12% of high school seniors admitted driving under the influence of marijuana within the past two weeks and 9.9 million persons age 12 or older reported driving under the influence of illicit drugs.



**Sources:**

Johnston L.D., & O'Malley P.M. (2013) Driving after drug or alcohol use by US high school seniors, 2001-2011. *American Journal of Public Health, 103*(11), 2027-2034. 10.2105/AJPH.2013.301246

Substance Abuse and Mental Health Services Administration, Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings, NSDUH Series H-48, HHS Publication No. (SMA) 14-4863. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014.

Session 1: Introduction

## DEC Program

- Based on solid medical and scientific facts
- Laboratory and field research
- Elite international program
- Share information
- Maintain quality

DRE 1-15

**Slide 15.**

The DEC Program is based on solid medical and scientific facts. The validity of the DEC Program has been tested in carefully controlled research in both the laboratory and the field. By enrolling in DRE training, you have become part of an elite international program. DREs form one of the tightest knit fraternities in law enforcement. DREs from many agencies and from many parts of the country work closely together to share information and other resources and to maintain the highest standards of quality. Each of you have been selected to receive this training because you were recognized by your department as a skilled and dedicated law enforcement professional. Your instructors welcome you to this school and are proud to have you here and we're sure you are proud to be here.

---

## D. Training Goals



The goals of the classroom training, from the viewpoint of the law enforcement agencies participating in it, are threefold: 1) To help police officers acquire the knowledge and skills needed to distinguish individuals under the influence of alcohol, other drugs, combinations of alcohol and other drugs, or who are suffering from an injury or illness; 2) To enable police officers to identify the broad category or categories of drugs inducing the observable signs of impairment manifested by an individual; and, 3) To qualify police officers to progress to Certification Training.

---

## E. Training Objectives

Session 1: Introduction

### Classroom Training Objectives

- Describe involvement of drugs in impaired-driving incidents
- Name the seven drug categories and recognize their effects
- Describe and properly conduct the drug influence evaluation
- Document results of the drug influence evaluation



DRE 1-17

**Slide 17.**

Session 1: Introduction

### Classroom Training Objectives

- Properly interpret the results of the evaluation
- Prepare a narrative for the Drug Influence Report
- Discuss appropriate procedures for testifying in typical DRE cases
- Prepare and maintain a relevant and up-to-date Curriculum Vitae (CV)



DRE 1-18

**Slide 18.**



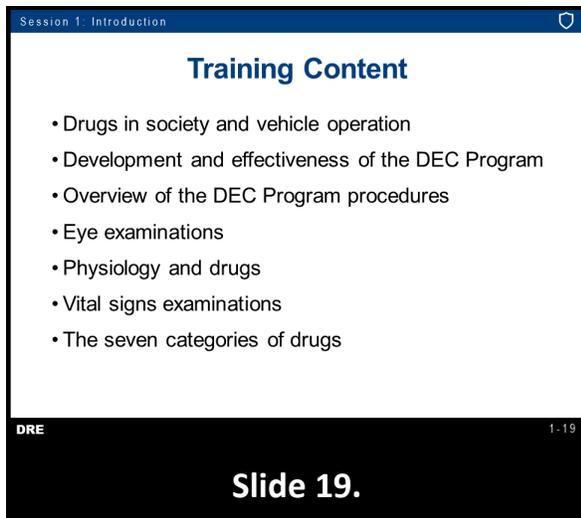
***Refer to wall charts when previewing the content topics. Give a brief overview of the contents covered under each major topic.***

When you successfully complete this training, you will be able to:

- Describe the involvement of drugs in impaired-driving incidents
- Name the seven categories of drugs and recognize their effects
- Describe and properly conduct the drug influence evaluation
- Document the results of the drug influence evaluation
- Properly interpret the results of the evaluation
- Prepare a narrative for the Drug Influence Report
- Discuss appropriate procedures for testifying in typical DRE cases
- Prepare and maintain a relevant and up-to-date Curriculum Vitae (CV).

Before you can be certified as a DRE, you will have to demonstrate that you can do each of these things.

## F. Overview of Course Content and Schedule



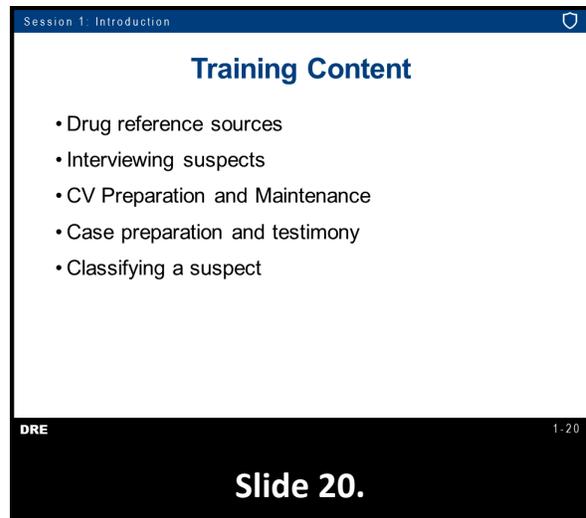
Session 1: Introduction

### Training Content

- Drugs in society and vehicle operation
- Development and effectiveness of the DEC Program
- Overview of the DEC Program procedures
- Eye examinations
- Physiology and drugs
- Vital signs examinations
- The seven categories of drugs

DRE 1-19

**Slide 19.**



Session 1: Introduction

### Training Content

- Drug reference sources
- Interviewing suspects
- CV Preparation and Maintenance
- Case preparation and testimony
- Classifying a suspect

DRE 1-20

**Slide 20.**

The course will cover the following topics:

- Drugs in Society and in Vehicle Operation
- Development and Effectiveness of the DEC Program
- Overview of the DEC Program Procedures
- Eye Examinations (a major component of the DEC Program procedures)
- Physiology and Drugs
- Vital Signs Examinations (a major component of the DEC Program procedures)
- The Seven Categories of Drugs
- Drug Reference Sources
- Interviewing Suspects (a major component of the DEC Program procedures)
- CV Preparation and Maintenance
- Case Preparation and Testimony
- Classifying a Suspect (interpreting and documenting the results of an evaluation)



***Solicit questions concerning the course content major topics.***

## G. Course Activities



***Refer to the wall chart outlining practice sessions.***

Hands-on practice is the principal learning activity of the course.

*Eye Examinations Practice:* Horizontal Gaze Nystagmus (HGN), Vertical Gaze Nystagmus (VGN), Lack of Convergence (LOC), Pupil Size, and Reaction to Light.

*Alcohol Workshop:* Psychophysical testing practice and Volunteer drinkers from outside the class will be recruited for this session.

*Practicing interpretation of the examination results:* Several sessions will be devoted to this allowing the participants to review drug evaluation reports and identify the probable drug category or combinations of categories.

*Vital signs examinations:* Pulse, Blood Pressure, Body Temperature.

*Practicing administration of the drug influence evaluation process:* Several sessions will be devoted to this. In each, participants will practice administering the drug influence examinations to each other. No hands-on practice with actual drugged subjects is included in the classroom portion of DRE training.

*Simulated drug-impaired subject examinations:* Participants will work in teams to conduct and document examinations of instructors who will be simulating the indicators of drug-impaired subjects.



***Solicit questions concerning the hands-on practice sessions.***

***Schedule: Refer to the wall chart outlining practice sessions. The course schedule is located in the Participant Manual. Give a brief overview of the schedule of sessions.***

***Solicit questions concerning the schedule.***

---

## H. Overview of Participant Guide

Session 1: Introduction

### Participant Guide

- Basic course reference
- Class notes for every session
- Guide organization
- Preview sessions in advance
- Review prior to exam

DRE  
PARTICIPANT GUIDE

DRE 1-22

**Slide 22.**

The participant guide is the basic reference document for this course. The guide contains thumbnails of each instructor presentation per session that includes key messages for each slide.



***Open the manual to Session 1 and briefly review the content which illustrates how the document is organized.***

Read each session prior to each day's classes. Use the guide to review the material prior to taking the final exam.

---

Session 1: Introduction

## Criteria for Passing

- Numerous quizzes
- Written test: Score 80% or better to progress to the certification phase



# 80%

DRE 1-23

**Slide 23.**

By taking good notes and by studying the guide carefully, participants should have no trouble in passing the course. There will be numerous quizzes during the class.



***At the conclusion of the classroom training, the participant must pass the written test with a score of 80% or better in order to progress to the Certification Phase.***

## I. Glossary of Terms

Session 1: Introduction

## Glossary of Terms

ADDICTION: Habitual, psychological dependent one's voluntary control.

ALVEOLAR BREATH: Breath from the

BLOOD ALCOHOL CONCENTRATION

BREATH ALCOHOL CONCENTRATION measured by a breath testing device

CLUE: Something that leads to the

CUE: A reminder or prompting a



DRE 1-24

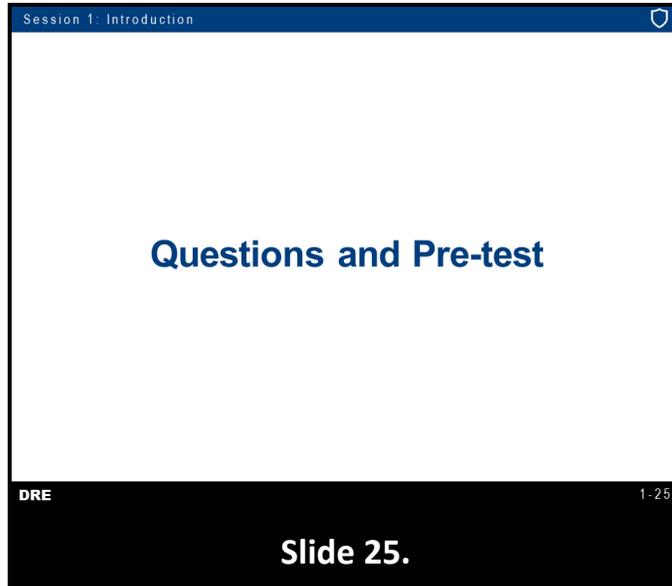
**Slide 24.**

The Glossary of Terms used in the course is located in the Participant Manual. It is recommended participants be familiar with the terms and definitions in the Glossary of Terms.



***Solicit participants' comments or questions concerning the Introduction and Overview.***

## J. Course Pre-Test Administration



***At this time, hand out pre-test.***

***The Pre-Test scores do not affect passage of this course, nor will the Pre-Test be a part of the participants' permanent record. Allow 20 minutes for the participants to complete, then collect the Pre-Test.***

## Glossary of Terms

**ACCOMMODATION REFLEX:** The adjustment of the eyes for viewing at various distances. Meaning the pupils will automatically constrict as objects move closer and dilate as objects move further away.

**ADDICTION:** Habitual, psychological, and physiological dependence on a substance beyond one's voluntary control.

**ADDITIVE EFFECT:** Occurs when the drugs independently affect some indicator in the same way and their use in combination will also affect the indicator and the effect may be reinforced.

**AFFERENT NERVES:** See: "Sensory Nerves."

**ALKALOID:** A chemical that is found in, and can be physically extracted from, some substance. For example, Morphine is a natural alkaloid of Opium. It does not require a chemical reaction to produce Morphine from Opium.

**ANALGESIC:** A drug that relieves or allays pain.

**ANALOG (of a drug):** A chemical that is very similar to the drug, both in terms of molecular structure and in terms of psychoactive effects. For example, the drug Ketamine is an analog of PCP.

**ANESTHETIC:** A drug that produces a general or local insensibility to pain and other sensation.

**ANTAGONISTIC EFFECT:** Occurs when a drug causes an action and another drug causes an opposite action, the effect cannot be predicted.

**ARRHYTHMIA:** An abnormal heart rhythm.

**ARTERY:** The strong, elastic blood vessels that carry blood away from the heart.

**AUTONOMIC NERVE:** A motor nerve that carries messages to the muscles and organs that we do not consciously control. There are two kinds of autonomic nerves, the sympathetic nerves and parasympathetic nerves.

**AXON:** The part of a neuron (nerve cell) that sends out a neurotransmitter.

**BAD TRIP:** A hallucination where the user becomes panic-stricken by what he/she is seeing or hearing, and may become uncontrollably excited, or even try to flee from the terror.

**BLOOD ALCOHOL CONCENTRATION (BAC):** The percentage of alcohol in a person's blood.

**BREATH ALCOHOL CONCENTRATION (BrAC):** The percentage of alcohol in a person's blood as measured by a breath testing device.

**BIPOLAR DISORDER:** A condition characterized by the alteration of manic and depressive states.

**BLOOD PRESSURE:** The force exerted by blood on the walls of the arteries. Blood pressure changes continuously, as the heart cycles between contraction and expansion.

**BRADYCARDIA:** Abnormally slow heart rate.

**BRADYPNEA:** Abnormally slow rate of breathing.

**BRUXISM:** Grinding the teeth. This behavior is often seen in persons who are under the influence of Cocaine or other CNS Stimulants.

**CANNABIS:** This is the drug category that includes Marijuana. Marijuana comes primarily from the leaves of certain species of Cannabis plants that grow readily all over the temperate zones of the earth. Hashish is another drug in this category and consists of the compressed leaves from female Cannabis plants. The active ingredient in both Marijuana and Hashish is a chemical called delta-9 tetrahydrocannabinol, usually abbreviated THC.

**CARBOXY THC:** A metabolite of THC (tetrahydrocannabinol).

**CENTRAL NERVOUS SYSTEM (CNS):** A system within the body consisting of the brain, the brain stem, and the spinal cord.

**CHEYNE-STOKES RESPIRATION:** Abnormal pattern of breathing. Marked by breathlessness and deep, fast breathing.

**CNS DEPRESSANTS:** One of the seven drug categories. CNS Depressants include alcohol, barbiturates, anti-anxiety tranquilizers, and numerous other drugs.

**CNS STIMULANTS:** One of the seven drug categories. CNS Stimulants include Cocaine, the Amphetamines, Ritalin, Desoxyn, and numerous other drugs.

**CONJUNCTIVITIS:** An inflammation of the mucous membrane that lines the inner surface of the eyelids caused by infection, allergy, or outside factors. May be bacterial or viral. Persons suffering from conjunctivitis may show symptoms in one eye only. This condition is commonly referred to as "pink eye", a condition that could be mistaken for the bloodshot eyes produced by alcohol or Cannabis.

**CONVERGENCE:** The "crossing" of the eyes that occurs when a person is able to focus on a stimulus as it is pushed slowly toward the bridge of their nose. (See, also, "Lack of Convergence".)

**CRACK/ROCK:** Cocaine base, appears as a hard chunk form resembling pebbles or small rocks. It produces a very intense, but relatively short duration "high".

**CURRICULUM VITAE (CV):** A written summary of a person's education, training, experience, noteworthy achievements and other relevant information about a particular topic.

**CYCLIC BEHAVIOR:** A manifestation of impairment due to certain drugs, in which the person alternates between periods (or cycles) of intense agitation and relative calm. Cyclic behavior, for example, sometimes will be observed in persons under the influence of PCP.

**DELIRIUM:** A brief state characterized by incoherent excitement, confused speech, restlessness, and possible hallucinations.

**DENDRITE:** The part of a neuron (nerve cell) that receives a neurotransmitter.

**DIABETES:** A condition that can result in insulin shock (taking too much insulin) which may produce tremors, increased blood pressure, rapid respiration, lack of coordination, headache, confusion, and seizures.

**DIACETYL MORPHINE:** The chemical name for Heroin.

**DIPLOPIA:** Double vision.

**DIASTOLIC:** The lowest value of blood pressure. The blood pressure reaches its diastolic value when the heart is fully expanded, or relaxed (Diastole).

**DISSOCIATIVE ANESTHETICS:** One of the seven drug categories. Includes drugs that inhibits pain by cutting off or disassociating the brain's perception of pain. PCP and its analogs are considered Dissociative Anesthetics.

**DIVIDED ATTENTION:** Concentrating on more than one thing at a time. The four psychophysical tests used by DREs require the suspect to divide their attention.

**DOWNSIDE EFFECT:** An effect that may occur when the body reacts to the presence of a drug by producing hormones or neurotransmitters to counteract the effects of the drug consumed.

**DRUG:** Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.

**DRUG RECOGNITION EXPERT (DRE):** An individual who successfully completed all phases of the DRE training requirements for certification established by the IACP and NHTSA. The word "evaluator," "technician," or similar words may be used as a substitute for "expert," depending upon locale or jurisdiction.

**DYSARTHIA:** Slurred speech. Difficult, poorly articulated speech.

**DYSMETRIA:** An abnormal condition that prevents the affected person from properly estimating distances linked to muscular movements.

**DYSPHORIA:** A disorder of mood. Feelings of depression and anguish.

**DYSPNEA:** Shortness of breath.

**EFFERENT NERVES:** See: "Motor Nerves".

**ENDOCRINE SYSTEM:** The network of glands that do not have ducts and other structures. They secrete hormones into the blood stream to affect a number of functions in the body.

**EXPERT WITNESS:** A person skilled in some art, trade, science or profession, having knowledge of matters not within the knowledge of persons of average education, learning and experience, who may assist a jury in arriving at a verdict by expressing an opinion on a state of facts shown by the evidence and based upon his or her special knowledge. (NOTE: Only the court can determine whether a witness is qualified to testify as an expert.)

**FLASHBACK:** A vivid recollection of a portion of a hallucinogenic experience. Essentially, it is a very intense daydream. There are three types: (1) emotional -- feelings of panic, fear, etc.; (2) somatic -- altered body sensations, tremors, dizziness, etc.; and (3) perceptual -- distortions of vision, hearing, smell, etc.

**GAIT ATAXIA:** An unsteady, staggering gait (walk) in which walking is uncoordinated and appears to be "not ordered."

**GARRULITY:** Chatter, rambling or pointless speech. Talkative.

**GENERAL INDICATOR:** Behavior or observations of the subject that are observed and not specifically tested for. (Observational and Behavioral Indicators)

**HALLUCINATION:** A sensory experience of something that does not exist outside the mind, e.g., seeing, hearing, smelling, or feeling something that isn't really there. Also, having a distorted sensory perception, so that things appear differently than they are.

**HALLUCINOGENS:** One of the seven drug categories. Hallucinogens include LSD, MDMA, Peyote, Psilocybin, and numerous other drugs.

**HASH OIL:** Sometimes referred to as “marijuana oil” it is a highly concentrated syrup-like oil extracted from marijuana. It is normally produced by soaking marijuana in a container of solvent, such as acetone or alcohol for several hours and after the solvent has evaporated, a thick syrup-like oil is produced with a high THC content.

**HASHISH:** A form of cannabis made from the dried and pressed resin of a marijuana plant.

**HEAD TRAUMA:** A blow or bump to the head that injures the brain and may cause observable signs and symptoms which may mimic drug and alcohol impairment.

**HEROIN:** A powerful and widely abused narcotic analgesic that is chemically derived from morphine. The chemical, or generic name of heroin is "diacetyl morphine".

**HOMEOSTASIS:** Dynamic, self-regulating process by which the body maintains a balanced or constant state while adjusting to internal and external conditions.

**HORIZONTAL GAZE NYSTAGMUS (HGN):** Involuntary jerking of the eyes occurring as the eyes gaze to the side.

**HORMONES:** Chemicals produced by the body's endocrine system that are carried through the blood stream to the target organ. They exert great influence on the growth and development of the individual, and that aid in the regulation of numerous body processes.

**HYDROXY THC:** A metabolite of THC (tetrahydrocannabinol).

**HYPERFLEXIA:** Exaggerated or over extended motions.

**HYPERGLYCEMIA:** Excess sugar in the blood.

**HYPERPNEA:** A deep, rapid or labored breathing.

**HYPERPYREXIA:** Extremely high body temperature.

**HYPERREFLEXIA:** A neurological condition marked by increased reflex reactions.

**HYPERTENSION:** Abnormally high blood pressure. Do not confuse this with hypotension.

**HYPERTHERMIA:** Increased body temperature.

**HYPOGLYCEMIA:** An abnormal decrease of blood sugar levels.

**HYPOPNEA:** Shallow or slow breathing.

**HYPOTENSION:** Abnormally low blood pressure. Do not confuse this with hypertension.

**HYPOTHERMIA:** Decreased body temperature.

**ICE:** A crystalline form of methamphetamine that produces a very intense and fairly long-lasting "high".

**IMPAIRMENT:** One of the several items used to describe the degradation of mental and/or physical abilities necessary for safely operating a vehicle.

**INHALANTS:** One of the seven drug categories. The inhalants include volatile solvents (such as glue and gasoline), aerosols (such as hair spray and insecticides) and anesthetic gases (such as nitrous oxide).

**INSUFFLATION:** One method of administering certain drugs. Insufflation requires that the drug be in powdered form. The user rapidly draws the drug up into the nostril, usually via a paper or glass tube. Insufflation is also known as snorting.

**INTEGUMENTARY SYSTEM:** The skin and accessory structures, hair and nails. Functions include protection, maintenance of body temperature, excretion of waste, and sensory perceptions.

**INTRAOCULAR:** "Within the eyeball".

**KOROTKOFF SOUNDS:** A series of distinct sounds produced by blood passing through an artery, as the external pressure on the artery drops from the systolic value to the diastolic value.

**LACK OF CONVERGENCE (LOC):** The inability of a person's eyes to converge, or "cross" as the person attempts to focus on a stimulus as it is pushed slowly toward the bridge of his or her nose.

**MAJOR INDICATORS:** Physiological signs that are specifically assessed and are, for the most part, involuntary reflecting the status of the central nervous system (CNS) homeostasis (Physiological Indicators).

**MARIJUANA:** Common term for the Cannabis Sativa plant. Usually refers to the dried leaves of the plant. This is the most common form of the cannabis category.

**MARINOL:** A drug containing a synthetic form of THC (tetrahydrocannabinol). Marinol belongs to the cannabis category of drugs, but Marinol is not produced from any species of cannabis plant.

**MEDICAL IMPAIRMENT:** An opinion made by a DRE based on the evaluation that the condition of a suspected impaired driver is more likely related to a medical impairment that has affected the subject's ability to operate a vehicle safely.

**METABOLISM:** The combined chemical and physical processes that take place in the body involving the distribution of nutrients and resulting in growth, energy production, the elimination of wastes, and other body functions. There are two basic phases of metabolism: anabolism, the constructive phase during which molecules resulting from the digestive process are built up into complex compounds that form the tissues and organs of the body; and catabolism, the destructive phase during which larger molecules are broken down into simpler substances with the release of energy.

**METABOLITE:** A chemical product formed by the reaction of a drug with oxygen and/or other substances in the body.

**MIOSIS:** Abnormally small (constricted) pupils.

**MOTOR NERVES:** Nerves that carry messages away from the brain, to the body's muscles, tissues, and organs. Motor nerves are also known as efferent nerves.

**MULTIPLE SCLEROSIS:** A degenerative muscular disorder.

**MUSCULAR HYPERTONICITY:** Rigid muscle tone.

**MYDRIASIS:** Abnormally large (dilated) pupils.

**NARCOTIC ANALGESICS:** One of the seven drug categories. Narcotic analgesics include opium, the natural alkaloids of opium (such as morphine, codeine and thebaine), the derivatives of opium (such as Heroin, Dilaudid, Oxycodone and Percodan), and the synthetic narcotics.

**NEGATIVE FEEDBACK:** A condition following chronic administration of a drug where the body may decrease or cease its natural actions through hormone and neurotransmitter receptors such that if the drug is not taken, the user does not return to a normal, non-drug-using state and may instead feel much worse in the opposite direction of the substance used.

**NERVE:** A cord-like fiber that carries messages either to or from the brain. For drug evaluation and classification purposes, a nerve can be pictured as a series of "wire-like" segments, with small spaces or gaps between the segments.

**NEURON:** A nerve cell. The basic functional unit of a nerve. It contains a nucleus within a cell body with one or more axons and dendrites.

**NEUROTRANSMITTER:** Chemicals that pass from the axon of one nerve cell to the dendrite of the next cell, and that carry messages across the gap between the two nerve cells.

**NULL EFFECT:** Occurs when neither drug affects a particular indicator of impairment, and their combination also will not affect that indicator.

**NYSTAGMUS:** An involuntary jerking of the eyes.

**"ON THE NOD":** A semi-conscious state of deep relaxation. Typically induced by impairment due to Heroin or other narcotic analgesics. The suspect's eyelids droop, and chin rests on the chest. Suspect may appear to be asleep but can be easily aroused and will respond to questions.

**OVERLAPPING EFFECT:** Occurs when one drug causes an effect, and the other drug does not.

**PALLOR:** An abnormal paleness or lack of color in the skin.

**PARANOIA:** Mental disorder characterized by delusions and the projection of personal conflicts that are ascribed to the supposed hostility of others.

**PARAPHERNALIA:** Drug paraphernalia are the various kinds of tools and other equipment used to store, transport or administer a drug. Hypodermic needles, small pipes, bent spoons, etc., are examples of drug paraphernalia.

**PARASYMPATHETIC NERVE:** An autonomic nerve that commands the body to relax and to carry out tranquil activities. The brain uses parasympathetic nerves to send "at ease" commands to the muscles, tissues, and organs.

**PARASYMPATHOMIMETIC DRUGS:** Drugs that mimic neurotransmitter associated with the parasympathetic nerves. These drugs artificially cause the transmission of messages that produce lower blood pressure, drowsiness, etc.

**PHENCYCLIDINE:** A contraction of PHENYL CYCLOHEXYL PIPERIDINE, or PCP. Formerly used as a surgical anesthetic, however, it has no current legitimate medical use in humans.

**PHENYL CYCLOHEXYL PIPERIDINE (PCP):** Often called "phencyclidine" or "PCP", it is a specific drug belonging to the Dissociative Anesthetics category.

**PHYSICIAN'S DESK REFERENCE (PDR):** A basic reference source for drug recognition experts. The PDR provides detailed information on the physical appearance and psychoactive effects of licitly manufactured drugs.

**PHYSIOLOGY:** Physiology is the branch of biology that deals with the functions and activities of life or living matter and the physical and chemical phenomena involved.

**PILOERECTION:** Literally, "hair standing up", or goose bumps. This condition of the skin is often observed in persons who are under the influence of LSD.

**POLYCATEGORY IMPAIRMENT:** Being under the combined influence of drugs from two or more drug categories.

**POLYDRUG IMPAIRMENT:** Being under the combined influence of two or more different drugs, which may be in the same or different categories.

**PSYCHEDELIC:** A mental state characterized by a profound sense of intensified or altered sensory perception sometimes accompanied by hallucinations.

**PSYCHOPHYSICAL TESTS:** Methods of investigating the mental (psycho-) and physical characteristics of a person suspected of alcohol or drug impairment. Most psychophysical tests employ the concept of divided attention to assess a suspect's impairment.

**PSYCHOTOGENIC:** Literally, "creating psychosis" or "giving birth to insanity". A drug is considered to be psychotogenic if persons who are under the influence of the drug become insane and remain so after the drug wears off.

**PSYCHOTOMIMETIC:** Literally, "mimicking psychosis" or "impersonating insanity". A drug is considered to be psychotomimetic if persons who are under the influence of the drug look and act insane while they are under the influence.

**PTOSIS:** Droopy eyelids.

**PULSE:** The rhythmic dilation and relaxation of an artery that results from the beating of the heart.

**PULSE RATE:** The number of expansions of an artery per minute.

**PUPILLARY LIGHT REFLEX:** The pupils of the eyes will constrict and dilate depending on changes in lighting.

**PUPILLARY UNREST:** The continuous, irregular change in the size of the pupils that may be observed under room or steady light conditions.

**REBOUND DILATION:** A period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and the range between minimum and maximum is equal to or greater than 1mm and does not return to its original constricted size.

**RESTING NYSTAGMUS:** Jerking of the eyes as they look straight ahead.

**SCLERA:** A dense white fibrous membrane that, with the cornea, forms the external covering of the eyeball (i.e., the white part of the eye).

**SENSORY NERVES:** Nerves that carry messages to the brain, from the various parts of the body, including notably the sense organs (eyes, ears, etc.). Sensory nerves are also known as afferent nerves.

**SINSEMILLA:** The unpollinated female cannabis plant, with a relatively high concentration of THC.

**SNORTING (See Insufflation):** One method of administering certain drugs. Snorting requires that the drug be in powdered form. The user rapidly draws the drug up into the nostril, usually via a paper or glass tube. Snorting is also known as insufflation.

**SPHYGMOMANOMETER:** A medical device used to measure blood pressure. It consists of an arm or leg cuff with an air bag attached to a tube and a bulb for pumping air into the bag, and a gauge for showing the amount of air pressure being pressed against the artery.

**STANDARDIZED:** Conforming to a model in comparative applications.

**STANDARDIZED FIELD SOBRIETY TESTING (SFST):** There are three NHTSA/IACP-approved SFSTs, namely Horizontal Gaze Nystagmus (HGN), Walk and Turn (WAT), and One Leg Stand (OLS). Based on a series of controlled laboratory and field studies, scientifically validated clues of impairment have been identified for each of these three tests. They are the only NHTSA/IACP-approved Standardized Field Sobriety Tests for which validated clues have been identified for DWI investigations.

**STETHOSCOPE:** A medical instrument used, for drug evaluation and classification purposes, to listen to the sounds produced by blood passing through an artery.

**STROKE:** A medical condition that occurs when a blood vessel that carries oxygen and nutrients to the brain is either blocked by a clot or a burst and may cause observable signs and symptoms which may mimic drug and alcohol impairment.

**SYMPATHETIC NERVE:** An autonomic nerve that commands the body to react in response to excitement, stress, fear, etc. The brain uses sympathetic nerves to send "wake up calls" and "fire alarms" to the muscles, tissues and organs.

**SYMPATHOMIMETIC DRUGS:** Drugs that mimic the neurotransmitter associated with the sympathetic nerves. These drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.

**SYNAPSE (or Synaptic Gap):** The gap or space between two neurons (nerve cells).

**SYNESTHESIA:** A sensory perception disorder, in which an input via one sense is perceived by the brain as an input via another sense. In its simplest terms, it is the transposition of the senses. An example of this would be a person "hearing" a phone ring and "seeing" the sound as a flash of light. Synesthesia sometimes occurs with persons under the influence of hallucinogens.

**SYSTEMATIC:** Done or acting according to a fixed plan or system; methodical.

**SYSTOLIC:** The highest value of blood pressure. The blood pressure reaches its systolic value when the heart is fully contracted (systole), and blood is sent surging into the arteries.

**TACHYCARDIA:** Abnormally rapid heart rate.

**TACHYPNEA:** Abnormally rapid rate of breathing.

**TETRAHYDROCANNABINOL (THC):** The principal psychoactive ingredient in drugs belonging to the cannabis category.

**THERAPEUTIC DOSE:** The amount of a drug needed to treat a disease or condition.

**TOLERANCE:** An adjustment of the drug user's body and brain to the repeated presence of a drug. As tolerance develops, the user will experience diminishing psychoactive effects from the same dose of the drug. As a result, the user typically will steadily increase the dose he or she takes, in an effort to achieve the same psychoactive effect.

**TRACKS:** Scar tissue usually produced by repeated injection of drugs, via hypodermic needle, along a segment of a vein.

**VEIN:** A blood vessel that carries blood back to the heart from the body tissues

**VERTICAL GAZE NYSTAGMUS (VGN):** An involuntary jerking of the eyes (up-and-down) which occurs as the eyes are held at maximum elevation. The jerking should be distinct and sustained.

**VOIR DIRE:** A French expression literally meaning “to see, to say.” Loosely, this would be rendered in English as “To seek the truth,” or “to call it as you see it.” In a law or court context, one application of voir dire is to question a witness to assess his or her qualifications to be considered an expert in some matter pending before the court.

**VOLUNTARY NERVE:** A motor nerve that carries messages to a muscle that we consciously control.

**WITHDRAWAL:** This occurs in someone who is physically addicted to a drug when he or she is deprived of the drug. If the craving is sufficiently intense, the person may become extremely agitated, and even physically ill.

# 2 DRE

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## DRUGS IN SOCIETY AND IN VEHICLE OPERATION

### LEARNING OBJECTIVES

- Define the term “drug” in the context of this course
- Name the seven drug categories relevant to the Drug Evaluation and Classification (DEC) Program
- State in approximate, quantitative terms the incidence of drug use among various segments of the American public
- State in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and other driving incidents

### CONTENTS

A. Definition and Categories of Drugs.....	2
B. Incidence and Characteristics of Drug Use in America .....	13
C. Incidence of Drug-Impaired Driving.....	14

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Reading Assignments

Session 2: Drugs in Society and in Vehicle Operation

## Learning Objectives

- Define the term “drug” in course context
- Name the seven drug categories
- State incidence of drug use
- State incidence of drug involvement in motor vehicle crashes and other driving incidents

DRE 2-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

### A. Definition and Categories of Drugs

Session 2: Drugs in Society and in Vehicle Operation

## What is a “Drug”?

**Working Definition of “Drug”:**

“Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.”

DRE 2-3

**Slide 3.**



***If this has been covered in the Pre-School, pose this question: “What is our working definition of the word “drug” and proceed to the next slide.***

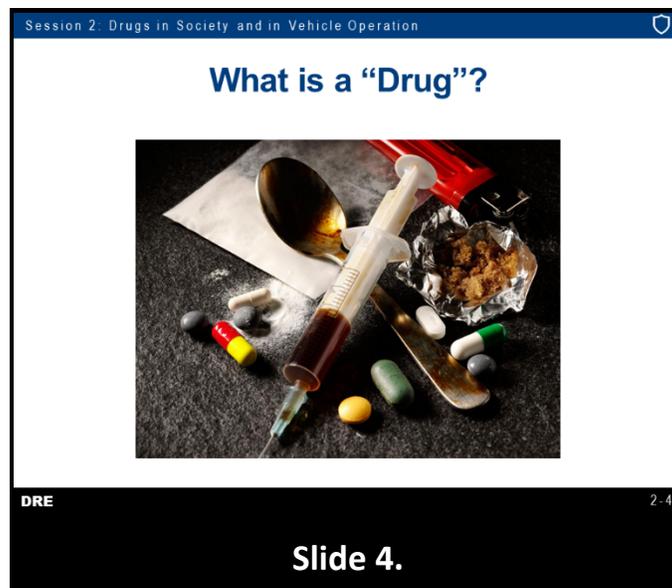
***Pose this question to the participants. Solicit several responses. What do we mean by the word “drug”?***

## What is a Drug?

- Medicines? Are all drugs medicines? Are all medicines drugs?
- Narcotics? Are all drugs Narcotics?
- Habit forming substances. Are all drugs habit forming? Are all habit-forming substances drugs?
- A simple, law enforcement-oriented definition
- This definition is derived from the California Vehicle Code



***Any substance when taken into the human body, can impair the ability of the person to operate a vehicle safely."***



***Point out this definition excludes many substances physicians, chemists, etc. might consider to be "drugs," e.g., antibiotics, Novocain, vitamins, etc. It also includes some substances that aren't normally thought of as "drugs," such as model airplane glue, insecticides, etc.***

Within this simple, law enforcement-oriented definition, there are seven categories of drugs. Each category consists of substances that impair a person's ability to drive. The categories differ from one another in terms of how they impair driving ability and in terms of the kinds of impairment they cause. Because the categories produce different types of impairment, they generate different signs and symptoms. With training and practice, you will be able to recognize the different signs of drug influence and determine which category is causing the impairment you observe in a subject.

Drug manufacturers are continuously developing new drugs and evaluating the need to continue production of current drugs. For this reason, some brand names or chemical compounds may change, or the drug may become distributed in generic forms only. Some prescription drugs encountered by the DRE may not be FDA approved for use in the United States but are still prescribed or available in other countries.

Illicit drug producers often slightly alter the chemical structure of a legally manufactured drug to avoid legal restrictions. These may be referred to as designer or novel substances.



**Ask participants: "What are the seven categories of drugs?"**  
**Write the names of the categories on the dry erase board or easel/easel pad as they are mentioned by the participants.**

Session 2: Drugs in Society and in Vehicle Operation

## Central Nervous System Depressants

Examples:

- Alcohol
- Barbiturates
- Antidepressants
- Anti-Anxiety Tranquilizers

A collage of images representing various CNS depressants: a bottle of alcohol, two white barbiturate tablets, two yellow antidepressant tablets, and a box of anti-anxiety tranquilizers with several tablets scattered in front of it.

DRE 2-5

**Slide 5.**

The category of CNS Depressants includes some of the most commonly abused drugs.



**Point out tens of millions of prescriptions for such drugs are written in this country each year.**

Alcohol remains the most familiar drug. In 2020, 138.5 million persons aged 12 and older were current drinkers of alcohol. 17.7 million classified themselves as heavy drinkers.



**Heavy alcohol use is defined as binge drinking on 5 or more days in the past 30 days. Binge drinking is defined as drinking 5 or more drinks (4 or more drinks for females) on the same occasion in the past 30 days.**



**Source:**

Substance Abuse and Mental Health Services Administration. (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>

CNS Depressants slow down the operation of the central nervous system (i.e., brain, brain stem, and spinal cord), cause the user to react more slowly, cause the user to process information more slowly, relieve anxiety and tension, and induce sedation, drowsiness, and sleep.

In high doses, CNS Depressants will produce general anesthesia (i.e., depress the brain's ability to sense pain). In very high doses, induce coma and death.

Session 2: Drugs in Society and in Vehicle Operation

## Central Nervous System Stimulants

Examples:

- Amphetamine
- Cocaine
- Methamphetamine
- Ritalin



DRE 2-6

**Slide 6.**

CNS Stimulants constitute another widely abused category of drugs.

According to the 2020 National Survey on Drug Use and Health, of users 12 or older, there appears to be approximately 5.2 million current (within the last month) Cocaine users aged 12 and older in the U.S. Additionally, 5.1 million persons reported non-medical use of prescription stimulants, and 2.5 million reported using Methamphetamine.



**Source:**

Substance Abuse and Mental Health Services Administration. (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>

CNS Stimulants speed up the operation of the central nervous system and of the various bodily functions controlled by the central nervous system and cause the user to become hyperactive and/or extremely talkative. The user's speech may become rapid and repetitive, heart rate increases, blood pressure increases, body temperature rises, and the user may become excessively sweaty. CNS Stimulants induce emotional excitement, restlessness, irritability and can induce cardiac arrhythmia (abnormal beating of the heart), cardiac seizures, and death.

Session 2: Drugs in Society and in Vehicle Operation

## Hallucinogens

Examples:

- LSD
- MDMA (Ecstasy)
- Peyote
- Psilocybin



DRE 2-7

**Slide 7.**

Hallucinogens are also widely abused.

LSD and Peyote are only two examples of Hallucinogens. There are many other Hallucinogens.

In recent years, significant increases in the abuse of both LSD and “Ecstasy” (MDMA) have been reported. In 2020, an estimated 7.1 million reported using Hallucinogens within the last year.



**Source:**

Substance Abuse and Mental Health Services Administration. (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>

Hallucinogens create perceptions that differ from reality. These perceptions are often very distorted, so the user sees, hears, and smells things in a way quite different from how they really look, sound, and smell. Hallucinogens cause the nervous system to send strange or false signals to the brain. Clarification: Hallucinogens confuse the Central Nervous System (as well as speeding it up, like CNS Stimulants).

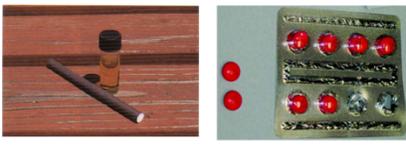
Hallucinogens produce sights, sounds, odors, feelings, and tastes that aren't real, induce a temporary condition very much like psychosis or insanity, and can create a "mixing" of sensory modalities, so the user "hears colors," "sees music". This mixing of the senses is called Synesthesia. With all of these false and distorted perceptions a person under the influence of hallucinogens would be a very unsafe driver.

Session 2: Drugs in Society and in Vehicle Operation

## Dissociative Anesthetics

Examples:

- PCP (Phenyl Cyclohexyl Piperidine)
- Ketamine
- Dextromethorphan



DRE 2-8

**Slide 8.**

PCP, its analogs, and Dextromethorphan are examples of Dissociative Anesthetics. PCP is considered by the medical community to be a Hallucinogen. However, because of the symptomatology it presents, it is in a separate category.



**People under the influence of Dissociative Anesthetics may exhibit a combination of the signs associated with CNS Depressants, CNS Stimulants, and Hallucinogens.**

Phencyclidine is a short form of the chemical name Phenyl Cyclohexyl Piperidine, from which we get the abbreviation “PCP”. PCP is a synthetic drug, i.e., it does not occur naturally but must be produced in a laboratory-like setting. PCP has many analogs, or “chemical cousins,” very similar to PCP in chemical structure and produce essentially the same effects. Analogs of PCP include Ketamine, Ketalar and Ketajet. PCP is also a very powerful pain killer, or anesthetic.



**Point out the reason PCP is a Dissociative Anesthetic is because it “separates” the user from any sensation of pain without making him or her unconscious.**

Dextromethorphan (DXM) is found in many over-the-counter antitussive cold medications such as Robitussin, Coricidin Cough and Cold, and Dimetapp. DXM is typically abused by school age children, teenagers, or young adults to achieve impairment. DXM is normally used in liquid or pill form. In high doses, DXM impairment is similar to the effects of PCP or Hallucinogens.

Session 2: Drugs in Society and in Vehicle Operation

## Narcotic Analgesics

Examples:

- Codeine
- Fentanyl
- Heroin
- Methadone
- Morphine
- OxyContin®



DRE 2-9

**Slide 9.**

In 2020, there was an estimated 2.5 million current abusers of prescription Narcotic Analgesics and over half a million Heroin users.

There are two subcategories of Narcotic Analgesics:

1. Natural Opiates are derivatives of Opium



**Source:**

Substance Abuse and Mental Health Services Administration. (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

2. Synthetics are produced chemically in the laboratory. The synthetics are not derived in any way from Opium but produce similar effects.



***Point out Methadone and Fentanyl are examples of a synthetic narcotic.***

The word “analgesic” means pain reliever. All of the drugs in this category reduce the person’s reaction to pain. Heroin is one of the most-commonly abused of the Narcotic Analgesics. Heroin is highly addictive.

In addition to reducing pain, Narcotic Analgesics produce euphoria, drowsiness, apathy, lessened physical activity, and sometimes impaired vision.

Persons under the influence of Narcotic Analgesics often pass into a semi-conscious type of sleep or near-sleep. This condition is often called being “on the nod.” They often are sufficiently alert to respond to questions effectively. Higher doses of Narcotic Analgesics can induce coma, respiratory failure, and death.

Session 2: Drugs in Society and in Vehicle Operation

## Inhalants

Examples:

- Volatile Solvents  
• (Various Glues, Gasoline, Paint, etc.)
- Aerosols  
• (Hairspray, Insecticides, etc.)
- Anesthetic Gases  
• (Nitrous Oxide, Amyl Nitrite, etc.)



DRE 2-10

**Slide 10.**

In 2020, nearly 1 million persons reported abusing Inhalants within the past month.



**Source:**

Substance Abuse and Mental Health Services Administration. (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>

Inhalants are the fumes of certain substances. These substances are found in many common products such as gasoline, oil-based paints, various glues, aerosol cans, varnish remover, cleaning fluids, etc. Examples: Volatile Solvents (Various Glues, Gasoline, Paint, etc.); Aerosols (Hairspray, Insecticides, etc.); Anesthetic Gases (Nitrous Oxide, Amyl Nitrite, etc.).

Different Inhalants produce different effects. Many produce effects similar to those of CNS Depressants. A few produce stimulant-like effects. Some produce hallucinogenic effects.

The Inhalant abuser’s attitude and demeanor can vary from inattentive, stuporous and passive, to irritable, violent, and dangerous. The abuser’s speech will often be slow, thick, and slurred.

Session 2: Drugs in Society and in Vehicle Operation

## Cannabis

Active ingredient:

- Tetrahydrocannabinol (THC)

Examples:

- Marijuana
- Hashish
- Marinol



DRE 2-11

**Slide 11.**

The category “Cannabis” includes the various forms and products of the Cannabis Sativa plant and other species of Cannabis plants.



**Write “Cannabis Sativa” on the dry erase board or easel/easel pad.**

The primary active ingredient in Cannabis products is the substance known as “Delta-9 Tetrahydrocannabinol” or “THC.”



**Write “ $\Delta$ -9 THC” on the dry erase board or easel/easel pad.**

Apart from alcohol, Marijuana is the most commonly abused drug in this country. According to the 2020 National Survey on Drug Use and Health, Marijuana was listed as the most common illicit drug used in the U.S. There were 32.8 million Americans over the age of 12 reporting use in the past month.



**Source:**

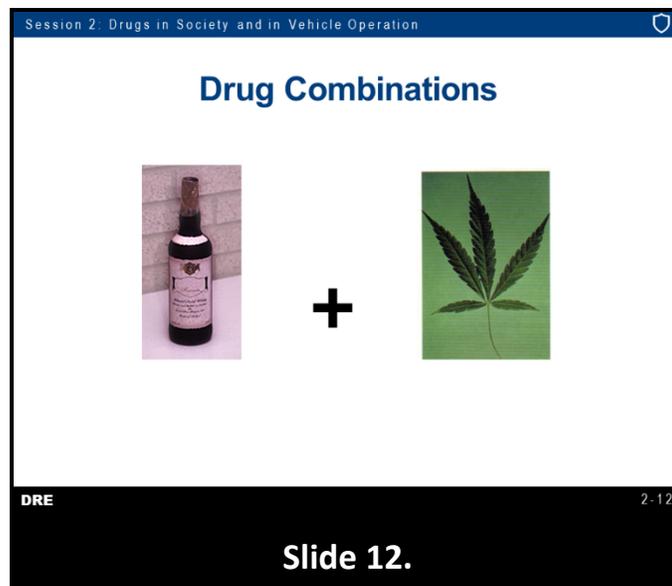
Substance Abuse and Mental Health Services Administration. (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.

Cannabis appears to interfere with the attention process. Drivers under the influence of Marijuana often do not pay attention to their driving.



***Divided attention SFSTs usually disclose some of the best evidence of Cannabis impairment.***

Cannabis also produces a distortion of the user’s perception of time, an increased heart rate (often over 100 beats per minute) and reddening of the eyes.



Many drug users appear to be “chemical gluttons.” They often are under the combined influence of two or more different drugs. The term for this is “polydrug use.”



**Write “polydrug use” on the dry erase board or easel/easel pad. “Poly” is the Greek prefix for “many.”**

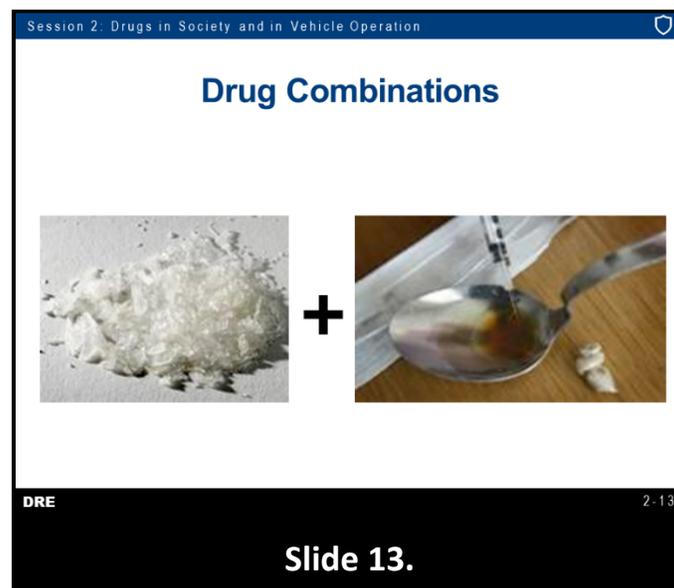
When drug users are under the combined influence of drugs from two or more drug categories, this is termed “polycategory use.”



**Write “polycategory use” on the dry erase board or easel/easel pad.**

Some very common examples of polydrug or polycategory use include:

- Alcohol with virtually any other drug
- Marijuana and PCP - A common way to use PCP is to sprinkle it on a Marijuana “joint” and smoke it
- Cocaine and Heroin, sometimes called a “speedball”
- Heroin and Amphetamine, sometimes called a “poor man’s speedball”
- Heroin and PCP, sometimes called a “fireball”
- “Crack” Cocaine and PCP, sometimes called “space base”
- “Crack” Cocaine and Marijuana, sometimes called “primo”
- “Crack” and Methamphetamine, sometimes called “croak”

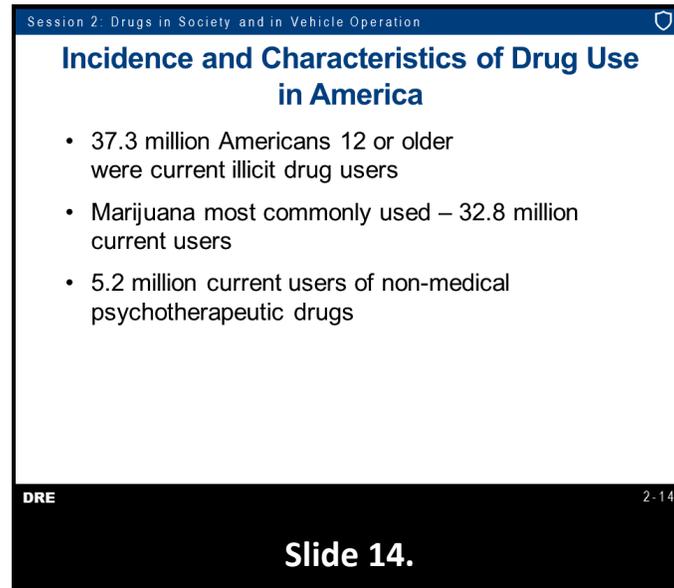


Sometimes, people take two different drugs (such as Heroin and Cocaine) that produce some opposite effects. For example, Heroin tends to lower blood pressure and Cocaine tends to elevate blood pressure.

Different drug combinations may produce unique, interactive effects. When a person has used multiple drugs, that person will experience multiple drug effects. Under proper medical supervision, specific drugs often are used to reverse overdose conditions. However, in a polydrug or polycategory situation, some of the signs of a particular drug may not be evident even though the person is under the influence of that drug.

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## B. Incidence and Characteristics of Drug Use in America



Session 2: Drugs in Society and in Vehicle Operation

### Incidence and Characteristics of Drug Use in America

- 37.3 million Americans 12 or older were current illicit drug users
- Marijuana most commonly used – 32.8 million current users
- 5.2 million current users of non-medical psychotherapeutic drugs

DRE 2-14

**Slide 14.**

In 2020, 37.3 million Americans aged 12 years or older were current illicit drug users. Marijuana was the most commonly used illicit drug in 2020, with 32.8 million users reporting use in the past month. In 2020, there were 5.2 million current users of non-medical psychotherapeutic drugs. These include pain relievers, tranquilizers, stimulants, and sedatives.



### **Source:**

Substance Abuse and Mental Health Services Administration. (2021). Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>

## C. Incidence of Drug-Impaired Driving

Session 2: Drugs in Society and in Vehicle Operation

### Drug-Impaired Driving Facts

About 11.8 million people aged 12 years and older admitted driving under the influence of illicit drugs in the past year.

DRE 2-15

**Slide 15.**

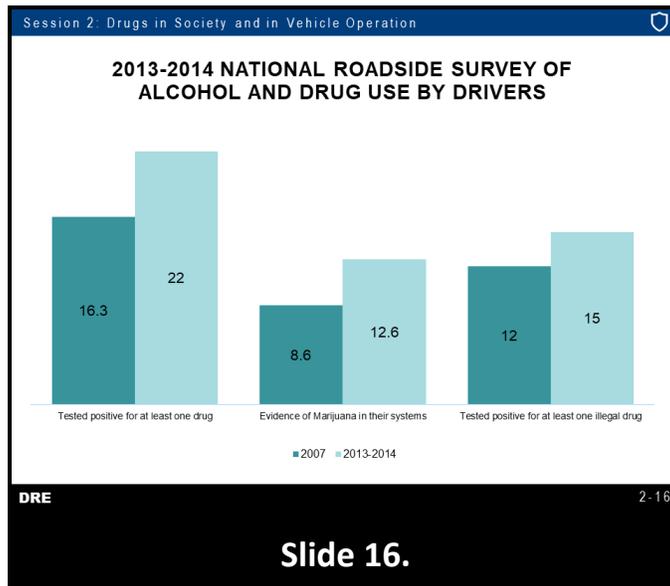
Accurate data on the frequency with which people drive while under the influence of drugs is somewhat limited. This is due to the various reasons that include: Many impaired drivers are never detected, and many drug users also consume alcohol. When they are stopped for impaired driving they may be arrested (and tabulated in statistics) as alcohol-impaired drivers only. Fact: About 11.8 million people aged 12 years and older admitted driving under the influence of illicit drugs in the past year.



#### **Source:**

Substance Abuse and Mental Health Services Administration. (2017). Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health. (HHS Publication No. SMA 18-5068, NSDUH Series H-53). Rockville, MD:: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from Retrieved from <https://www.samhsa.gov/data/>

When they are involved in crashes, they may not be tested for drugs.



The National Highway Traffic Safety Administration (NHTSA) undertook a comprehensive study of the prevalence of potentially impairing drug use by drivers in 2013 and 2014. Over 30,000 drivers over 40 years, were asked to provide an oral fluid or blood sample. Samples were tested for illegal drugs, prescription medicines, and over-the-counter drugs. Twenty-two percent of drivers tested positive for at least one drug, up from 16.3% in the 2007 Roadside Study. 12.6% of the drivers had evidence of Marijuana use in their systems, up from 8.6% in the 2007 Roadside Study. Fifteen percent of drivers tested positive for at least one illegal drug, up from 12% in 2007.



**Source:**

Berning, A., Compton, R., & Wochinger, K. (2015). Results of the 2013–2014 National Roadside Survey of Alcohol and Drug Use by Drivers. (Traffic Safety Facts Research Note. Report No. DOT HS 812 118). Washington, DC: National Highway Traffic Safety Administration.

The facts are unmistakable: Drug use is common among many people. So is drug-impaired driving.



***Consult national and local resources for updated data on drugs and driving.***

## NHTSA Drug and Alcohol Crash Risk Study



DRE

2-17

### Slide 17.

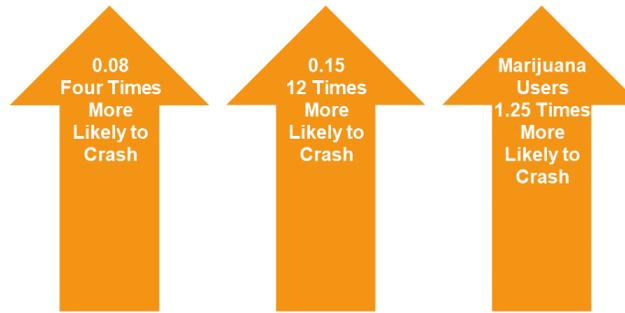
The largest such study ever conducted to assess the comparative risk of drunk- and drugged-driving was conducted in Virginia Beach, VA over a 20-month period. It collected data from more than 3,000 drivers involved in a crash and more than 6,000 non-crash drivers for comparison. Drivers were tested for a wide range of drugs, but marijuana was the only drug found in large enough numbers for statistically significant findings.

**Source:**

Lacey, J. H., Kelley-Baker, T., Berning, A., Romano, E., Ramirez, A., Yao, J., ,... & Compton, R. (2016, December). Drug and alcohol crash risk: A case-control study (Report No. DOT HS 812 355). Washington, DC: National Highway Traffic Safety Administration.



## NHTSA Drug and Alcohol Crash Risk Study Key Findings



DRE

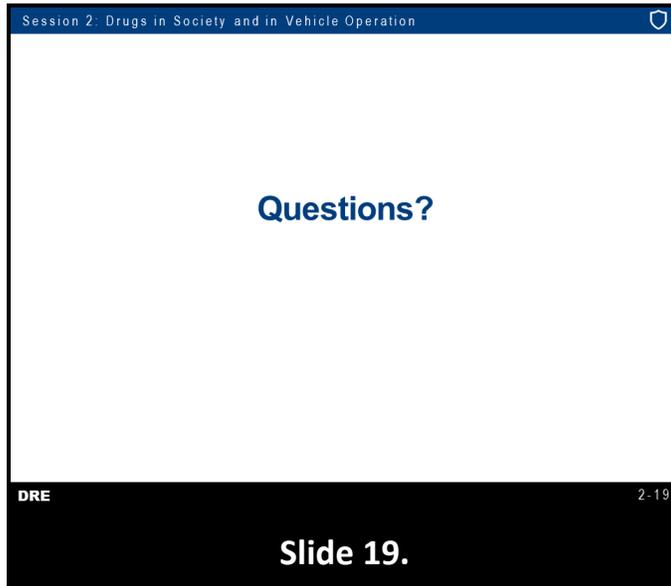
2-18

**Slide 18.**

Drivers at a BAC level of 0.08 percent were about four times more likely to crash than sober drivers. Drivers with a BAC level of 0.15 percent were 12 times more likely to crash than sober drivers. Marijuana users were about 25% more likely to be involved in a crash than drivers with no evidence of Marijuana use.

**Source:**

Lacey, J. H., Kelley-Baker, T., Berning, A., Romano, E., Ramirez, A., Yao, J., ,... & Compton, R. (2016, December). Drug and alcohol crash risk: A case-control study (Report No. DOT HS 812 355). Washington, DC: National Highway Traffic Safety Administration.



***Solicit participants' comments and questions about Drugs in Society and in Vehicle Operation.***

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Session 2: Drugs in Society and in Vehicle Operation

### Test Your Knowledge

1. What does the term “drug” mean, as it is used in this course?
2. What are the seven categories of drugs?
3. To which category does alcohol belong?
4. To which category does Cocaine belong?

DRE 2-20

**Slide 20.**

Session 2: Drugs in Society and in Vehicle Operation

### Test Your Knowledge

5. What does “polydrug use” mean?
6. What is a “Speedball?”
7. In the 2013-2014 National Roadside Survey of Alcohol and Drug Use by Drivers, \_\_\_\_\_% of drivers tested positive for at least one illegal drug.

DRE 2-21

**Slide 21.**

### Test Your Knowledge

1. What does the term “drug” mean, as it is used in this course?
2. What are the seven categories of drugs?
3. To which category does alcohol belong?
4. To which category does Cocaine belong?
5. What does “polydrug use” mean?
6. What is a “Speedball?”
7. In the 2013-2014 National Roadside Survey of Alcohol and Drug Use by Drivers, \_\_\_\_ % of drivers tested positive for at least one **illegal** drug.



1. ***A drug is any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.***
2. ***CNS Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants and Cannabis***
3. ***CNS Depressants***
4. ***CNS Stimulants***
5. ***Being under the combined influence of two or more different drugs***
6. ***Cocaine and Heroin or Methamphetamine and Heroin***
7. ***15%***

# 3 DRE

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## DEVELOPMENT AND EFFECTIVENESS OF THE DRUG EVALUATION AND CLASSIFICATION PROGRAM

### LEARNING OBJECTIVES

- State the origin and evolution of the Drug Evaluation and Classification (DEC) Program
- Describe research and demonstration project results that validate the effectiveness of the program
- State the impact of legal precedents established by case law

### CONTENTS

A. Origin and Evolution of the Drug Evaluation and Classification (DEC) Program.....	2
B. Evidence of Program Effectiveness .....	4
C. DEC Program Acceptance .....	14

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Reading Assignments

Session 3 - Development & Effectiveness of the DEC Program

## Learning Objectives

- State origin and evolution of DEC Program
- Describe DEC Program research and validation
- Discuss DEC Program acceptance in the courts

DRE 3-2

**Slide 2.**



*Briefly review the objectives, content, and activities of this session.*

### A. Origin and Evolution of the Drug Evaluation and Classification (DEC) Program

Session 3 - Development & Effectiveness of the DEC Program

## LAPD Developed DRE



DRE 3-3

**Slide 3.**



*Write: "LAPD" on dry erase board or easel/easel pad.*

The DEC Program was developed by personnel of the Los Angeles Police Department (LAPD).

Development of the DEC Program began in the early 1970's in response to a growing awareness that many people apprehended for impaired driving were under the influence of drugs rather than alcohol.

Sergeant Dick Studdard (Traffic Officer) retired from the LAPD in June 1990. Sergeant Studdard and his fellow officers often encountered many impaired drivers whose blood alcohol concentrations (BACs) were zero or very low. They occasionally succeeded in having physicians examine some of these low BAC subjects, resulting in diagnosis of drug influence.



***Examining physicians subsequently would be subpoenaed to testify in contested cases.***

***For various reasons, physicians were often reluctant or unwilling to conduct these examinations and offer opinions.***

There are some reasons why doctors may be reluctant. They typically receive little training in the recognition of specific signs of drug impairment, particularly at street-level doses. They may not see the subject until hours after the drugs were used, by which time the signs and symptoms often have changed.

As a result, some drivers whom Studdard and other officers were certain were impaired by drugs were not prosecuted or convicted for DWI. Studdard concluded it was essential to develop appropriate procedures officers could use when confronted with persons suspected of drug impairment.

Len Leeds, former LAPD narcotics officer, was approached by Sergeant Studdard and asked to collaborate in the development of a program to help identify drug-impaired subjects. They initiated some independent research by consulting with physicians, enrolling in relevant classes, studying textbooks, technical articles, etc. and secured management-level support within the department to continue research and program development. As time went on, many other key persons both within and outside LAPD contributed to the development and refinement of the program. In 1979, the program was officially recognized by LAPD.



***The LAPD program was referred to as the Drug Recognition Expert (DRE) program. [Drug Recognition Expert - LAPD Online](#)***

## B. Evidence of Program Effectiveness

Session 3 – Development & Effectiveness of the DEC Program

### LAPD and NHTSA

- Developed and validated SFSTs for alcohol-impaired driving
- By early 1980's NHTSA began to assist LAPD in validating DRE program

DRE 3-4

**Slide 4.**

LAPD and the National Highway Traffic Safety Administration (NHTSA) worked together to develop the Drug Recognition Expert (DRE) training as we know it today. The first step was to develop and validate standardized field sobriety tests (SFSTs) for investigating alcohol-impaired driving. LAPD personnel played a major role in the research that led to the widespread use of Horizontal Gaze Nystagmus (HGN), the Walk and Turn (WAT) test, and the One Leg Stand (OLS) test. By the early 1980's, NHTSA completed its validation of the standardized tests for DWI enforcement. At this time, NHTSA began to assist LAPD in validating the DRE program.

Session 3 – Development & Effectiveness of the DEC Program

### The DRE Process



DRE 3-5

**Slide 5.**

The DRE process evolved into what is essentially a three-part determination. First, it establishes the subject is impaired and verifies his or her alcohol level is not consistent with the degree of impairment that is evident.



***Emphasize the impairment is not consistent with the alcohol level.***

***Clarification: the first portion of the drug influence evaluation is devoted principally to SFST of the subject and to the administration of a breath test.***

Inconsistency between the observed impairment and the BAC suggests the presence of some other drug(s) or some other complicating factor such as an illness or injury.

Second, it uses evaluation procedures to determine whether the impairment may stem from illness or injury requiring medical attention or is drug related.

Third, it uses evaluation procedures to determine what category (or categories) of drugs are the likely cause of the impairment.

**Key Point:** The entire evaluation process is standardized which means it is administered the same way to all subjects and administered the same way by all officers.



***Pose this question: “Why is it necessary for an officer to use reliable standardized assessment procedures to determine the category of drugs causing the impairment?”***

***Follow-up question: “If we see a subject is impaired and the BAC is too low to account for that impairment, why don’t we simply obtain a blood sample and ask the laboratory to analyze the sample for all drugs?”***

***Solicit responses from participants.***

Session 3 – Development & Effectiveness of the DEC Program

## Reasons for Standardized Procedure

- Articulate suspicion of drug influence
- Subject may refuse testing
- Identify psychoactive impairment
- Reduce testing costs
- Identify need for medical intervention

DRE 3-6

**Slide 6.**

One reason for needing a reliable standardized assessment procedure is we may be called upon to submit evidence of an articulable suspicion of drug influence to support our request for a

chemical test of the subject. Some courts or motor vehicle hearings officers may find a low BAC result, by itself, does not provide adequate basis for requesting the subject to submit to a second chemical test.

Another reason is the subject may refuse to submit to the chemical test, denying us of scientific evidence of drug influence. In that case, conviction or acquittal may hinge on the officer's observations and expertise as a DRE.

A third reason is chemical tests usually disclose only that the subject has used a particular drug recently. The chemical test usually does not indicate whether the drug is psychoactive at the present time. Thus, the DRE procedures are needed to establish the subject not only has used the drug, but also that he or she is under the influence.

A fourth reason is it can be expensive and require a large sample of blood or urine to perform a broad analysis for any or all drugs. Practical constraints require we be able to point the laboratory technician toward those types of drugs most likely to be found in the sample. It is always possible that a person suspected of drug impairment is actually suffering from some medical problem. If a sample is collected and the subject is not examined by someone who is qualified, evidence of medical problems may not come to light until it is too late.

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Session 3 - Development & Effectiveness of the DEC Program

## Two Stages of Research

**Laboratory Evaluation**  
• Johns Hopkins University



**Field Evaluation**  
• Los Angeles



DRE 3-7

**Slide 7.**

NHTSA assisted LAPD in a two-phase study. There was laboratory evaluation, using volunteers who administered selected drugs which was the Johns Hopkins study conducted in 1984. There was also a field evaluation, using persons actually arrested in Los Angeles on suspicion of drug influence which was the LAPD Field Study conducted in 1985.

The research studies and their titles were:

- Identifying Types of Drug Intoxication: Laboratory Evaluation of a Subject Examination Procedure, May 1984 Final Report. George E. Bigelow, Ph.D. et al. Behavioral Pharmacology Research Unit, Department of Psychiatry and Behavioral Sciences.

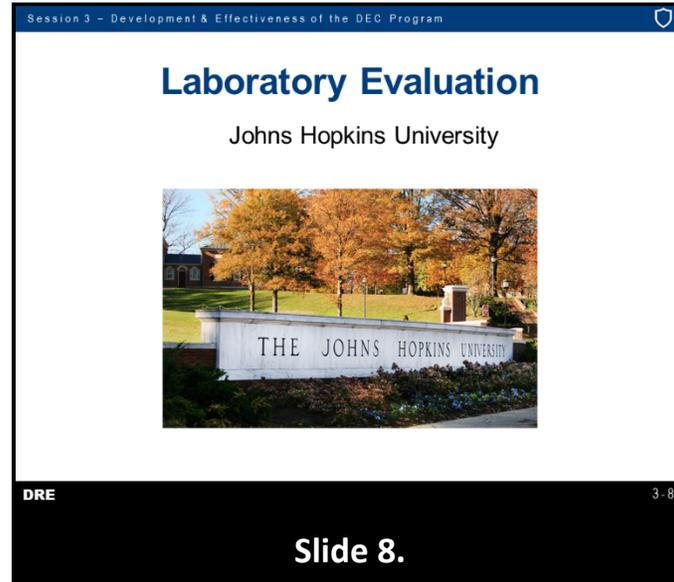
Funded by the U.S. Department of Transportation's NHTSA and the National Institute of Drug Abuse.



**Source: Commonly called the Johns Hopkins Study**

Bigelow, G. E., Bickel, W. E., Roache, J. D., Liebson, I. A., & Nowowieski, P. (1985). Identifying Types of Drug Intoxication: Laboratory Evaluation of a Subject-Examination Procedure. Washington DC: National Highway Traffic Safety Administration. DOT HS 806753

- Field Evaluation of the Los Angeles Police Department Drug Detection Procedure, February 1986, DOT HS 807 012, A NHTSA Technical Report, National Highway Traffic Safety Administration. Richard P. Compton. (Commonly referred to as the 173 Case Study)



The Laboratory Evaluation took place at Johns Hopkins University in Maryland. The drug examiners were senior DREs from LAPD. The LAPD participants were Dick Studdard, Jerry Powell, Pat Russell, and Doug Laird. The laboratory experiments were planned and conducted by researchers from Johns Hopkins. Volunteers each took a “pill” and smoked a “cigarette”. The “pill” contained either no drug (placebo) or one of the following drugs:

- Secobarbital (CNS Depressant)
- Valium (i.e., Diazepam – CNS Depressant)
- d-amphetamine (CNS Stimulant)



***Secobarbital, Diazepam, and d-amphetamine were the pharmaceuticals used in the study. All were administered in identical gelatin capsules and were not brand name drugs.***

A common brand name for Secobarbital is Seconal; a common brand name for Diazepam is Valium and a common brand name for d-amphetamine is Dexedrine. The “cigarette” contained either THC or no drug (placebo). Neither the volunteers nor the LAPD officers knew what the volunteers had taken.

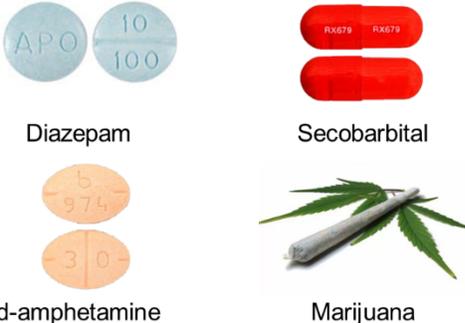


***Inform participants this condition is known as a “double blind” experiment. The people being tested and the people doing the testing are kept uninformed of the test condition.***

Two different dose levels of Marijuana, Diazepam, and d-amphetamine were used. Clarification: some of the Diazepam and d-amphetamine pills were “weak,” some were “strong.” Similarly, some of the Marijuana cigarettes were “weak,” some “strong.” All of the Secobarbital pills were “strong.”

Session 3 - Development & Effectiveness of the DEC Program

### Laboratory Evaluation



Diazepam

Secobarbital

d-amphetamine

Marijuana

DRE 3-9

**Slide 9.**

Normal daily dose for therapeutic purposes:

- Diazepam: 4-40 mg
- Secobarbital: approx. 100 mg
- d-amphetamine: 15 mg

Doses administered for this study:

- Diazepam: weak – 15mg, strong – 30mg
- Secobarbital: 300 mg

- d-amphetamine: weak – 15 mg, strong – 30 mg
  - Marijuana: weak – 12 puffs of 1.3% THC cigarettes, strong – 12 puffs of 2.8% THC cigarettes
- 

Session 3 - Development & Effectiveness of the DEC Program

## Laboratory Evaluation

- DRE officers correctly identified 95% of drug-free subjects as "unimpaired"
- DRE officers classified 98.7% of high-dose subjects as "impaired"
- Correctly identified category of drugs for 91.7% of high-dose subjects

DRE 3-10

**Slide 10.**

The results of the laboratory evaluation showed the DREs were excellent in identifying subjects who received only placebo doses: they classified 95% of the drug-free subjects as “not impaired”. Similarly, they were excellent in identifying the high-dose subjects. They classified as “impaired” 98.7% of the subjects who received Secobarbital or strong doses of Marijuana, Diazepam, or d-amphetamine. They correctly identified the category of drug for 91.7% of those strong dose subjects.

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## Laboratory Evaluation

DRE officers were less successful in classifying low-dose subjects

- 17.5% of d-amphetamine impaired
- 32.5% of weak marijuana impaired

DRE

3-11

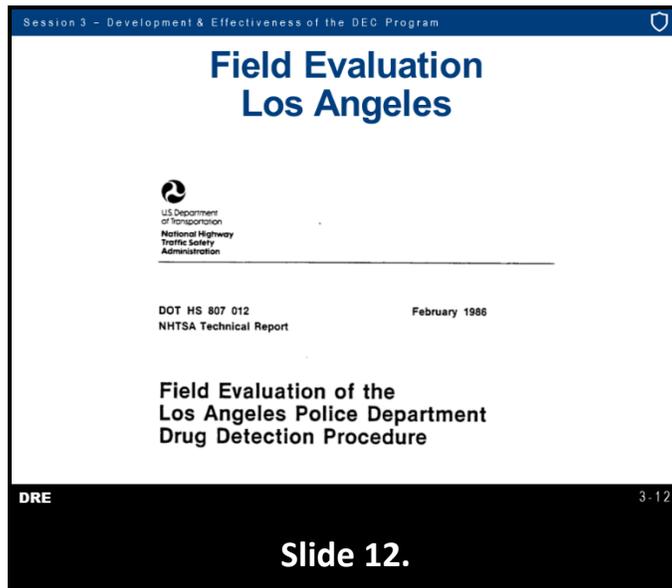
### Slide 11.

The DREs were less successful in identifying the weak dose subjects. Only 17.5% of the subjects who received the weak dose of d-amphetamine were classified as “impaired”. Only 32.5% of the subjects who smoked the “weak” Marijuana cigarettes were classified as “impaired”.



***Emphasize these low-dose subjects probably would never have been stopped and arrested by police officers if they had been driving.***

The results of the laboratory validation study were considered to be extremely positive. The DRE procedures correctly identified the category of drugs in more than 90% of the subjects who were impaired. The procedures only rarely indicated that unimpaired subjects were under the influence of drugs. Laboratory studies can only allow certain dose levels of drugs, which are much lower than those seen at street levels. Therefore, participants in laboratory studies may not show many of the signs of impairment that are seen with subjects administering street-level doses of drugs.



The field validation study was based on 173 people actually arrested on suspicion of driving under the influence of drugs.



***Point out during the study period, many other drugged-driving arrests were made by LAPD officers.***

None of the 173 cases involved a crash. In all of the cases, the arrested subjects agreed to submit to a blood test. Twenty-eight different DREs from LAPD and the Los Angeles area participated in the examinations of these 173 subjects. The researchers excluded all cases where the subjects refused to give blood since it would have been impossible to check the DREs accuracy in those cases. Similarly, they excluded all cases that involved crashes since the subjects' injuries could have confounded the drug examination. Also excluded were subjects who were found in possession of drugs or had any charges other than the drugged driving charge.

Session 3 - Development & Effectiveness of the DEC Program

## Field Evaluation Los Angeles

Blood tests confirmed:

- One suspect had no drugs or alcohol
- 10 had alcohol only
- 37 (21%) had one drug other than alcohol
- 82 (47%) had two drugs (including alcohol)
- 43 (25%) had three or more drugs (including alcohol)

**Slide 13.**

Based on the independent blood tests, only one of the 173 subjects was found to have no alcohol or other drugs. Another ten subjects were found to have only alcohol in them.



***Point out it is possible these ten so-called “drug free” subjects may have used drugs the independent laboratory could not identify for various reasons. Even if we assume these ten people really had not used any drug, ten out of 173 is a very small “false positive” rate.***

Thirty-seven (21%) of the subjects were found to have only one drug other than alcohol. Eighty-two had two drugs (including alcohol) (47%) and forty-three (25%) had three or more drugs (including alcohol).



***Write on dry erase board “72% - two or more drugs.”***

This means 125 of the 173 subjects had used two or more drugs: that is more than 72% of the subjects.



***Emphasize: Polydrug use is very common.***

PCP was the drug most often found among these 173 subjects: more than half of them (56%) had used PCP. The key finding of this study was that for more than nine out of ten of the subjects (92.5%), the blood test confirmed the presence of at least one drug category “opined” by the DREs.

Session 3 - Development & Effectiveness of the DEC Program

## Toxicology Results for Specific Categories

- 92%: Phencyclidine (PCP)
- 85%: Narcotic Analgesics
- 78%: Cannabis
- 50%: CNS Depressants
- 33%: CNS Stimulants



**Slide 14.**

Below are the toxicology results for specific categories:

- PCP: blood tests supported DREs' opinions in 92% of the cases



***Point out: Study data for PCP was collected when PCP was considered a DRE drug category. In the other 8% it is possible a PCP analog might have been used.***

- Narcotic Analgesics: blood tests supported 85% of the DREs' opinions
- Cannabis: blood tests supported 78% of DREs' opinions
- Central Nervous System (CNS) Depressants: blood tests supported 50% of DREs' opinions



***Point out there are literally hundreds of different CNS Depressants, many of which may not have been identifiable by the independent laboratory.***

- CNS Stimulants: blood tests supported 33% of DREs' opinions



***Emphasize, in this study, blood samples were not frozen after collection. Unfortunately, Cocaine continues to degenerate in a blood sample if the sample isn't frozen. It is quite possible the Cocaine had degraded from some samples before the lab analyzed them.***

Numerous States have conducted comparisons of laboratory analysis and DRE opinions. The correlation rates exceeded 80% in those studies.



**Emphasize: Simply because a lab cannot find “drugs” in a sample does not guarantee that no drug is present. Not all labs are able to test for every possible drug.**

A study conducted in 1990 by the Arizona Department of Public Safety Central Regional Crime Laboratory compiled records of the toxicological analysis corresponding to Arizona DREs were analyzed showing a laboratory corroboration rate of 86.5% had been achieved.



**Source:**

Adler, E. V., & Burns, M. (1994). Drug Recognition Expert (DRE) Validation Study. AZ: Arizona Governor's Office of Highway Safety.

The overall conclusion of the laboratory and field studies is the DEC Program is an effective tool for law enforcement.



**Solicit participants’ questions about the laboratory and field studies.**

### C. DEC Program Acceptance

Session 3 – Development & Effectiveness of the DEC Program

## DEC Program Acceptance

### “Frye” Standard

“Is the procedure or principle espoused, accepted by the relevant scientific community?”



DRE 3-15

**Slide 15.**

The DEC Program has also been effective in the court room.

*Favorable Court Rulings on DEC Procedures:* Courts in various States have ruled favorably on the DEC Program. Most American courts employ either the Frye or Daubert Standard for determining the admissibility of scientific evidence. The Frye standard is the traditional test for admissibility of “new” scientific evidence.



**Print “Frye Standard” on the dry erase board or easel/easel pad.**

The Frye standard: “Is the procedure or principle espoused, accepted by the relevant scientific community?” Frye standard was set by the Washington D.C. Court in 1923.

Session 3 - Development & Effectiveness of the DEC Program

## DEC Program Acceptance

### “Daubert” Standard

Shows reliability before scientific evidence can be admitted



DRE 3-16

**Slide 16.**

In Daubert, courts serve as a gatekeeper for all scientific evidence.



**Print “Daubert” on the dry erase board or easel/easel pad.**

The Daubert Standard (Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579, 1993) requires the court to assess “whether reasoning or methodology underlying the testimony is scientifically valid and if whether that reasoning or methodology properly can be applied to the facts in issue”. The court’s focus “must be solely on principles and methodology, not on the conclusions that they generate” and the court must screen such evidence to “ensure that any scientific testimony or evidence admitted is not only relevant, but reliable” thus a “gate-keeping” role.

Factors to be considered for admissibility under the Daubert Standard include; 1) Whether the theory or technique can be and has been tested; 2) Whether the theory or technique has been subjected to peer-review and publication; 3) The known or potential rate of error for the theory or technique; 4) The existence and maintenance of standards controlling the operation of the technique or test, and 5) Whether the theory or technique has been generally or widely accepted in the relevant scientific community.

Daubert standard requires a showing of reliability before scientific evidence can be admitted.

Courts assess evidence by considering four factors:

- Opinions are testable
- Methods/principles have been subject to peer review
- Known error rate can be identified
- Opinions rest on methodology that is generally accepted within the relevant scientific/technical community

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Session 3 - Development & Effectiveness of the DEC Program

## DEC Program Acceptance

### "Frye" Standard

- Arizona v Johnson
- Colorado v Hernandez
- Minnesota v Klawitter
- Washington v Baity



DRE 3-17

**Slide 17.**

The traditional standard for scientific admissibility of evidence was the Frye Standard.

*State of Arizona v. Dayton Johnson and Samuel Rodriguez, et al, NOS 90056865 and 90035883, (1990)*: An Arizona court (Tucson Municipal Court) ruled the Frye Standard was met. However, upon appeal, the Arizona State Supreme Court ruled the Frye Standard did not apply to the DEC Program.

*State of Colorado v. Daniel Hernandez, 92M 181, (1992)*: A Colorado Court (Boulder County Court) ruled the procedures used by DREs are not new or novel and the Frye Standard did not apply.

*State of Minnesota, City of Minneapolis v. Larry Michael Klawitter, 518 N.W.2d 577, (1993)*: A Minnesota Court (City of Minneapolis) ruled that outside of nystagmus, the DEC Program is not subject to the Frye Standard.

*Washington v. Baity, 991P.2d, 1151, 140 Wn. 2d 1 (2000)*: A Washington Supreme Court ruled the DRE protocols are the application of traditional techniques.

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Session 3 – Development & Effectiveness of the DEC Program

## DEC Program Acceptance

### “Daubert” Standard

- New Mexico v Aleman
- Nebraska v Daly



DRE 3-18

**Slide 18.**

*New Mexico v. Mariam Aleman, Dona Ana County, 3rd District (2003):* A New Mexico Court ruled the DRE’s opinion was correct and the DRE protocol is admissible.

*State (Nebraska) v Daly 775 N.W.2d 47 Nebraska Supreme Court, (2009):* “A law enforcement officer with the training and experience offered by ‘drug recognition expert’ certification is sufficiently qualified to testify, based on his or her evaluation, that a suspect was under the influence of drugs.”

In many jurisdictions, it will not be necessary to have expert scientific testimony to secure admissibility of a DRE’s examination of a subject. The DEC Program is gaining acceptance in many courts. In fact, testimony based on DRE investigation have been accepted by courts for years. Expert testimony regarding drug influence has long been accepted by numerous courts. The components of DRE evaluation are generally accepted in the scientific community. The DEC Program simply combined those components into a systematic and standardized procedure. Thus, many prosecutors believe FRYE standards do not apply to DRE evaluations and testimony.

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Session 3 – Development & Effectiveness of the DEC Program

## Horizontal Gaze Nystagmus Case Law

Arizona v Blake



DRE 3-19

**Slide 19.**

HGN, one key element of the DEC Program, has been recognized as meeting the Frye standard by several State Supreme Courts. The first to do so was Arizona, in the case known as State vs. Blake.



***Print “Arizona vs. Blake” on the dry erase board or easel/easel pad.***

***Point out additional court rulings on HGN are summarized in the participant guide.***

***Emphasize participants should familiarize themselves with the case law on HGN to ensure they avoid the errors that kept evidence from being admitted in the past.***

***If there are significant cases concerning DEC or HGN from the participants’ State, review them at this time.***

***Solicit participants’ questions and comments about case law.***

Summary of HGN Case Law: The American Prosecutor’s Research Institute HGN State Case Law Summary is available at the end of this session. The prevailing trend is for courts to admit HGN as evidence of impairment, with the proper scientific foundation. But courts consistently reject all attempts to introduce HGN as evidence of a quantitative BAC.

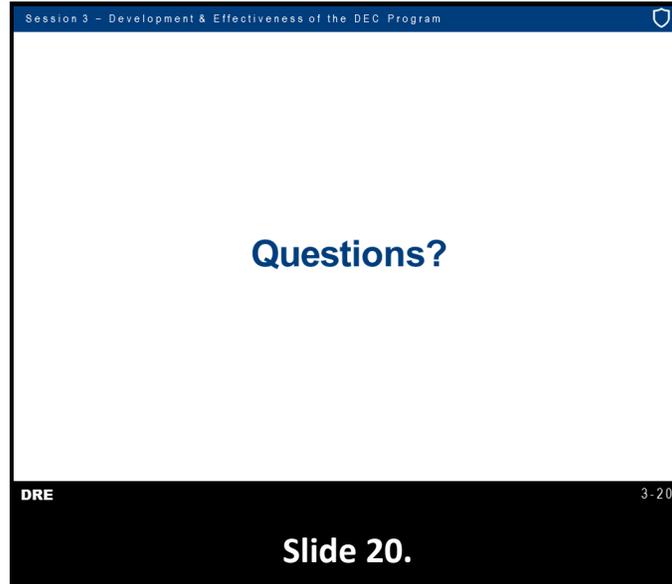


***Write on dry erase board or easel/easel pad – “Cannot be used as evidence of specific BAC level.”***

The court ruled in cases where there is no chemical test to determine a BAC level, HGN test results can be admitted the same as of SFSTs to show a “neurological malfunction,” one cause of which could be the administration of alcohol.



**Write “No Chemical Test – HGN Admissible.”**



***Solicit participants’ questions and comments about Development and Effectiveness of the Drug Evaluation and Classification Process.***

Session 3 – Development & Effectiveness of the DEC Program

## Test Your Knowledge

1. State four reasons why it is important not to rely simply on a chemical test to establish a subject's impairment.
2. What categories of drugs were included in the Johns Hopkins Evaluation?
3. In what percentage of cases in the Los Angeles Field Evaluation did blood tests support the DREs' opinion PCP was present?

DRE 3-21

**Slide 21.**

Session 3 – Development & Effectiveness of the DEC Program

## Test Your Knowledge

4. What percentage of blood tests in the LAPD Field Evaluation supported the presence of at least one drug category identified by the DREs?
5. What was the landmark State Supreme Court case that upheld the use of HGN as evidence of impairment?
6. Which landmark expert testimony court decision requires the court to have a "gate-keeper" role and screen evidence?

DRE 3-22

**Slide 22.**

### Test Your Knowledge

1. State four reasons why it is important not to rely simply on a chemical test to establish a subject's drug impairment.
2. What categories of drugs were included in the Johns Hopkins Evaluation?
3. In what percentage of cases in the Los Angeles Field Evaluation did blood tests support the DREs' opinion PCP was present?
4. What percentage of blood tests in the LAPD Field Evaluation supported the presence of at least one drug category identified by the DRE's?
5. What was the landmark State Supreme Court case that upheld the use of HGN as evidence of impairment?
6. Which landmark expert testimony court decision requires the court to have a "gate-keeper" role and screen evidence?



1. ***Develop articulable evidence of drug impairment; Suspect may refuse chemical test; Chemical tests do not indicate recency of use; Suspect may be suffering from injury or illness.***
2. ***CNS Depressants, CNS Stimulants and Cannabis***
3. ***92%***
4. ***92.5%***
5. ***State (AZ) vs. Blake***
6. ***Daubert (Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579, 1993)***

# 4 DRE

## OVERVIEW OF DRUG RECOGNITION EXPERT PROCEDURES

### LEARNING OBJECTIVES

- Name the components of the Drug Evaluation and Classification (DEC) Program drug influence evaluation
- State the purpose of each component
- Describe the activities performed during each component

### CONTENTS

A. Components of the Drug Evaluation and Classification Process.....	2
B. Interview of the Arresting Officer .....	17
C. Overview of the Preliminary Examination .....	20
D. Examinations of the Eyes .....	24
E. Divided Attention Tests .....	26
F. Examinations of Vital Signs.....	27
G. Dark Room Examinations.....	28
H. Examination of Muscle Tone .....	31
I. Examination for Injection Sites .....	32
J. Subject Statements .....	34
K. Opinion of the Evaluator .....	35
L. Toxicological Examination .....	36
M. Video Demonstrations (Optional).....	37

### LEARNING ACTIVITIES

- Instructor-Led Presentation/Demonstrations
- Video Presentations
- Reading Assignments



## Learning Objectives

- Name components of DEC Program drug influence evaluation
- State purpose of each component
- Describe activities performed during each component

DRE

4-2

**Slide 1.**

*Briefly review the objectives, content, and activities of this session.*

### A. Components of the Drug Evaluation and Classification Process



## The Drug Influence Evaluation



DRE

4-3

**Slide 2.**

The DEC Program Process is a systematic and standardized method to establish the subject is impaired and verifies his or her alcohol level is not consistent with the degree of impairment that is evident. Inconsistency between the observed impairment and the blood alcohol concentration (BAC) suggests the presence of some other drug(s) or some other complicating factor such as an illness or injury. The DEC Program Process is to determine whether the impairment may stem from illness or injury requiring medical attention or is drug related. And, the DEC Program Process is to determine what category (or categories) of drugs are the likely cause of the impairment.



**Write on the dry erase board or easel/easel pad: “A SYSTEMATIC AND STANDARDIZED PROCESS.”**

**Definition of systematic: Done or acting according to a fixed plan or system; methodical.**

**Definition of standardized: Conforming to a model in comparative applications.**

Some of these observable signs and symptoms relate to the subject’s appearance.



**Write “appearance” on the dry erase board or easel/easel pad.**

Some of these observable signs and symptoms relate to the subject’s behavior.



**Write “behavior” on the dry erase board or easel/easel pad.**

Some relate to the subject’s performance of carefully administered psychophysical tests.



**Ask participants: “What does ‘psychophysical’ mean?”**

**Point out “psychophysical” relates to the subject’s mind (psyche) and body (physique).**

**Write “psychophysical testing” on the dry erase board or easel/easel pad.**

Session 4: Overview of Drug Recognition Expert Procedures

## The Drug Influence Evaluation

Why is it so important to perform the drug influence evaluation in exactly the same way, every time?

DRE 4-4

**Slide 3.**

Drugs impair the subject's ability to control his or her mind and body. Psychophysical tests can disclose the subject's ability to control mind and body is impaired. The specific manner in which the subject performs the psychophysical tests may help indicate the category or categories of drugs causing the impairment. Some of the observable signs and symptoms relate to the subject's automatic responses to the specific drugs that are present. All of these reliable indicators are examined and carefully considered before an opinion is made concerning what categories of drugs are affecting the subject.

DREs should always try to conduct the 12-step process in the same manner each time. If there is deviation from the 12-step process, it should be noted in the narrative report. DREs should make every effort to conduct a complete post arrest drug influence evaluation for every drug impaired driver, whether they are the arresting officer or not. However, there may be times when DREs begin the 12-step process, but are unable to complete it (for example, uncooperative subject, equipment failure, or refusals). DREs should document all available evidence and observations in their report.

**Whenever possible, DREs should conduct the entire drug influence evaluation in accordance with DEC Program training.**



***Ask participants: "Why is it so important to perform the drug influence evaluation in exactly the same way, every time?"***



## Reasons for Standardization

- Ensures no mistakes are made
- No steps are omitted
- Eliminates extraneous or unreliable “indicators”
- Promotes professionalism
- Helps secure acceptance in court

DRE

4-5

### Slide 4.



***Probe to draw out all major reasons for standardization.***

Standardization helps to ensure no mistakes are made. There are no steps omitted and no extraneous or unreliable “indicators” are included. Standardization helps to promote professionalism among Drug Recognition Experts (DREs). Standardization helps to secure acceptance in court.

Circumstances may warrant a DRE to perform a step out of sequence or the suspect may be unable, or refuses, to perform part of the evaluation. If this occurs, the DRE should document the circumstances in their narrative report.



***Discuss examples of reasons when the DRE may be unable to complete each step of the evaluation, i.e., injuries, uncooperative subject, equipment failure.***

In such cases, the DRE may still be able to form an opinion based upon the evidence obtained. *State v. Cammack*, 1997 WL 104913 (Minnesota Ct. Appeals, 1997) ruled a DRE need not complete the entire 12-step evaluation for an opinion to be admissible so long as there is sufficient admissible evidence.

Session 4: Overview of Drug Recognition Expert Procedures

## Drug Influence Evaluation Steps

International Association of Chiefs of Police  
Drug Evaluation and Classification Program  
Drug Influence Evaluation Checklist

- \_\_\_\_\_ 1. Breath alcohol test
- \_\_\_\_\_ 2. Interview of arresting officer
- \_\_\_\_\_ 3. Preliminary examination and first pulse  
(Note: Gloves must be worn from this point on.)
- \_\_\_\_\_ 4. Eye examinations
- \_\_\_\_\_ 5. Divided attention tests:
  - \_\_\_\_\_ Modified Romberg Balance
  - \_\_\_\_\_ Walk and Turn
  - \_\_\_\_\_ One Leg Stand
  - \_\_\_\_\_ Finger to Nose
- \_\_\_\_\_ 6. Vital signs and second pulse
- \_\_\_\_\_ 7. Dark room examinations
- \_\_\_\_\_ 8. Check for muscle tone
- \_\_\_\_\_ 9. Check for injection sites and third pulse
- \_\_\_\_\_ 10. Interrogation, statements, and other observations
- \_\_\_\_\_ 11. Opinion of evaluator
- \_\_\_\_\_ 12. Toxicological examination

**Slide 5.**

The DEC Program drug influence evaluation has twelve components or steps.



**Refer participants to the 12-step evaluation checklist in their participant guide. Briefly describe the 12-step process on the following slides. Then provide greater detail later in the session.**

Session 4: Overview of Drug Recognition Expert Procedures

## 1. Breath Alcohol Test

**Slide 6.**

The Breath Alcohol Test is needed to determine BAC. The purpose of the breath test is to determine whether the specific drug, alcohol, may be contributing to the impairment observed in the subject. Obtaining an accurate measurement of BAC enables the DRE to assess whether alcohol may be the sole cause of the observable impairment or whether it is likely some other drug or drugs, or other complicating factors, are contributing to the impairment.



**Remind participants many subjects who are under the influence of drugs other than alcohol also have alcohol in their system.**

Session 4: Overview of Drug Recognition Expert Procedures

## 2. Interview of the Arresting Officer



DRE 4-8

**Slide 7.**

A slide from a presentation titled "Session 4: Overview of Drug Recognition Expert Procedures". The slide is titled "2. Interview of the Arresting Officer" and features a photograph of two police officers in uniform. One officer is holding a clipboard and looking at it, while the other officer stands beside him, also looking at the clipboard. The slide includes the text "DRE" and "4-8" in the bottom left corner and "Slide 7." in a black box at the bottom center.

If the DRE is the arresting officer, the information gained from this step will already be known. Even when the DRE is the arresting officer, every effort should be made to conduct a complete post arrest drug influence evaluation on the subject. In most cases, the subjects you will examine will not be people you arrested. The arresting officer may have seen or heard things that would be valuable indicators of the kinds of drugs the subject has administered. The arresting officer, in searching the subject, may have uncovered drug-related paraphernalia or even drugs themselves. The arresting officer also may be able to alert you to important information about the subject's behavior that could be very valuable for your own safety. Document if the arresting officer has been trained in ARIDE.

### 3. Preliminary Examination

**DRUG INFLUENCE EVALUATION**

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Recorder/Witness	Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency	
Arrestee's Name (Last, First, Middle)	Date of Birth	Sex	Arresting Officer (Name, ID#)	
Date Examined / Time / Location	Board Test: Results:	Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Oral Fluid <input type="checkbox"/>	Urine <input type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When?	What have you been drinking? How much?	Time of last drink?
Time now/ Actual	When did you last sleep?	How long?	Are you sick or injured?	Are you diabetic or epileptic?
<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No	Attitude:	Coordination:		
Speech:	Breath odor:	Face:		
Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft	Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Abile to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy

DRE

4-9

Slide 8.



Instructor Note

**Remind participants protective gloves must be worn from this portion of the evaluation on.**

The purpose of the preliminary examination is to help you decide whether to continue with the drug influence evaluation, pursue a possible medical complication, or proceed with a DWI (alcohol) case. The preliminary examination is your first opportunity to observe the subject closely and directly. Another purpose of the preliminary examination is to begin systematically assessing the subject's appearance, behavior, and automatic bodily responses for signs of drug-induced impairment.



Instructor Note

**Emphasize the term "preliminary" does not imply "unimportant." Very valuable evidence often comes to light during the preliminary examination.**

The preliminary examination consists of a series of questions and observations dealing with possible injuries or medical problems, the subject's face, speech, breath, pupil size and tracking ability, initial check for estimation of an angle of onset of nystagmus, and initial examination of the subject's pulse.

While you are assessing the subject's tracking ability, you also perform a preliminary assessment of whether nystagmus is present in the subject's eyes. In particular, if the nystagmus or "jerking" is observed, an initial estimation of the angle of onset should be made. The approximate angle of onset may help to determine whether the subject has consumed some drug other than alcohol. **This is not a complete Horizontal Gaze Nystagmus (HGN) test at this time. An entire HGN test will be conducted in the next step.**



**Emphasize courts generally accept these questions as not being in conflict with the subject's Constitutional rights. However, the participants must comply with their own department's policies as to whether they should advise the subjects of their Constitutional rights before asking these questions.**

Session 4: Overview of Drug Recognition Expert Procedures

### 4. Examinations of the Eyes

HGN	Left Eye	Right Eye	Convergence	
Lack of Smooth Pursuit				
Maximum Deviation				
Angle of Onset				

DRE 4-10

**Slide 9.**

Certain drugs produce very easily observable effects on the eyes.



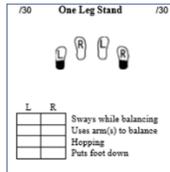
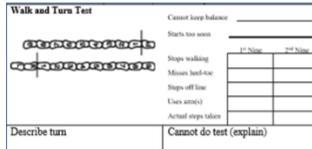
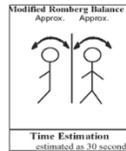
**Ask participants: "What do we look for, in a subject's eyes, to determine if he or she may be under the influence of alcohol?" Probe, as necessary, to draw out the response "nystagmus."**

One of the most dramatic of these effects is nystagmus, which means an involuntary jerking of the eyes. Persons under the influence of alcohol usually will exhibit HGN, which is an involuntary jerking of the eyes occurring as the eyes gaze to the side. Alcohol is not the only drug that causes HGN. HGN is not the only observable effect on the eyes that will be caused by various drugs.



**Point out examinations of the eyes will be covered in much greater depth later in this training.**

### 5. Divided Attention Tests



DRE

4-11

**Slide 10.**



**Ask participants: “What does ‘divided attention’ mean?” Probe, as necessary, to draw out responses indicating the concept of “concentrating on more than one thing at a time.”**

All drugs that impair driving ability will also impair the subject’s ability to perform divided attention tests. These tests are familiar to you in the context of examining alcohol-impaired subjects. The same tests are very valuable for disclosing evidence of impairment due to drugs other than alcohol.



**Point out participants will have opportunities to practice administering these tests subsequently in the training.**

The divided attention tests used in the DRE examination include: Modified Romberg Balance (MRB); Walk and Turn (WAT); One Leg Stand (OLS); and Finger to Nose (FTN).

Session 4: Overview of Drug Recognition Expert Procedures

## 6. Examination of Vital Signs

Pulse and Time

1. \_\_\_\_\_ / \_\_\_\_\_

2. \_\_\_\_\_ / \_\_\_\_\_

3. \_\_\_\_\_ / \_\_\_\_\_

Blood Pressure  
/

Temperature  
°F

DRE4 - 12

Slide 11.

Drugs affect the operation of the heart, lungs, and other major organs of the body. These effects show up during examination of the subject's vital signs.



***Point out examinations of vital signs will be covered in depth later and participants will have ample opportunity to practice measuring vital signs.***

The vital signs that are reliable indicators of drug influence include blood pressure, pulse, and temperature.

Session 4: Overview of Drug Recognition Expert Procedures

## 7. Dark Room Examinations

PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area:
Left Eye				Oral cavity:
Right Eye				
Rebound Dilation: <input type="checkbox"/> Yes <input type="checkbox"/> No			Reaction to Light:	

DRE4 - 13

Slide 12.

Many categories of drugs affect how the pupils will appear and how they respond to light.

Certain kinds of drugs will cause the pupils to become larger or dilate. Some other drugs cause the pupils to become smaller or constrict. By systematically changing the amount of light entering the subject's eyes, we can observe the pupils' appearance and reaction under controlled conditions. We carry out these examinations in a dark room, using a penlight to control the amount of illumination entering the subject's eyes.



***Exhibit a penlight.***

We use a device called a pupillometer to estimate the size of the subject's pupils.



***Exhibit a pupillometer. Point out the pupillometer has a series of circles or semi-circles of various sizes.***

By lining the circles up alongside the subject's pupil, the pupil's size can be determined.



***Point out participants will have several opportunities to practice conducting dark room examinations later in the course.***

Other examinations are also conducted in the darkroom, using the penlight, i.e., examination of the nasal area and mouth for signs of drug use and for concealed contraband.

Session 4: Overview of Drug Recognition Expert Procedures

## 8. Examination of Muscle Tone

<b>MUSCLE TONE:</b> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid <input type="checkbox"/>
Comments:

DRE 4-14

**Slide 13.**

Certain categories of drugs may cause the user's muscles to become noticeably tense and rigid. Others may cause the muscle tone to be flaccid or soft. Evidence of muscle tone may be apparent when the subject attempts to perform the divided attention tests. It may also be observed when taking the subject's pulse, blood pressure, or while examining for injection sites.



***Point out examination for muscle tone will be covered in depth later in the course.***

Session 4: Overview of Drug Recognition Expert Procedures

### 9. Examination for Injection Sites

RIGHT ARM	LEFT ARM
ATTACH PHOTOS OF FRESH PUNCTURE MARKS	

DRE 4-15

**Slide 14.**

Certain drugs are commonly injected by users via hypodermic needles.



***Ask participants: “What drug is most often associated with injection via hypodermic needle?”***

Heroin is probably most commonly associated with injection, but several other types of drugs also are injected by many users. Locating injection sites on a subject provides evidence of possible drug use.

## 10. Subject's Statements and Other Observations

What drugs or medications have you been using?		How much?	Time of use?	Where were the drugs used? (location)
Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation
Officer's Signature:			Reviewed/approved by / date:	DRE #
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen
			<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Sedative
			<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

DRE

4 - 16

### Slide 15.

At this point in the evaluation, the DRE may have reasonable grounds to believe the subject is under the influence of a drug or drugs. The DRE may also have at least an articulable suspicion as to the category or categories of drugs causing the impairment. The DRE should proceed to interview the subject to support their opinion concerning the drug category or categories involved.



Instructor Note

***Emphasize any such interview can proceed only in conformance with formal admonition and strict observance of the subject's applicable Constitutional rights.***

The DRE must carefully record the subject's statements and any other observations that may constitute relevant evidence of drug-induced impairment.



Instructor Note

***Point out DREs should use appropriate follow-up questions for interviewing subjects based upon the probable category or categories of drugs involved.***



## 11. Opinion of Evaluator



DRE

4-17

### Slide 16.

Based on all of the evidence and observations collected from the preceding steps, the DRE should be able to reach an informed opinion as to whether the subject is under the influence of a drug or drugs, and if so the probable category or categories of drugs causing impairment. The DRE must record a narrative summary of the facts forming the basis for their opinion.



***Point out if the DRE concludes the subject is impaired, you will state that in your written narrative report.***

***Point out the DRE should refer to drug categories and not to specific drugs.***



## 12. Toxicological Analysis



DRE

4-18

### Slide 17.

The toxicological analysis of the sample is designed to obtain scientific, admissible evidence to support the DRE's opinion. This step is the analysis of the collected specimen. Specimen collection may have occurred earlier in the arrest process or evaluation. If not, it should be collected now. Proper Department policy and procedures should be followed in requesting, obtaining, and handling the toxicological sample. In some cases the arresting officer may have already obtained the specimen prior to the DRE's arrival. Just because the subject refuses or is unable to provide a specimen for analysis, the DRE should continue with an evaluation and form an opinion.



***Solicit participants' comments and questions concerning this preview of the DRE procedures.***

## B. Interview of the Arresting Officer

Session 4: Overview of Drug Recognition Expert Procedures

### Interview of Arresting Officer



DRE 4-19

**Slide 18.**

The purpose of the interview of the arresting officer is to obtain a summary of the subject's actions, behaviors, etc., that led to the arrest and the suspicion that drugs other than alcohol may be involved. If the arresting officer is ARIDE trained, they may have additional observations that are helpful in identifying drug impairment. The DRE should elicit this information during this interview.



***Emphasize DREs should form the habit of posing explicit questions to arresting officers using a systematic process. A cursory or open-ended interview (e.g., "What do we have here?") may fail to elicit some relevant information because arresting officers won't always know what is relevant to a drug evaluation.***

*Interview Behavior:* Examples of questions DREs could ask during the interview include:

- Was the subject operating a vehicle?
- What actions, maneuvers, etc. were observed?
- Was there a crash?
  - If yes, was the subject injured?
- Was the subject observed smoking, drinking or eating?
- Was the subject apparently inhaling any substance?
- How did the subject respond to the arresting officer's stop?
- Did the subject attempt to conceal or throw away any items or materials?
- What has been the subject's attitude and demeanor during contact with the arresting officer and have there been any changes?
- Describe the subject's performance on roadside field sobriety tests.



Instructor  
Note

**Ask participants to suggest any other questions that might be relevant concerning the arresting officer's observations of the subject's behavior.**

**Remind participants they are acting as investigators and advisors to the arresting officers.**

Session 4: Overview of Drug Recognition Expert Procedures

## Interview of Arresting Officer

### Subject's Statements

- Has subject complained of illness/injury?
- Has subject used drug-related "street terms" or slang?
- How has subject responded to questions?
- Is subject's speech slurred, slow, thick, rapid, mumbled, etc.?
- What, specifically, has subject said?

DRE 4-20

**Slide 19.**

### *Interview Concerning Subject's Statements*

- Has the subject complained of an illness or injury?
- Has the subject used any "street terms" or slang associated with drugs or drug paraphernalia?
- How has the subject responded to the arresting officer's questions?
- Was the subject's speech slurred, slow, rapid, thick, mumbled, etc.?
- What, specifically, has the subject said to the arresting officer?



Instructor  
Note

**Ask participants to suggest any other questions that might be relevant concerning statements the subject made in the arresting officer's presence.**



## Interview of Arresting Officer

### Physical Evidence

- Materials uncovered during search?
- Smoking paraphernalia?
- Injection materials?
- Balloons, plastic bags, small metal foil wrappings, etc.?
- Subject's BAC?

DRE

4-21

### Slide 20.

*Interview: Physical Evidence:* Issues concerning physical evidence include:

- What items or materials were uncovered during the search of the subject or vehicle?
- Were any smoking paraphernalia uncovered?
- Were any injection materials, i.e., needles, syringes, leather straps, rubber tubes, spoons, bottle caps, etc. found
- Were there any balloons, plastic bags, small metal foil wrappings, etc. found?
- What was the subject's blood alcohol concentration?



Instructor  
Note

***Emphasize the subject should be requested to submit to a breath test if that has not already been done.***

***Ask participants to suggest any other relevant questions concerning physical evidence.***

***Solicit participants' comments and questions concerning the interview of the arresting officer***

## C. Overview of the Preliminary Examination

Session 4: Overview of Drug Recognition Expert Procedures

### Overview of Preliminary Examination

- Questions
- Observations of face, breath and speech
- Initial checks of the eyes
- First check of the pulse



DRE 4-22

**Slide 21.**

The preliminary examination consists of questions, observations of face, breath, and speech, initial checks of the eyes, and the initial check of the subject's pulse.



***Point out pulse check actually is part of the examination of the subject's vital signs. Pulse is checked three times during the drug influence evaluation to rule out nervousness or a possible medical condition. This also gives a more accurate and reliable pulse.***



## Preliminary Examination Questions

- Sick or injured?
- Any physical defects?
- Diabetic or epileptic?
- Insulin?
- Doctor's or dentist's care?
- Medications or drugs?

DRE

4-23

### Slide 22.

The questions deal with injuries or medical problems the subject may have. They include:



***Point out these questions are incorporated into the Drug Influence Evaluation Form which the participants will use during all of their practice sessions. Briefly discuss the relevance of each question.***

- Are you sick or injured?
- Do you have any physical defects?
- Are you diabetic or epileptic?
- Do you take insulin?
- Are you under a doctor or dentist's care?
- Are you taking any medications or drugs?

If the subject responds in the affirmative to any of the above questions, ask follow-up questions to gather more information.



## Initial Checks of Eyes

- Check pupil size
- Assessment of tracking ability
- Initial estimate of nystagmus angle of onset



DRE

4-24

**Slide 23.**

The initial checks of the subject's eyes include several important steps.

*Check of the Size of Each Pupil:* The initial examination of the eyes may reveal signs of injury or illness. A difference in pupil size of greater than 0.5 mm may indicate an injury or existing medical condition.

Instructor  
Note

***Point out if the two pupils are of unequal size, this may indicate the subject is suffering from a head injury, brain tumor, or other condition that may require prompt medical attention.***

***Also point out the influence of certain categories of drugs may be present if the pupils are dilated or constricted.***

*Assessment of the Ability of the Eyes to Track a Moving Object:* While you are assessing the subject's tracking ability, you can also perform a preliminary assessment of whether nystagmus is present in the subject's eyes. The presence of nystagmus may indicate the presence of certain categories of drugs or medical conditions.

Instructor  
Note

***Demonstrate how to use a stimulus to assess the ability of eyes to track a moving object.***

***Point out if the two eyes do not exhibit the same tracking ability, this too may indicate a head injury or other medical condition.***

*Initial Estimation of the Angle of Onset of HGN:* If the nystagmus or "jerking" is observed, an initial estimation of the angle of onset can be made. The approximate angle of onset may help to determine whether the subject has consumed some drug other than alcohol.



***Point out certain categories of drugs cause HGN. For example, this will be true of CNS Depressants, Inhalants, and Dissociative Anesthetics.***

***Remind participants there is a general correlation between BAC and the Angle of Onset of Nystagmus. Generally speaking, the higher the BAC, the earlier the angle of onset.***

If the subject has also used some other drug that also causes nystagmus, the angle of onset may occur even earlier than the BAC would indicate. Example: Suppose you are examining a subject who has an angle of onset at 40 degrees. Based on that alone, you would expect the person's BAC to be in the .08 - .10 percent range. But if that subject has also administered a Dissociative Anesthetic, the onset could occur much earlier, perhaps as soon as the eyes start to move to the side.

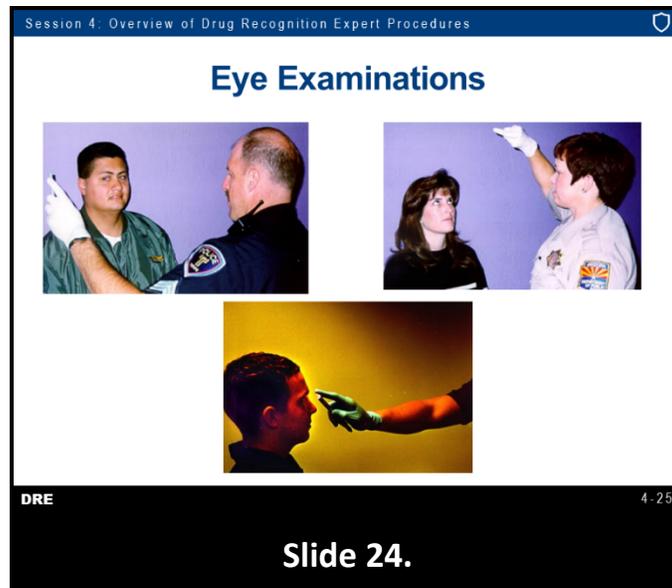


***Emphasize if the angle of onset does not match the BAC level, the DRE should be alert to the possible presence of some drug other than alcohol.***

***But also emphasize the nystagmus onset angle could correspond very closely to what would be expected from the alcohol level alone even though the subject has administered large quantities of other drugs.***

For example: Cannabis, Narcotic Analgesics, CNS Stimulants, and Hallucinogens do not cause nystagmus and will not affect the angle of onset.

## D. Examinations of the Eyes



***Emphasize this is a complete eye examination unlike the initial estimation of angle of onset conducted during the preliminary examination.***

The Examinations of the Eyes consist of three tests.

**HGN:** The HGN test includes three clues; Lack of Smooth Pursuit, Distinct and Sustained Nystagmus at Maximum Deviation, and Angle of Onset.



***Point out the importance of checking for each of these clues in every examination of the eyes.***

**Vertical Gaze Nystagmus (VGN):** VGN is an involuntary jerking of the eyes (up-and-down) which occurs when the eyes gaze upward at maximum elevation. Certain types of drugs tend to cause VGN, while others do not.



***Point out VGN tends to develop with relatively high doses of certain drugs for that individual.***

**Lack of Convergence (LOC):** LOC is the inability of the eyes to draw in toward the center (cross) while fixating on a stimulus being moved in toward the bridge of the nose. LOC is checked by first getting the subject to focus on and track the stimulus as it slowly moves in a circle in front of the subject's face.



***Illustrate on the dry erase board or easel/easel pad different examples of LOC.***  
***Point out the circular motion (either left or right) serves to demonstrate the subject is tracking the stimulus.***

Then, the stimulus is slowly pushed in toward the bridge of the subject's nose, stopping at a distance approximately, but no closer than, 2 inches, and held for approximately one (1) second.



***Remind participants that it is a good idea to conduct the LOC test twice to confirm the results.***

***Point out the stimulus does not actually touch the subject's nose, stopping approximately, but no closer than, 2 inches from the nose.***

Under the influence of certain types of drugs, the eyes may not be able to converge.



***Remind participants subjects who normally wear reading glasses should be afforded the opportunity to wear their glasses during the LOC test if available.***

***Solicit participants' comments and questions concerning the Examinations of the Eyes.***

## E. Divided Attention Tests

Session 4: Overview of Drug Recognition Expert Procedures

### Divided Attention Tests

- Modified Romberg Balance
- Walk and Turn
- One Leg Stand
- Finger to Nose



DRE 4-26

**Slide 25.**

Several Divided Attention tests used for drug examinations are the same familiar tests used for examining alcohol-impaired subjects.

- Modified Romberg Balance (MRB)
- Walk and Turn (WAT)
- One Leg Stand (OLS)



***Point out the OLS is administered twice during the DEC drug influence evaluation (one on each leg).***

- Finger to Nose (FTN)



***Point out all of these tests were covered in their entirety in Session 3 of the Pre-School.***

***You may need to review the tests. If so, the tests are detailed in the participant guide for this session.***



***MRB Test Demonstration – Instructor or participant led. Point out officer safety is of major importance during this test.***

***Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating.***

***WAT Test Demonstration – Instructor or participant led. Point out officer safety is of major importance during this test.***

***Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating.***



***OLS Test Demonstration – Instructor or participant led. Point out officer safety is of major importance during this test.***

***Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating.***

***FTN Test Demonstration – Instructor or participant led.***

***Ask class if anything was missed or done incorrectly. Excuse the participants following the demonstration and thank them for participating.***

***Point out participants will have numerous opportunities to observe and practice the divided attention tests during the remainder of the course.***

## F. Examinations of Vital Signs

Session 4: Overview of Drug Recognition Expert Procedures

### Examinations of Vital Signs

- Pulse
- Blood pressure
- Temperature



DRE 4-27

**Slide 26.**



***Point out these examinations will be covered in detail in Session 7.***

The vital signs consist of three things routinely measured in basic physical examinations: Pulse; Blood Pressure; and Temperature.

These measurements require some familiar instruments: stethoscope; manual blood pressure cuff and gauge (sphygmomanometer); and oral thermometer with disposable mouthpieces. A time piece capable of measuring in seconds is also required.



***Display these items.***

Any other equipment must be approved by the Technical Advisory Panel (TAP) of the International Association of Chiefs of Police (IACP).



***Point out procedures for measuring blood pressure, pulse, and temperature will be explained and practiced later in this course.***

***Solicit participants' comments and questions concerning examinations of vital signs.***

## G. Dark Room Examinations

Session 4: Overview of Drug Recognition Expert Procedures

### Dark Room Examinations

- Room light
- Near-total darkness
- Direct light
- Oral and nasal cavity check



DRE 4-28

**Slide 27.**

The principal activity that takes place during the dark room examinations is the estimation of pupil size under three lighting conditions, or levels. Those levels are: Room light; Near total darkness; and Direct light.

The room light estimation is conducted prior to darkening the room lights. Whenever possible, the room light estimation should be conducted in the same room where the other pupil estimations are conducted. This helps ensure the same focal point and light intensity.

For safety reasons, whenever possible, another officer should always accompany you and the subject into the dark room.



***Point out this is essential for officer safety. Remind participants no one should normally be carrying a firearm when in the presence of a subject during the dark room examination.***

**Room Light:** Before turning off the lights, you will estimate the size of the subject's pupils under room light.



***Point out some departments require the subject be handcuffed before going into the darkroom.***

You must always first estimate the left pupil, then the right.



***Point out the subject should be instructed not to try to focus on you or on the penlight, but to look “slightly up and at a specific focal point” (straight ahead and several feet away) during the estimation of pupil size.***

You must position the pupillometer alongside the eye to ensure an accurate estimation. After you have completed the room light estimations, turn off the lights and wait at least 90 seconds to allow your eyes and the subject’s eyes to adapt to the darkness.

*Near Total Darkness:* The next check will be of pupil size under near total darkness. You will need the bare minimum amount of light necessary to see the subject’s pupils and the pupillometer.



***Emphasize this point.***

You can create the necessary light by covering the tip of the penlight with your finger or thumb or by using a dim red light.



***Demonstrate this. Point out a slight glow emanates. If possible, darken the room and exhibit the slight glow.***

The light is then moved near the subjects left eye just until it is possible to distinguish the colored portion of the eye (Iris). Hold the pupillometer alongside the eye and locate the circle or semi-circle closest in size to the pupil.



***Repeat the procedure for the right eye.***

*Direct Light:* The third and final check will be of the pupil size under direct light. You will shine the full strength of the penlight directly into the subject’s eye for a minimum of 15 seconds.



***Point out it is necessary to maintain reasonably fresh batteries in the penlight.***

Do this by activating the penlight pre-positioned in front of the eye.



***Demonstrate this using a participant volunteer.***

The penlight should be held close enough to the subject's eye so its beam fills the eye socket.



***Demonstrate this. Point out this will illuminate the area that usually would be discolored if the subject had a "black eye."***

When the light is initially shown into the eye, you will check for the pupil's reaction to light. Then immediately estimate the pupil size under direct light at the end of the 15-second period.



***If possible, darken the room and exhibit the illumination using a participant volunteer.***

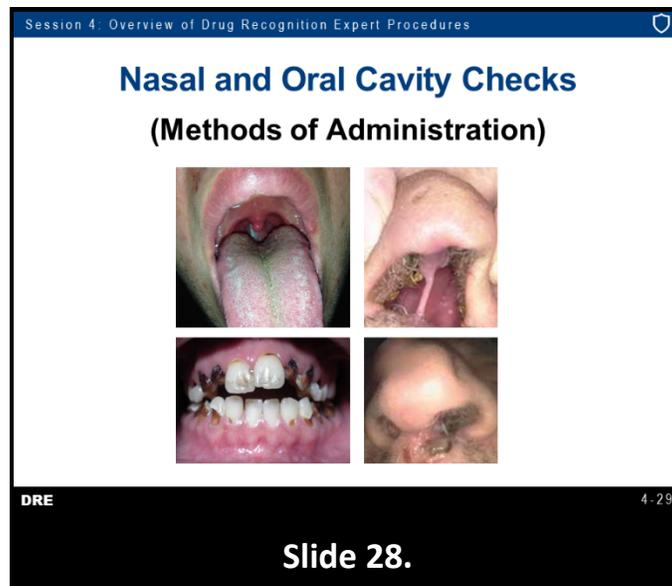
***Emphasize it is very important not to position the penlight too closely or too far away since this will affect the constriction or dilation of the pupil.***

***Excuse the participant and thank him or her for participating.***

**Other Activities:** Two other activities are conducted while in the darkroom. They are examination of the nasal area and examination of the oral cavity.



***Solicit participants' comments and questions concerning these checks.***



For the purpose of this training we will use the term methods of administration to describe any manner by which a drug or alcohol enters the human body whether it be orally or otherwise. In the dark room, DREs may observe evidence that drugs were administered through the nose or the mouth. If administered through the nose, observations may include powder in the nasal area, redness in the nasal area, and others. If administered through the mouth, observations may include coating on the tongue, blisters/burns, debris in the mouth, and others.



**Encourage participants to document other indicators consistent with drug use.**

## H. Examination of Muscle Tone

Session 4: Overview of Drug Recognition Expert Procedures

### Examination of Muscle Tone

- Flaccid
- Normal
- Rigid



DRE 4-30

**Slide 29.**

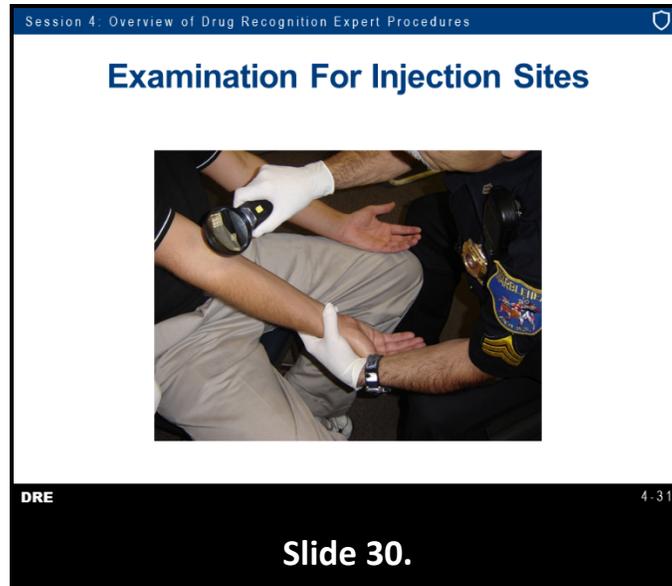
Starting with the subject's left arm, examine the arm muscles. Firmly grasp the upper arm and slowly move down to determine muscle tone. The muscles should appear flaccid, normal, or rigid to the touch.



**Demonstrate.**

Examine the right arm in the same manner.

## I. Examination for Injection Sites



Some injection sites may be relatively easy to notice. Persons who frequently inject certain drugs develop lengthy scars, commonly referred to as “tracks,” from repeated injections in the same veins. Injection of certain drugs may result in severe caustic action against the skin and flesh producing easily observable sores. A fresh injection site may not be readily observable.



***Point out injection sites can be observed with some drug categories. Injection sites will be covered in detail in Session 17.***

Frequently, a DRE will locate the injection site initially by touch, running the fingers along such commonly used locations as the neck, forearms, wrists, back of hand, etc.



***Emphasize gloves should be worn when touching the subject.***  
***Select a participant and demonstrate a tactile search for injection sites.***

When the DRE locates a possible injection site, a light magnifying lens, commonly known as a “ski light,” can be used to provide a magnified visual examination. “Ski” – short for schematic.



***If available, display this instrument. Demonstrate its use.***

***Solicit participants' comments and questions concerning examination for injection sites.***

***Point out hypodermic needles are sized according to gauge. The gauge of a needle is a measurement of the inside diameter.***

***Point out the gauge number represents how many needles of that size would be needed to equal one inch. The higher the gauge, the smaller the diameter of the needle, i.e., a 16-gauge needle is 1/16th of an inch.***

During this step, the third pulse is taken.



While conducting the examination for injection sites, DREs may observe evidence that drugs were administered through injection or transdermally.



***Give some examples of the appearance and physical characteristics of injection sites.***

In addition to injecting drugs into the veins in the arms, since needles typically leave marks which can be difficult to conceal, users will find more creative and less conspicuous areas on the body to administer a substance.



***Examples of drugs prescribed to be transmitted through the skin are the birth control patches, nicotine patch, and pain management patches.***

Drugs which are able to be administered transdermally can be administered accidentally through contact. Some selected Hallucinogens, Dissociative Anesthetics, and Narcotic Analgesics can be administered transdermally. Cannabis can also be administered transdermally.



***Point out to participants the importance of officer safety indicated in their guide. Example: Wear protective glasses, masks, and gloves when searching subjects and vehicles.***

## J. Subject Statements

Session 4: Overview of Drug Recognition Expert Procedures

### Subject Statements

- Document statements
- Additional probing questions if appropriate
- Miranda Rights



DRE 4-33

All spontaneous statements and subject's response to questions should be documented. Ask additional probing questions as appropriate.



***Remind participants to make sure the subject has been advised of their applicable Constitutional rights.***

***Give specific examples of probing questions, admissions, and denials.***

***Ask participants for additional examples and list all on dry erase board or easel/easel pad.***

*Drug Influence Form Questions:*

- What medication or drug have you been using? How much?
- Time of use?
- Where were the drugs used? (location)

*Be Sure to Record:*

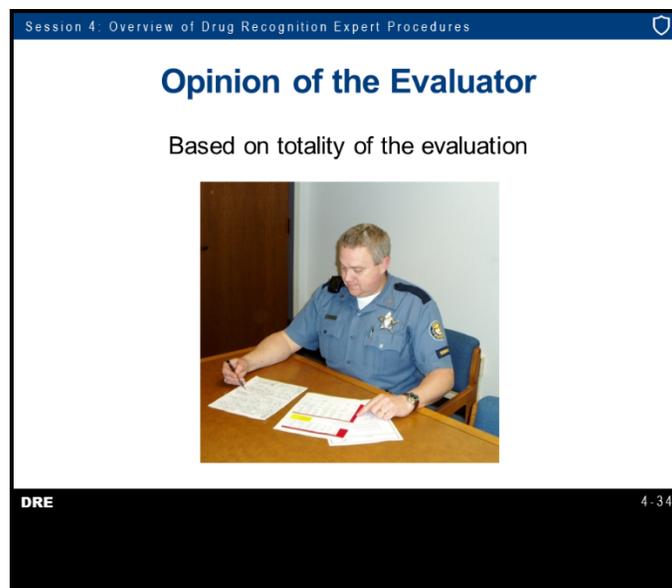
- Date/Time of Arrest
- Time DRE Notified
- Evaluation Start Time
- Time Completed
- DRE signature (Include rank)
- ID #
- Reviewed by



***Point out DREs should use appropriate follow-up questions for interviewing subjects based upon the probable category or categories of drugs involved.***

---

## K. Opinion of the Evaluator



Based on the totality of the evaluation, the DRE should form an opinion of the subject's impairment and, if impaired, the drug category or categories responsible. Anytime there is a positive BAC reading during an evaluation, the DRE must list alcohol (ETOH) as part of their opinion.

The DRE should not base their opinion on just one thing, i.e., admissions, drugs and/or contraband, etc. All the facts and context must be considered and a conclusion made from the whole picture regarding the subject's impairment and its cause.

## L. Toxicological Examination

Session 4: Overview of Drug Recognition Expert Procedures

### Toxicological Analysis

**Toxicology Samples**

- Follow State implied consent laws
- Follow department or agency evidence policies



DRE 4-35

The toxicological examination is a chemical analysis of the subject's blood, urine, or oral fluid by an approved toxicology laboratory. This is not to be confused with the collection of the toxicology sample. A specimen should be collected at some point during the investigation.

*Collecting Toxicology Samples:* Your State's implied consent statutes will dictate the type of sample you can obtain; urine, blood, breath, or oral fluid. Departmental policy, State laboratory guidelines, and procedures should be followed in requesting, obtaining, and handling the toxicology sample. There may be times when the toxicology sample was obtained prior to Step 12 of the DRE protocol. If the toxicology sample has not been collected prior to Step 12, it should be collected now. The DRE should document the details of collecting the evidentiary toxicological sample regardless of when it was obtained.

*Specimen Containers:* The type of container for collecting the sample will be dictated by the type of sample taken and the laboratory requirements where it will be tested. Containers should be sterile and have a lid that will seal tightly to prevent leaks.



***Review participants' department's policy and procedures for requesting, obtaining, and handling toxicological samples.***

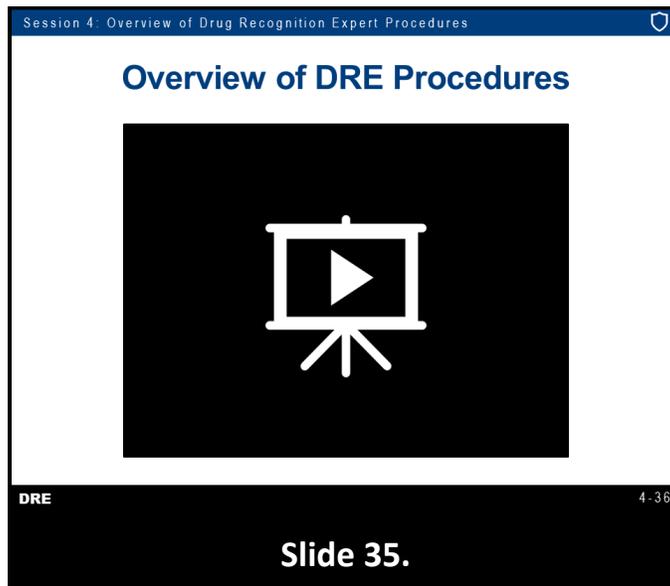
***Ask the participants to relate the law of their State. The implied consent laws may vary significantly from State to State.***

***Have the participants discuss their individual laws and possibly write their requirements on the easel/easel pad for comparison. These are issues that must be addressed with the individual agencies to insure proper and standardized procedures. Participants should follow-up with the appropriate representatives from their agencies to coordinate this activity.***

***Solicit participants' comments and questions concerning toxicological examinations.***

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## M. Video Demonstrations (Optional)



***Instruct participants to refer to their drug influence evaluation checklist and the drug evaluation form as they watch the video.***

***Play the video "Overview of DRE Procedures." (Approximately 22 min. This is the same video shown during Session 2 of the Pre-School). Questions?***

Session 4: Overview of Drug Recognition Expert Procedures

## Questions?

DRE 4-37

**Slide 36.**



*Solicit participants' comments and questions regarding Overview of DRE Procedures.*

Session 4: Overview of Drug Recognition Expert Procedures

## Test Your Knowledge

1. Give three important reasons for conducting DEC evaluations in a standardized fashion.
2. What are the twelve components of the drug evaluation process?
3. How many times is pulse rate measured during the drug influence evaluation?

DRE 4-38

**Slide 37.**

### Test Your Knowledge

1. Give three important reasons for conducting DEC evaluations in a standardized fashion.
2. What are the twelve components of the drug evaluation process?
3. How many times is pulse rate measured during the drug influence evaluation?



**1. Help avoid mistakes, help promote and maintain professionalism and consistency among DREs, and help secure the court's acceptance of your testimony.**

**2.**

- 1. Breath alcohol test**
- 2. Interview of the arresting officer**
- 3. Preliminary examination**
- 4. Examinations of the eyes**
- 5. Divided attention tests**
- 6. Examination of vital signs**
- 7. Dark room examinations**
- 8. Examination of muscle tone**
- 9. Examination for injection sites**
- 10. Subject's statements and other observations**
- 11. Opinion of evaluator**
- 12. Toxicological analysis**

**3. Three**

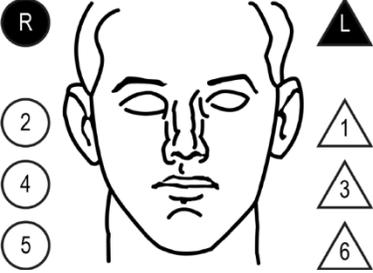
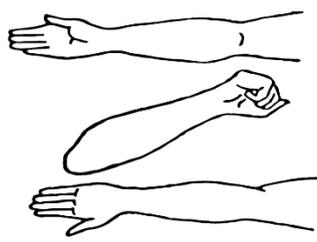
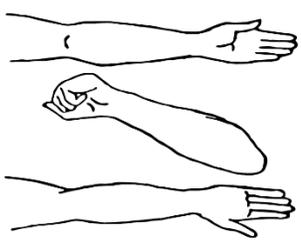
**International Association of Chiefs of Police**

**Drug Evaluation and Classification Program**

**Drug Influence Evaluation Checklist**

- \_\_\_\_\_ 1. Breath alcohol test
- \_\_\_\_\_ 2. Interview of arresting officer
- \_\_\_\_\_ 3. Preliminary examination and first pulse  
(Note: Gloves must be worn from this point on.)
- \_\_\_\_\_ 4. Eye examinations
- \_\_\_\_\_ 5. Divided attention tests:
  - \_\_\_\_\_ Modified Romberg Balance
  - \_\_\_\_\_ Walk and Turn
  - \_\_\_\_\_ One Leg Stand
  - \_\_\_\_\_ Finger to Nose
- \_\_\_\_\_ 6. Vital signs and second pulse
- \_\_\_\_\_ 7. Dark room examinations
- \_\_\_\_\_ 8. Check for muscle tone
- \_\_\_\_\_ 9. Check for injection sites and third pulse
- \_\_\_\_\_ 10. Interrogation, statements, and other observations
- \_\_\_\_\_ 11. Opinion of evaluator
- \_\_\_\_\_ 12. Toxicological examination

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #		Evaluator's Agency		Case #
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property			Arresting Officer's Agency		
Arrestee's Name (Last, First, Middle)		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location / /		Breath Test: Results:		Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When?		What have you been drinking? How much?		Time of last drink?	
Time now/ Actual /	When did you last sleep?	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No			Attitude:		Coordination:		
Speech:		Breath odor:		Face:			
Corrective Lenses: <input type="checkbox"/> None Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy							
Pulse and Time		HGN		Convergence		One Leg Stand	
1. _____ / _____ 2. _____ / _____ 3. _____ / _____		Lack of Smooth Pursuit		 Right eye      Left eye		/30      /30	
Modified Romberg Balance Approx.      Approx.		Walk and Turn Test		Cannot keep balance _____ Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Uses arm(s) _____ Actual steps taken _____		 L      R      L      R Sways while balancing Uses arm(s) to balance Hopping Puts foot down	
Time Estimation _____ estimated as 30 seconds		Describe turn		Cannot do test (explain)		Type of footwear:	
Finger to Nose (Draw lines to spots touched)		PUPIL SIZE		Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)	
		Left Eye				Nasal area:	
		Right Eye				Oral cavity:	
				Rebound Dilatation: <input type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light:	
Blood Pressure /		Temperature °F		RIGHT ARM		LEFT ARM	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:					
What drugs or medications have you been using?		How much?		Time of use?		Where were the drugs used? (Location)	
Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation			
Officer's Signature:		Reviewed/approved by / date:				DRE #	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol		<input type="checkbox"/> CNS Stimulant	
		<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input type="checkbox"/> Hallucinogen	
				<input type="checkbox"/> Dissociative Anesthetic		<input type="checkbox"/> Inhalant	
				<input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Cannabis	

# 5 DRE

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## EYE EXAMINATIONS

### LEARNING OBJECTIVES

- State the purpose of various eye examinations in the Drug Evaluation and Classification (DEC) Program drug influence evaluation procedure
- Describe the administrative procedures for the eye examinations
- Describe the clues for each eye examination
- Conduct the eye examinations and note the clues observed
- Prepare complete, clear, and accurate records of the eye examinations

### CONTENTS

A. Purpose of the Eye Examinations .....	3
B. Procedures and Clues .....	7
C. Demonstrations .....	27
D. Documentation Procedures .....	29

### LEARNING ACTIVITIES

- Instructor-Led Presentation/Demonstrations
- Participant-Led Demonstrations
- Participants' Hands-On Practice
- Reading Assignments



***The use of Ultraviolet (UV) lights are at the discretion of the State DRE Coordinator, however, UV lights are necessary for this session and should be made available.***

Session 5: Eye Examinations

### Learning Objectives

- State purpose of various eye examinations in the DEC Program drug influence evaluation procedure
- Describe administrative procedures and clues for eye examinations
- Conduct eye examinations and note clues observed
- Prepare complete, clear and accurate records of eye examinations

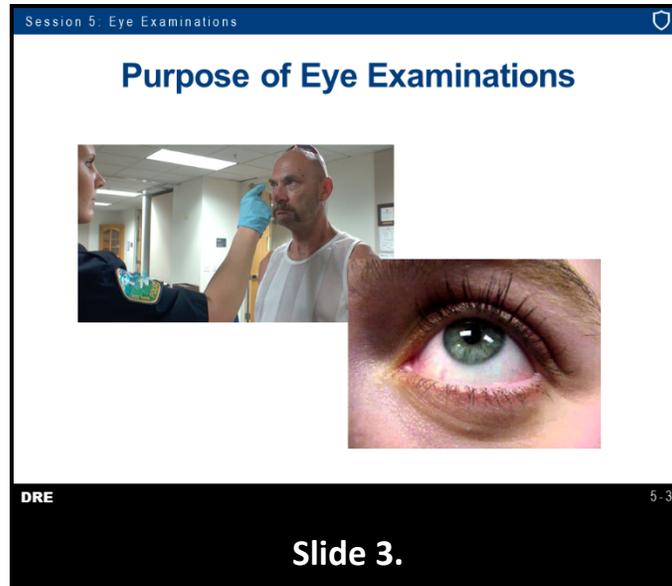
DRE 5-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

## A. Purpose of the Eye Examinations



The principal purpose of the eye examinations is to obtain articulable facts indicating the presence or absence of specific categories of drugs. Certain drug categories usually cause the eyes to react in specific ways. Other drug categories usually do not cause those reactions. The tests of Horizontal Gaze Nystagmus (HGN) and Vertical Gaze Nystagmus (VGN) provide important indicators of the drug categories that may or may not be present.



***Ask participants: "What causes HGN?" Alcohol and certain other drugs will cause HGN.***

If HGN is observed, it is likely the subject may have administered alcohol or another CNS Depressant, an Inhalant, a Dissociative Anesthetic, or a combination of those. If VGN is observed, the implication may be the subject administered a large dose of alcohol for that individual, a Dissociative Anesthetic, such as PCP, or high doses of other Depressants or Inhalants.



***Point out it is very unlikely a subject would exhibit VGN without also exhibiting HGN.***

Any deficiency in eye movement or pupil response, especially if it is acquired or of recent onset, can impair a person's ability to see properly. Drug impairment, including from alcohol, can affect eye movements in several ways, depending on the nature of the intoxicant used. Drug use, including alcohol, is understood to cause physiological changes that are of recent onset and acquired:

1. Lack of smooth pursuit can impair the ability to see details (such as when reading a sign) or make accurate observations (as of the direction and speed of another vehicle) when

there is relative motion between the observer and the target (one or the other is moving, or both are moving but at different speeds and/or different directions);

2. Acquired nystagmus (either at or before maximum deviation) causes a reduction of visual acuity, primarily because of the suppression of visual processing during the fast phase of the nystagmus; and
3. Lack of convergence can cause double vision (diplopia) when looking at objects up close or when frequently or repeatedly changing viewing distance between far and near (such as when looking back and forth from the road to the car's dashboard).

Individuals with long-standing abnormality or deficiency often learn to compensate in some manner. One example includes making a head movement rather than an eye movement when someone has a natural lack of smooth pursuit, not due to intoxication, illness, or trauma. Likewise, someone who has a constant and long-standing nystagmus may be able to detect and extract visual information between successive eye movements. Therefore, while the appearance to the officer may be abnormal, the person is not necessarily impaired.



**Source:**

Leigh, R. and Zee, D. (2015) The Neurology of Eye Movements, Fifth Edition. Oxford University Press.

Session 5: Eye Examinations

### Angle of Onset of Nystagmus

By comparing subject's BAC with Angle of Onset of HGN, it may be possible to determine alcohol is or is not the sole cause of observed nystagmus

Consistency of Angle of Onset and BAC can be compared using the following formula:

$$\text{BAC} = 50 - \text{Angle of Onset}$$

DRE 5-4

**Slide 4.**

By comparing the subject's blood alcohol concentration (BAC) with the Angle of Onset of HGN, it may be possible to determine that alcohol is or is not the sole cause of the observed nystagmus.

**Clarification: If the angle of onset is significantly inconsistent with the BAC, the implication may be the subject has also taken a Dissociative Anesthetic, such as PCP, an Inhalant, or some CNS Depressant other than alcohol.**

The consistency of the Angle of Onset and BAC can be compared using the following formula:  
 $BAC = 50 - \text{Angle of Onset}$ .



**Write the formula on the dry erase board or easel/easel pad:  $BAC = 50 - \text{Angle of Onset}$ .**

**Emphasize this is not an absolute mathematical formula.**

Explanation:  $BAC = 100 \times \text{blood alcohol}$  (i.e., if blood alcohol is 0.10,  $BAC = 10$ ). Example: If onset angle is 35 degrees, then:  $BAC = 50 - 35 = 15$ . The corresponding BAC would be approximately 0.15. Keep in mind this formula is only a statistical approximation. It is not an exact relationship for all subjects at all times. The formula can easily be "off" by 0.05 or more even though the subject has consumed no drug other than alcohol.



**Emphasize this point.**

Session 5: Eye Examinations

### Eye Examinations

- Purpose of comparing BAC and Angle of Onset is to determine possible presence of another "DID" drug
- LOC can also provide another clue as to possible presence of "DIDC" drugs

DRE 5-5

**Slide 5.**

The purpose of comparing BAC and Angle of Onset is to obtain a general indication of the possible presence of another CNS Depressant, a Dissociative Anesthetic, or an Inhalant. The check for Lack of Convergence (LOC) can provide another clue as to the possible presence of Depressants, Inhalants, Dissociative Anesthetics, or Cannabis ("DIDC" drugs). LOC is also an indicator of the possible presence of Cannabis.



## Pupil Size and Reaction to Light

- Provide useful indicators of the possible presence of many drug categories
- During the eye examinations, also check for rebound dilation

DRE

5-6

### Slide 6.

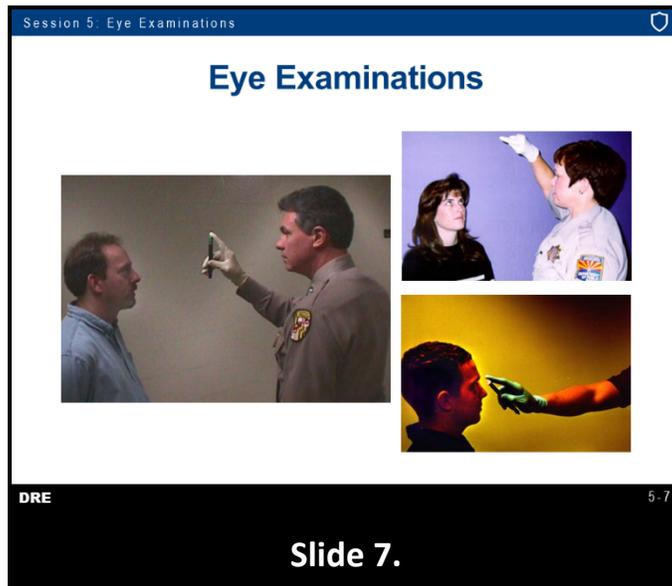
The checks of pupil size and Reaction to Light provide useful indicators of the possible presence of many drug categories. CNS Depressants, CNS Stimulants, and Inhalants will normally cause the pupils to react slowly. There will generally be little movement with Narcotic Analgesics. CNS Stimulants and Hallucinogens normally will cause the pupils to dilate. Cannabis normally causes dilation of the pupils, although this isn't always observed.



Instructor  
Note

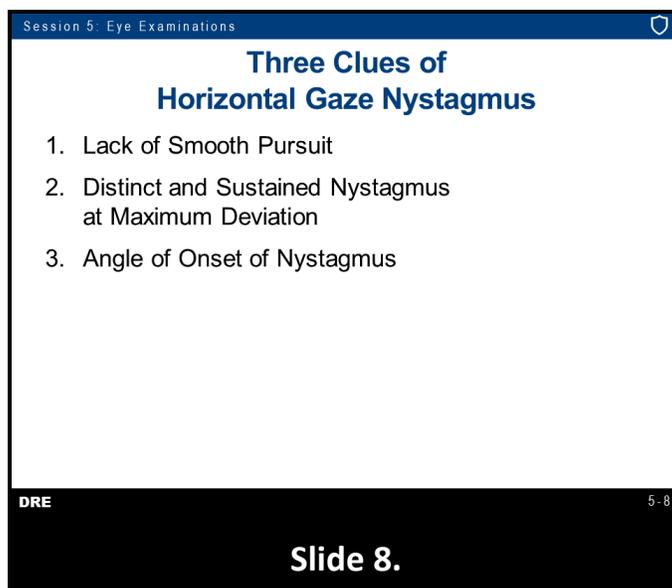
***Point out pupil dilation due to Cannabis isn't always observed in laboratory studies but may be due to lab dose levels are less than "street" doses.***

Some specific Inhalants may cause pupil dilation. Narcotic Analgesics will normally cause observable constriction of the pupils. During the eye examinations you will also check for rebound dilation.



To review, the Eye Examinations consists of: HGN; VGN; and LOC.

## B. Procedures and Clues



HGN test consists of three separate checks, administered independently to each eye. There are three clues of HGN: Lack of Smooth Pursuit; Distinct and Sustained Nystagmus at Maximum Deviation; and Angle of Onset of Nystagmus. Prior to checking for the three clues of nystagmus, check for Equal Pupil Size, Equal Tracking, and Resting Nystagmus. There should be a noticeable break between equal tracking and lack of smooth pursuit.

### First Clue: Lack of Smooth Pursuit



**Select a participant and demonstrate the first check of HGN on that participant.**

If the subject is wearing contact lenses, note that fact on the report but don't have the subject remove them.



***Mention research and testing has proven contacts will not interfere with the HGN test or cause nystagmus.***

If the subject is wearing eyeglasses, have him or her remove them.

Position the stimulus approximately 12 – 15 inches in front of the subject's nose.

Hold the tip of the stimulus slightly above the level of the subject's eye.



***Point out this procedure ensures the subject's eyes will be wide open and easy to observe.***

Instruct the subject to hold the head still and follow the stimulus with their eyes and to keep looking at the stimulus until told the test is over.

The first check is for "Lack of Smooth Pursuit." Move the stimulus smoothly all the way to the subject's left side and back all the way to the right side.



***Point out the stimulus should be moved at a speed that requires approximately 2 seconds to bring it from the center out all the way to the side. It should then be moved from side to side at the same speed. This means it should take approximately 4 seconds to move from the extreme left to the extreme right.***

Make at least two complete passes of the stimulus: to the left side, to the right side, back to the left side, and finally back to the right side. When doing this, don't pause at the center of the subject's face; move all the way to the left, then all the way to the right, then again, all the way to the left and back all the way to the right, in a smooth, continuous motion. While the eye is moving, examine it for evidence of a Lack of Smooth Pursuit.



Instructor  
Note



Activity

**Use the following analogy:**

- **A smoothly pursing eye will move without friction, much the way a windshield wiper glides across the windshield when it is raining steadily**
- **An eye showing Lack of Smooth Pursuit will move in a fashion similar to a wiper across a dry windshield**

**Excuse the participant volunteer and thank him or her for participating.**

**Instruct participants to work in pairs, taking turns checking each other's eyes for Lack of Smooth Pursuit.**

**Monitor, coach, and critique the participants' practice.**

**Allow this practice to continue for approximately 2 minutes.**

**Second Clue: Distinct and Sustained Nystagmus at Maximum Deviation.** The second check is for "Distinct and Sustained Nystagmus at Maximum Deviation."



Instructor  
Note

**Select a participant and demonstrate the second check of HGN on that participant.**

Again, position the stimulus as before.

Move the stimulus all the way to the subject's left side and hold it there so the subject's eye is turned as far to the side as possible.

Hold the eye at that position for a minimum of 4 seconds, to check carefully for jerking that may be present and is distinct.



Instructor  
Note

**Point out for this to be a clue, the nystagmus (jerking) must be distinct and sustained.**

When you have completed this check for the left eye, repeat the process for the right eye. Then, do it once again for the left eye, and again for the right, to verify distinct and sustained nystagmus is or is not present.



Instructor  
Note

**Point out some people exhibit slight jerking of the eye at maximum deviation, even when unimpaired, but this will not be evident or sustained for more than a few seconds. When impaired by alcohol and CNS Depressants, Inhalants, or Dissociative Anesthetics ("DID" drugs), the jerking will be larger, more pronounced, sustained for more than 4 seconds, and easily observable.**

A slight or barely visible tremor is not sufficient to consider this clue present. A definite, sustained jerking must be seen.



Instructor  
Note

***Excuse the participant volunteer and thank him or her for participating.***

***Instruct participants to work in pairs, taking turns checking each other's eyes for Distinct and Sustained Nystagmus at Maximum Deviation.***

***Monitor, coach, and critique the participants' practice.***

***Allow this practice to continue for approximately 2 minutes.***



Activity

**Third Clue: Angle of Onset of Nystagmus:** The final check is for the “Angle of Onset of Nystagmus.”



Instructor  
Note

***Select a participant and demonstrate the third check of HGN on that participant.***

Position the stimulus as before.

Slowly move the stimulus to the subject's left side, carefully watching the eye for the first sign of jerking. The stimulus should be moved at a speed that takes approximately four seconds or more to move from center to approximately 45 degrees. Moving the stimulus at a slower speed aids the officer in observing when the eye first begins to jerk.

When you see the eye jerk, stop moving the stimulus, hold it at that position, and verify the jerking continues. If jerking is not evident with the stimulus held steady, you have not located the point of onset. Therefore, resume moving the stimulus slowly toward the side until you notice the jerking again.

When you locate the point of onset nystagmus, stop moving the stimulus and estimate the angle of onset. If the nystagmus is not observed prior to approximately 45 degrees, stop and hold the stimulus at a 45-degree angle to verify the nystagmus is not present.



Instructor  
Note

***Point out angle estimation simply requires practice.***

Then, repeat the process for the right eye.

Then, again check onset for the left eye, and again for the right.



***Excuse the participant volunteer and thank him/her for participating.***

***Exhibit a template (if available). Point out the template (if available) will be used during practice only.***

***Emphasize if the clues of HGN are markedly different for the two eyes, a neurological or other medical problem (such as head injury) may be present***



***Participants' Initial Practice of Angle Estimation: Instruct participants to work in pairs, taking turns estimating angles of each other's eyes.***

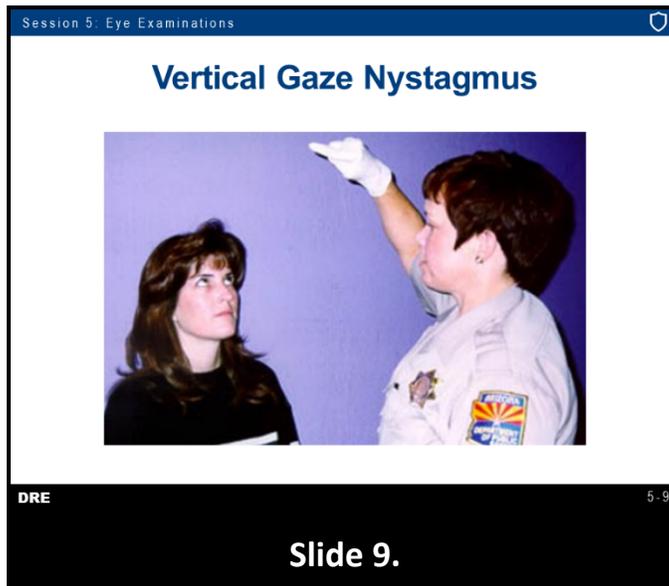
***Instruct participants they are to try to draw their partner's eyes to four different angles:***

- ***30 degrees***
- ***35 degrees***
- ***40 degrees***
- ***45 degrees***

***Participants will check their accuracy using a template (the template is available at the end of this session).***

***Monitor, coach, and critique the participants' practice.***

- 30 degrees
- 35 degrees
- 40 degrees
- 45 degrees



**Select a participant and demonstrate the VGN test on the participant.**

Position the stimulus horizontally, approximately 12 – 15 inches in front of the subject’s nose.

Instruct the subject to hold the head still and follow the stimulus with the eyes only.

Raise the stimulus until the subject’s eyes are elevated as far as possible.

Watch closely for evidence of the eyes jerking upward.



**Point out the examiner should keep the subject’s eyes elevated for a minimum of four (4) seconds to verify the jerking is present.**

**Point out the VGN check should be repeated.**

**Excuse the participant volunteer and thank him/her for participating.**

**Participants’ Initial Practice of the VGN Test: Instruct participants to work in pairs, taking turns administering the VGN test to each other.**

**Monitor, coach, and critique the participants’ practice.**

**Allow this practice to continue for only about 2 minutes.**





The test for LOC determines whether the subject is able to cross his or her eyes.



**Select a participant and demonstrate the check for LOC on that participant.**

Lack of Convergence (LOC) means an inability to cross the eyes. If the subject to be tested routinely wears eyeglasses during reading and near visual tasks, the eyeglasses should be worn for the LOC check if they are readily available.

If the subject's eyeglasses are not readily available, the DRE should still conduct the test.



**Sources for clinical use of testing with subject wearing eyeglasses for LOC:**

Carlson, N., & Kurtz D. (2003). *Clinical Procedures for Ocular Examination*. McGraw-Hill, 3rd edition, Sept. 26, 2003

Borsting, E., Cooper, J., Cotter, S., Kulp, M., London, R., Mitchell, G.L., Rouse, M., Scheiman, M., & Wensveen, J. (2005). A randomized clinical trial of treatments for convergence insufficiency in children. *Arch Ophthalmol*, 123(1), 14-24. 10.1001/archophth.123.1.14

Position the stimulus approximately 12-15 inches in front of the subject's face.

Instruct the subject to hold their head still and follow the stimulus with the eyes only.

Keep the object 12-15 inches away from the subject's nose and start to move the stimulus slowly in a circle approximately the same size as the subject's face.



***Point out this initial circular motion helps to verify the subject has focused on the stimulus and is able to track it. Emphasize it doesn't matter whether the circular motion is clockwise or counterclockwise.***

Once you have verified the subject is tracking the stimulus, stop moving in a circular manner with the stimulus above eye level, pause and then move it down slowly and steadily toward the bridge of the nose.

Hold the stimulus near the bridge of the nose for approximately one (1) second. The stimulus should not come any closer than approximately two (2) inches from the bridge of the nose. Carefully observe the subject's eyes to determine whether both eyes converge.

Repeat.



***If the results are different between the two checks, conduct a third check and document the most frequent result.***

***Point out if the subject being tested is wearing contact lenses, make note of the fact and conduct the check for LOC.***

***Excuse the participant volunteer and thank him/her for participating.***



***Participants' Initial Practice of the Check for the LOC: Instruct participants to work in pairs, taking turns testing each other's eyes for LOC.***

***Monitor, coach, and critique the participants' practice.***

***Allow this practice to continue for only about 2 minutes.***

Session 5: Eye Examinations

## Eye Exams Practice

<p>Preliminary</p> <ul style="list-style-type: none"> <li>• Equal Pupil Size</li> <li>• Resting Nystagmus</li> <li>• Tracking ability</li> <li>• Angle of onset</li> </ul>	<p>Eye Exams</p> <ul style="list-style-type: none"> <li>• HGN</li> <li>• VGN</li> <li>• LOC</li> </ul>
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**Slide 11.**



***Instruct participants to practice in pairs.***

***Each participant will conduct a complete set of eye examinations on his or her partner. Participants then will “reverse roles.”***

*Preliminary Eye Exams:* The following checks are conducted in the preliminary examination.

- Check for Equal Pupil Size
- Check for Resting Nystagmus
- Assessment of tracking ability
- Initial estimation of nystagmus angle of onset



***Monitor, coach, and critique participants’ practice.***

*Eye Exams:* These eye exams are conducted in the following step.

- HGN
- VGN
- LOC



***Make sure each participant administers a complete series of eye examinations at least once.***

Session 5: Eye Examinations

## Estimation of Pupil Size



DRE 5-12

**Slide 12.**

The pupils of our eyes continually adjust in size to accommodate different lighting conditions.



***Exhibit a pupillometer.***

We use a device called a pupillometer to estimate the size of the subject's pupils. The pupillometer is held alongside the subject's eye, moved up and down until the circle or semi-circle closest in size to the pupil is located.



***Demonstrate the positioning of the pupillometer.***

Pupil size estimations are recorded as the numeric value that corresponds to the diameter of the circle or semi-circle that is closest in size to the subject's pupil in each lighting condition.



***Select a participant and demonstrate pupil size estimation using the participant.***

Session 5: Eye Examinations

## Pupillary Considerations



**Slide 13.**

DRE 5-13



***Pupillary Unrest: Point out this term is defined in the glossary at the front of the participant guide.***

Another eye sign that may be observed by the DRE is Pupillary Unrest. Pupillary Unrest is defined as the continuous, irregular change in the size of the pupils that may be observed under room or steady light conditions. Pupillary Unrest is not abnormal or a sign of impairment. If observed, it is most likely not related to drug or medical impairment. Its presence can be due to various reasons, e.g., light source fluctuations in focusing and attention issues of the subject being tested. Pupillary Unrest is seen as natural pupillary movements that are active in the presence of light, focusing, and maintaining alertness in normal people.

“Accommodation Reflex” is an adjustment of the eyes for viewing at various distances, meaning the pupils will automatically constrict as objects move closer and dilate as objects move farther away.



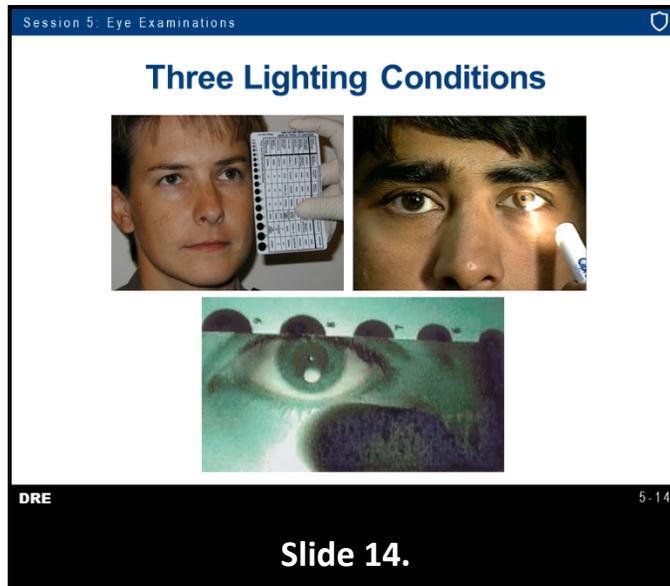
***Refer participants to the glossary of terms in their guide for the definition of Accommodation Reflex.***

This should not be confused with Pupillary Unrest, the continuous, irregular change in the size of the pupils that may be observed under room or steady light conditions or with pupillary light reflex which is the pupil’s normal reaction to the changes in light. To avoid the possibility of causing accommodation reflex, have the subject maintain his/her eyes fixated on a stationary object greater than six feet away.



***Whenever possible, use a focal target at approximately the same distance for each lighting condition.***

***Demonstrate the Accommodation Reflex by having the participants focus on an object very close and one at a distance.***



**Write on the dry erase board or easel/easel pad “The Three Lighting Conditions.”**

Pupil sizes are estimated under three different lighting conditions: Room Light; Near Total Darkness; and Direct Light.

Estimation of Pupil Size under Room Light: The pupils are examined in room light prior to darkening the room.



**Point out since room lighting conditions can vary considerably and often cannot be controlled, the range of pupil sizes may be broad.**



**Participant’s Initial Practice of Pupil Size Estimation—Room Light: Instruct participants to work in pairs, taking turns checking each other’s pupils.**

**Monitor, coach, and critique the participants’ practice.**

**Allow this practice to continue for only about 2 minutes.**

**Participant’s Initial Practice of Pupil Size Estimation—Dark Room**

After you have completed the pupil size estimations in room light, you must darken the room, wait approximately 90 seconds (for eyes to adjust to the light), and then proceed with the dark room exam.

Estimation of Pupil Size under Near Total Darkness: For the check under near total darkness completely cover the tip of the penlight with your finger or thumb, so only a slight glow is exhibited and no white light emerges or use a dim red light.



**Demonstrate this.**  
**Select a participant to aide in demonstrations of dark room pupil estimations.**

Bring the light source up toward the subject’s left eye until you can just distinguish the pupil from the colored portion of the eye (iris).



**Demonstrate this.**

Continue to hold the light source in that position and bring the pupillometer up alongside the subject’s left eye and locate the circle or semi-circle that is closest in size to the pupil.

Repeat this procedure for the subject’s right eye.



**Demonstrate this.**  
**Monitor, coach, and critique the participants’ practice.**  
**Allow this practice to continue for only about 2 minutes.**



Session 5: Eye Examinations

### Estimation of Pupil Size – Near Total Darkness – UV Light

DRE 5-15

**Slide 15.**

Ultraviolet (UV) light is an approved additional technique for use at the discretion of the State coordinator. The UV light is primarily to be used for the Near Total Darkness pupil size estimation only. The UV light does not replace using a pen light with a tip of a light cover with the finger or a thumb. The UV light procedure may be used by a DRE trained in its use, if the result using the standard procedure is in question or an accurate result cannot be obtained due to extreme darkness of the subject’s iris.

Independent research has demonstrated UV lights are effective tools for assessing pupil size in near total darkness, giving essentially identical results to the standard evaluation regardless of subject eye color. Evaluators found the UV light easier to use, especially when assessing subjects with dark eyes. If the UV light is used, it should be used after pupil size estimations have been attempted with the appropriate light source.

“Position the UV light near the subject’s face along the cheek just below the eye, starting with the subject’s left eye first.” If the light is held along the cheek, it can be used to illuminate the pupilometer.

“Start with the light about parallel to the subject’s face and slowly increase the angle outward away from the subject’s face until the light passes through the cornea (the clear window at the front of the eye) keep moving the light until the yellow-green glow of the crystalline lens is evident.”

When using a UV light to assess pupil size, avoid shining the light directly into the subject’s eye. In low dosages and for short exposure times, the UV light is not harmful to the subject’s eye. However, the light does emit visible wavelengths in the blue-violet region of the spectrum, otherwise the evaluator would not be able to see the light is on. Consequently, shining the light directly into the subject’s eye can unintentionally cause the pupil to constrict.

“For certain individuals, the UV light may not work as intended. Contact lens wearers whose contact lenses absorb UV will not exhibit fluorescence of the crystalline lens. Some subjects who have had cataract surgery may also not exhibit fluorescence. When the crystalline lens inside the eye develops a cataract, it is usually removed surgically. If the lens is not replaced, the individual often will need to wear very high-power spectacle or contact lenses in order to see clearly. In this case, there is no longer any structure behind the pupil and thus no fluorescence occurs. Even if the lens is replaced with an artificial lens, the artificial lens typically will not exhibit fluorescence.”

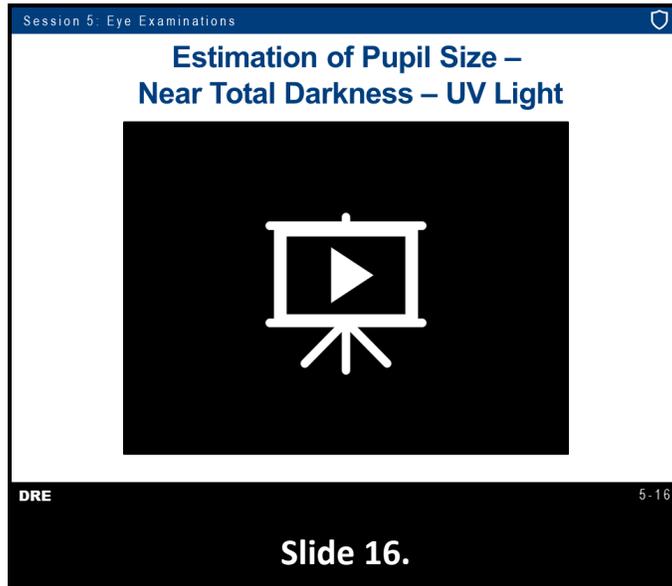
Using a DRE pupilometer, estimate the size of the glowing pupil in near total darkness.

Conduct the same procedure for the right eye.



**Source:**

Citek, K. (2014). Using a UV Light for Near Total Darkness Eye Exam. DECP Technical Advisory Panel



***Play “UV Light for DRE Near Total Darkness Pupil Size Estimation” video.***

Using a UV light to estimate pupil size in the near total darkness lighting condition is an easy, safe, and effective evaluation, especially when assessing subjects with dark eyes. Used properly, there is no potential harm to the subject or the DRE.

Use of the UV light for the near total darkness pupil estimation is not mandatory and does not replace the current near total darkness penlight procedure. If a DRE uses the UV light for the near total darkness estimation, it shall be documented in the narrative report.

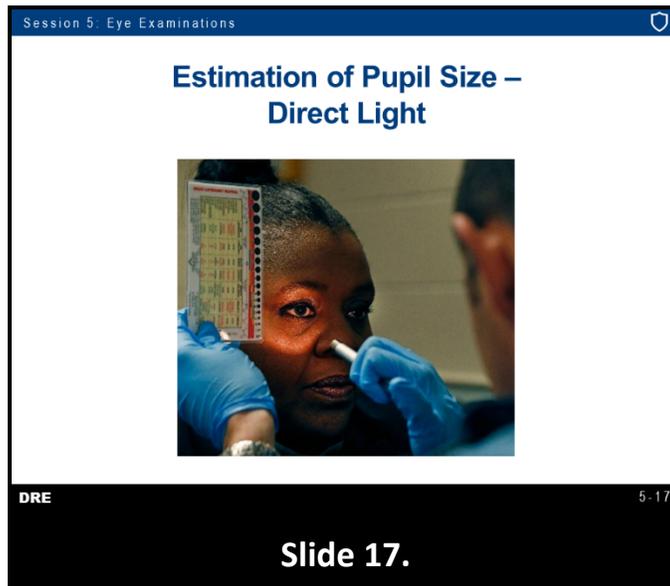


***Demonstrate this.***

***Monitor, coach, and critique the participants’ practice.***



***Allow this practice to continue for only approximately 2 minutes.***



From a darkened environment, quickly illuminate the left eye. This can be accomplished by activating the penlight pre-positioned in front of the eye, or by activating the penlight with the light covered and positioned in front of the eye. The objective is to capture an accurate assessment of the reaction to light by minimizing the pupil's exposure to light before the penlight can be directed solely into the eye.



***Demonstrate this.***

Position the penlight so it illuminates and approximately fills the subject's eye socket.



***Demonstrate this.***

***Emphasize the penlight should be positioned so the beam just "fits" the eye socket.***

Hold the penlight in that position for 15 seconds. During the 15 seconds, bring the pupilometer up alongside the left eye.

Find the circle or semi-circle that is closest in size to the pupil.



***Remind participants to position the penlight so the beam "fits" the eye socket when the beam is brought directly into the eye.***

Repeat this procedure for the subject's right eye.



Instructor Note

**Monitor, coach, and critique the participants' practice.**

**Allow the practice to continue for approximately 2 minutes.**



Activity

**Solicit participants' comments and questions concerning the eye examinations.**



Video

Session 5: Eye Examinations

## Rebound Dilation

A period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and the range between minimum and maximum is equal to or greater than 1mm and does not return to its original constricted size.

Click Picture to Play



**Slide 18.**

DRE 5-18



Instructor Note

**Print on dry erase board or easel/easel pad: "REBOUND DILATION."**

Rebound dilation is defined as a period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and the range between minimum and maximum is equal to or greater than 1mm and does not return to its original constricted size.

Medical research indicates fluctuations under 1mm are relatively common for reasons unrelated to drug impairment (Bergamin et al. 2002).



Instructor Note

**Point out the DRE will record rebound dilation if observed by recording the constricted or the smallest size and the largest or dilated size, i.e., 3.0 - 4.5 mm.**

Example: The pupil is estimated at 8.5 mm in near total darkness. Once the penlight is shined into the pupil it constricts to 4.0 mm then steadily dilates to 6.0 mm and remains that diameter while the direct light is shined into the eye.

Rebound dilation has been reported with persons impaired by drugs that cause pupillary dilation. Cannabis is most common. In a 2016 study, nearly 71% of Cannabis-impaired subjects displayed rebound dilation. In another study (Declues, et. al), nearly 51% of Cannabis-impaired subjects displayed rebound dilation.



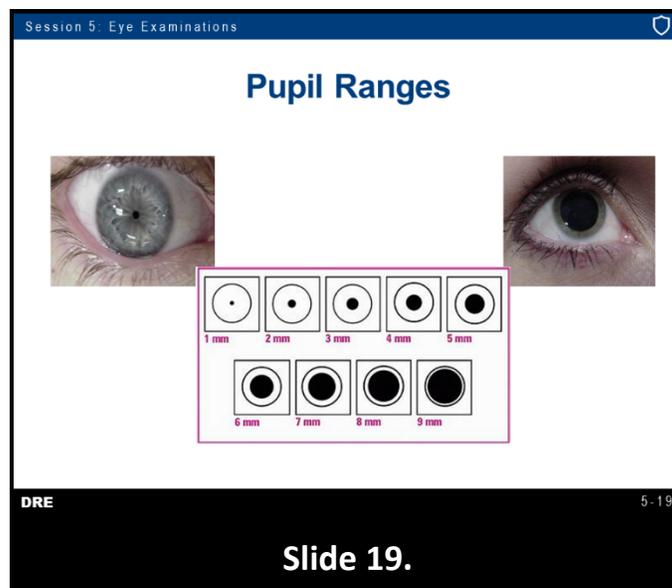
**Rebound dilation is termed “pupillary escape” in medical literature.**

**Sources:**

Hartman, R., Heustis, M., Hayes, C., & Richman, J. (2016). Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. *Accident Analysis and Prevention*, 92, 219-229.

<http://dx.doi.org/10.1016/j.aap.2016.04.012>

Declues, K., Figueroa, A., & Perez, S. (2016). A Two-Year Study of Delta 9-Tetrahydrocannabinol Concentrations in Drivers; Part 2: Physiological Signs on Drug Recognition Expert (DRE) and Non-DRE Examinations. *Journal of Forensic Sciences*, 61(6), 1664-1670. 10.1111/1556-4029.13168



For most people, even under very bright light the pupils will not constrict much below a diameter of 2.0 millimeters (mm) or dilate to a diameter of more than 8.5 mm in near total darkness conditions.



**Point out results of studies indicated there are significant differences between the average pupil size ranges in the three test conditions.**

**Source:**

Decker, D., McAndrew, K.G., Mullaney, S., & Richman, J. (2004). An evaluation of pupil size standards used by police officers for detecting drug impairment. *Journal of the American Optometric Association*, 75(3), 175-182.

[https://doi.org/10.1016/S1529-1839\(04\)70037-8](https://doi.org/10.1016/S1529-1839(04)70037-8)

Consequently, the use of three distinct pupil size ranges for each of the different testing conditions may be considered more useful in the evaluation to determine impairment vs. non-impairment.

Session 5: Eye Examinations

### Pupil Size Technical Terms

- Miosis – abnormally small pupil (constricted)
- Mydriasis – abnormally large pupil (dilated)



DRE 5-20

**Slide 20.**

Two key technical terms regarding pupil sizes are: Miosis – abnormally small pupil, i.e., constricted; Mydriasis – an abnormally large pupil, i.e., dilated.

Session 5: Eye Examinations

### DRE Average Pupil Sizes



DRE 5-21

**Slide 21.**

Room Light: For a non-impaired person, the average pupil size and range for room light is approximately 4.0 mm with pupil sizes ranging from 2.5 to 5.0 mm.

Near Total Darkness: For a non-impaired person, the average pupil size and range for near total darkness is approximately 6.5 mm with pupil sizes ranging from 5.0 to 8.5 mm.

Direct Light: For a non-impaired person, the average pupil size and range for direct light is approximately 3.0 mm with pupil sizes ranging from 2.0 to 4.5 mm.



Session 5: Eye Examinations

## Reaction to Light

Assessment of how quickly pupil constricts to its smallest size during check of pupil size under direct light.



DRE 5-22

**Slide 22.**



***This is a review of information covered during the DRE Preliminary School.***

Assessment of how quickly the pupil constricts to its smallest size during the check of pupil size under direct light when the light is first introduced into the subject's eye.



***Demonstrate this.***

As you introduce the beam of light directly into the subject's eye, note how the pupil reacts.



***Demonstrate this.***

Under ordinary conditions, the pupil should react very quickly and constrict noticeably when the light beam strikes the eye.

Under the influence of certain categories of drugs, the pupil's reaction may be slow or there may be no visible reaction at all. CNS Depressants, CNS Stimulants, and Inhalants will usually cause the pupils to react slowly to light. Narcotic Analgesics may have little or no visible reaction to light.

For DRE purposes, we consider the pupil's reaction to be slow if it takes more than one second to reach its smallest size.

Hold the direct light on the subject's eye for a minimum of 15 seconds to assess pupil reaction.

Also check for Rebound Dilation during this 15-second period. Caution should be used so as not to move the light beam or allow the bulb to change in light intensity.

When you have completed this process for the left eye, repeat it for the right eye.



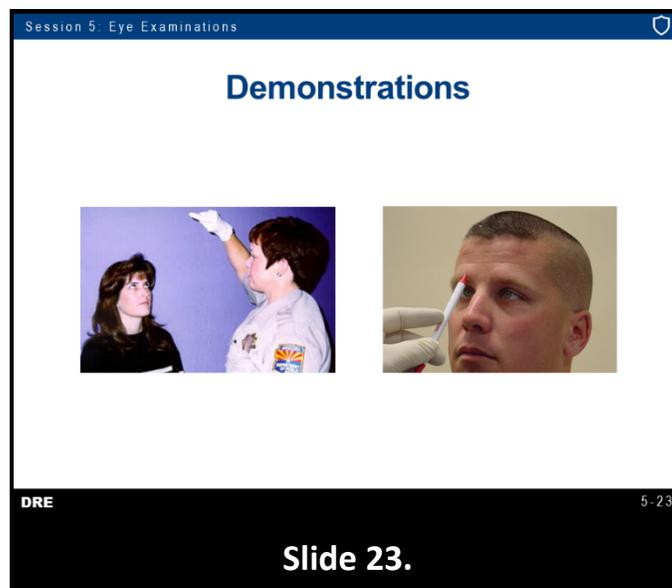
***Participants' initial practice in assessing the pupil's reaction to light: Have participants work in pairs, checking each other's pupil reaction.***



***Monitor, coach, and critique the participants' practice.***

***Allow the practice to continue for approximately 2 minutes.***

## C. Demonstrations



***Select two participants to come before the class.***

***Instruct one participant to demonstrate the administration of HGN to the other participant.***

- Check for Lack of Smooth Pursuit
- Check for Distinct and Sustained Nystagmus at Maximum Deviation
- Check for an Angle of Onset of Nystagmus



***Coach and critique the participant administrator's performance. Make sure the participant administrator checks both eyes.***

***Estimation of Angle of Onset: When the participant administrator has completed the HGN test, instruct the participant administrator to draw the participant subject's eye to an angle of 35 degrees. Check the accuracy of this estimate, using the template.***

***Excuse the two participants and thank them for participating.***

***Demonstration of VGN and LOC: Select two other participants to come before the class.***

***Instruct one participant to check the other for VGN.***

***Coach and critique the participant administrator's performance.***

***Instruct the second participant to check the eyes of the first participant for LOC.***

***Coach and critique the participant administrator's performance.***

***Excuse the two participants and thank them for participating.***

Session 5: Eye Examinations

### Demonstration of Pupil Size and Reaction to Light Checks

- Room Light

**Dark Room Checks of Pupil Size**

- Near Total Darkness
- Direct Light
- Reaction to Light

DRE 5-24

**Slide 24.**

- Room Light



***Select two other participants to come before the class.***

***Instruct one participant to check the other's pupils under Room Light.***

***Coach and critique the participant administrator's performance.***

Dark Room checks of pupil size:

- Near Total Darkness

- Direct Light
- Reaction to Light



**Instructor Note**

***Instruct the second participant to demonstrate how to perform the Dark Room checks of pupil size.***

***Coach and critique the participant administrator's performance.***

***Point out assessment of the pupil's Reaction to Light takes place in conjunction with the Direct Light check.***

***Excuse the two participants and thank them for participating.***

***Solicit participants' comments and questions concerning these demonstrations of the eye examinations.***

## D. Documentation Procedures

Session 5: Eye Examinations

### Sample Eye Examination

Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts (lens)	Types: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Flashes: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	Tracking: <input type="checkbox"/> Good <input type="checkbox"/> Unequal
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (scaphin)	Resting Nystagmus: <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus: <input type="checkbox"/> Yes <input type="checkbox"/> No	Abil to follow stimulus: <input type="checkbox"/> Yes <input type="checkbox"/> No
HGN		Convergence	
Lack of Smooth Pursuit	Left Eye	Right Eye	Right eye Left eye
Maximum Deviation			
Angle of Onset			

PUPIL SIZE	Brown Right (2.5 - 5.8)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Normal size
Left Eye				
Right Eye				
Echard Dilator: <input type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light		

DRE 5-25

**Slide 25.**



**Instructor Note**

***Instruct participants to turn to the Standardized Drug Influence Evaluation Form in their guides or handout forms to the participants.***

A brief examination of the eyes is made during the Preliminary Examination.

- Check for Equal Pupil Size
- Check for Resting Nystagmus
- Assessment of tracking ability
- Initial assessment of nystagmus angle of onset



Instructor  
Note

**HGN: Emphasize all three checks of the HGN test must be documented for each eye. Remind participants they must indicate the numerical number of the angle of onset and not just check-mark the box.**

**Solicit participants' comments and questions concerning procedures for documenting the eye examinations**

**VGN: Remind participants "Yes" implies VGN was present, "No" implies it was not present.**

For VGN, "Yes" implies VGN was present, "No" implies it was not present.



Instructor  
Note

**LOC: Point out It will be necessary to diagram the movement of the eyes.**

For LOC, it will be necessary to diagram the movement of the eyes. The dark room eye examinations are documented in a subsequent section of the form.



Instructor  
Note

**Point out the location of that section. Emphasize all dark room checks of the eyes must be performed and documented independently for each eye.**

**Instruct participants to practice in pairs.**



Activity

**Each participant will conduct a complete set of eye examinations on his or her partner. Participants then will "reverse roles."**

**Preliminary Eye Exams: Tell the participants to record their estimations of their partner's pupil sizes on the Drug Influence Evaluation Form.**

**Monitor, coach, and critique participants' practice.**

**Eye Exams: Make sure each participant administers a complete series of eye examinations at least once.**

Pupil Size Estimations: Room Light; Near Total Darkness; and Direct Light.



***If possible, the training room should be at least somewhat darkened for this final stage of practice.***

***Reporting out of Pupil Size Estimations: While the participants' practice is still going on, print the matrix at the end of this session on the dry erase board or easel/easel pad.***

***Tell the participants we will tabulate the pupil sizes of everyone in the class, for each of the three lighting conditions. For simplicity, tell the participants we will tabulate the left eye pupil sizes only.***

### ***Tabulations***

#### ***Room Light***

***Direct the participants' attention to the first column of the matrix.***

***Say: "Let's concentrate now only on the room light estimations."***

***Ask: "How many of you found your partners had pupils of 2.0 mm or less in room light?" (Get a show of hands, count them, print the number in the first box of the first column).***

***Then ask: "How many had partners with a 2.5 mm pupil in room light?" (Count the hands and print the number in the 2nd box).***

***Continue this until you get to the last box in the 1st column: "How many had partners with pupils of 8.0 mm or larger?" (Count the hands, print the number).***

***Repeat this process for each of the other two lighting conditions.***

***Near Total Darkness Tabulation: Use same process as above.***

***Direct Light Tabulation: Make appropriate comments about the number of participants whose pupils are outside the normal range of size under the various lighting levels.***

Session 5: Eye Examinations

Questions?

DRE 5-26

Slide 26.



*Solicit participants' comments and questions concerning Eye Examinations.*

45

40

35

30

30

35

40

45

### Pupil Size Chart

Pupil Size	Room Light	Near Total Darkness	Direct Light
2.0 mm			
2.5 mm			
3.0 mm			
3.5 mm			
4.0 mm			
4.5 mm			
5.0 mm			
5.5 mm			
6.0 mm			
6.5 mm			
7.0 mm			
7.5 mm			
8.0 mm and above			

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #		Evaluator's Agency		Case #
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property			Arresting Officer's Agency		
Arrestee's Name (Last, First, Middle)		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location / /		Breath Test: Results:	Test Refused <input type="checkbox"/> Instrument #:		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When?		What have you been drinking? How much?		Time of last drink?	
Time now/ Actual /	When did you last sleep?	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No			Attitude:		Coordination:		
Speech:		Breath odor:			Face:		
Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids <input type="checkbox"/> Normal <input type="checkbox"/> Droopy		Pulse and Time		HGN		/30 <b>One Leg Stand</b> /30	
1. _____ / _____ 2. _____ / _____ 3. _____ / _____		Lack of Smooth Pursuit		Left Eye		Right Eye	
Maximum Deviation		Convergence		Right eye		Left eye	
Angle of Onset		Cannot keep balance _____		Stops walking		1st Nine	
Modified Romberg Balance Approx. Approx.		Walk and Turn Test		Starts too soon _____		2nd Nine	
				Misses heel-toe			
Time Estimation _____ estimated as 30 seconds		Describe turn		Cannot do test (explain)		Type of footwear:	
Finger to Nose (Draw lines to spots touched)		PUPIL SIZE		Room light (2.5 - 5.0)		Darkness (5.0 - 8.5)	
		Left Eye		Direct (2.0 - 4.5)		Nasal area:	
		Right Eye		Rebound Dilatation: <input type="checkbox"/> Yes <input type="checkbox"/> No		Oral cavity:	
Blood Pressure /		Temperature °F		RIGHT ARM		LEFT ARM	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:					
What drugs or medications have you been using?		How much?		Time of use?		Where were the drugs used? (Location)	
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:	
Officer's Signature:		Reviewed/approved by / date:		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation		DRE #	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant		<input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis			

# 6 DRE

## PHYSIOLOGY AND DRUGS: AN OVERVIEW

### LEARNING OBJECTIVES

- Explain the general concept of human physiology
- Explain the purposes and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.)
- Explain how drugs work in the body
- Explain how the drug influence evaluation is used to detect signs and symptoms indicative of drug impairment

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### LEARNING ACTIVITIES

- Instructor-Led Presentation/Demonstrations
- Reading Assignments

Session 6: Physiology and Drugs: An Overview

## Learning Objectives

- Explain general concept of human physiology
- Explain purposes and functions of major systems in the body
- Explain how drugs work in the body
- Explain how the drug influence evaluation is used to detect signs or symptoms indicative of drug impairment

DRE 6-2

**Slide 2.**



*Briefly review the objectives, content, and activities of this session.*

## A. Physiology and Drugs: An Overview

Session 6: Physiology and Drugs: An Overview

## Physiology

A 3D anatomical illustration of a human torso, showing the internal organs and skeletal structure in a semi-transparent blue color. The heart, lungs, and stomach are clearly visible.

DRE 6-3

**Slide 3.**

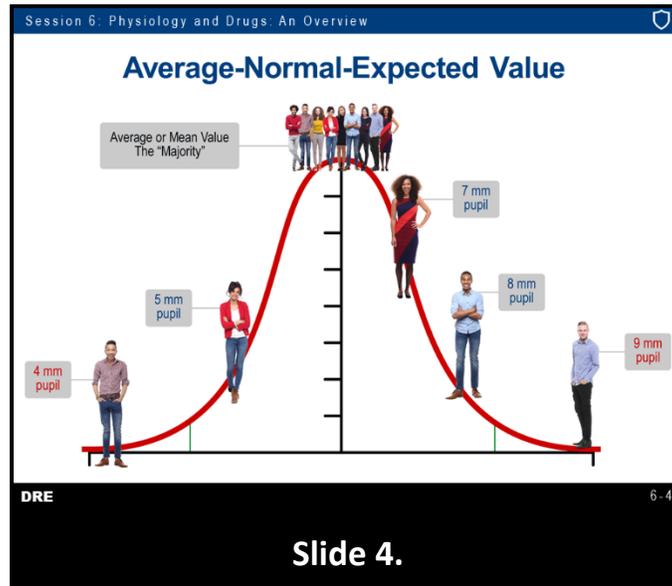
For the purposes of this training, physiology is the study of the functions of living organisms and their parts. Before we can understand how drugs work, we must have a basic understanding of how the body works. It is not necessary to have detailed knowledge of specific functions or medical terminology. DREs will not become medical specialists as a result of this limited overview; however, they are encouraged to learn as much as possible about human physiology through additional instruction and independent reading.

We will review general concepts of how the body functions in a “normal” or “standard” human.

All human beings are different, and a “normal” or “standard” human does not exist. However, experience and scientific studies have produced an average range of values, or expected values, of non-impaired people that can be used for comparison purposes.



***We will briefly review the primary functions of the body systems relevant to the Drug Evaluation and Classification (DEC) Program.***



In the Drug Evaluation and Classification (DEC) Program we use the terms Average Value or Expected Range.

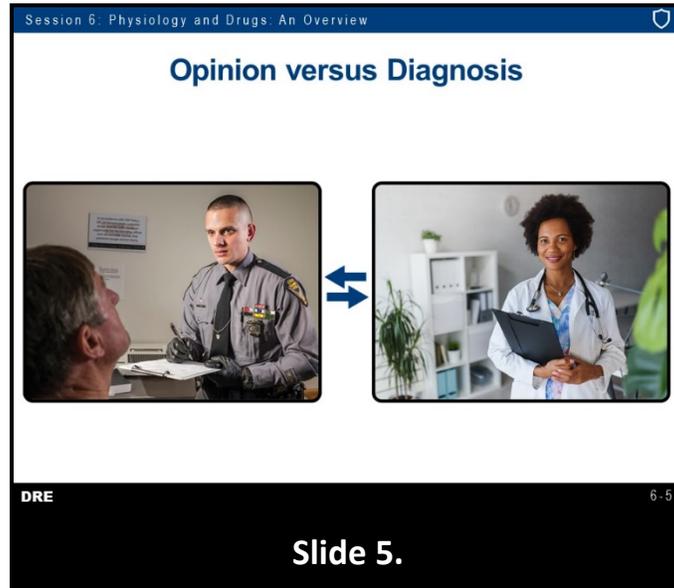
- **Average Value** is a single value that represents the middle of the range that the majority of healthy, non-impaired people would exhibit. For example, the average for pupil size in near total darkness is 6.5 mm. This means when ALL the sizes were measured using the DRE protocol in a large number of pupils in healthy, non-impaired adults, the average pupil size was approximately 6.5 mm.
- **Expected Range** describes a range of values above or below the average for the majority of healthy non-impaired people. The average pupil size in near-total darkness is 6.5 mm, but the “Expected” range is 5.0-8.5 mm for healthy or non-impaired person.

Normal can be used to describe conditions that are not measured numerically such as muscle tone, etc.

For DREs, the closer the finding is to the average value, the more likely the person is not exhibiting impairment in that function. The farther away from the average value and nearer the edge of the expected range, the more likely the person is exhibiting impairment in that function.

For example: If the average value for life expectancy of males in the U.S. is 76 years old, we would expect someone to live between 70 and 80 years old. If someone dies at age 60 or at age 90, we may consider that outside of the expected range.

The defense may ask “what is normal for my client?” A DRE needs to be prepared to explain the meanings of the terms average value and expected range and how it relates to the drug influence evaluation.



The DRE’s goal is to determine if impairment is present and the probable cause(s) of observed impairment.

A diagnosis is a medical conclusion reached by someone with medical experience and expertise. DREs do not make a diagnosis.

An opinion is a determination based on special knowledge, experience, and articulable facts. As a DRE, when you complete a drug influence evaluation, you are rendering an opinion that the impairment is a result of a medical issue(s) and/or drugs.

---

## Opinion vs. Diagnosis

	DRE	Doctor
Reason for Assessment	<b>LEGAL: Nonvoluntary arrest</b> Impaired driving and need to determine the possible reason for impairment.  <b>Medical care is offered and decided in the beginning.</b>	<b>MEDICAL: Voluntary</b> visit with symptoms or complaints.
Compliance	<b>Unpredictable</b> and may be <b>limited or refused</b> since it involves evidence and rights	<b>Full</b> with history and tests to lead to proper <b>diagnosis and treatment.</b>
Time	<b>Single one-time</b> contact and <b>limited</b> time.	<b>Multiple</b> visits and time
Outcome Goal	<b>Presence of impairment</b> not due to alcohol. <b>Opinion</b> based on <b>possibilities</b> as to cause of impairment. <b>Verification is unpredictable.</b> <b>Treatment is not the outcome goal.</b>	<b>Differential diagnosis</b> with multiple tests leading to <b>treatment goal.</b>

DRE

6-6

### Slide 6.



*Each of the following should be listed and discussed briefly.*

#### REASON FOR ASSESSMENT

DRE: Non voluntary arrest: Impaired driving and need to determine possible reason for impairment. Medical care is offered and decided in beginning.

Doctor: Voluntary visit with symptoms or complaints.

#### COMPLIANCE

DRE: Unpredictable compliance and may be limited or the subject may simply refuse, since it involves rights and evidence.

Doctor: Doctor or medical personnel generally get full compliance, a full history, order tests in order to receive the proper diagnosis and treatment. DREs do not provide treatment in regard to the evaluation.

#### TIME

DRE: A single, one-time contact with limited time.

Doctor: May involve multiple visits and time.

#### OUTCOME GOAL

DRE: Presence of impairment, and inconsistent with BAC, the opinion is based on probabilities as to the cause of impairment. Treatment is not the outcome goal.

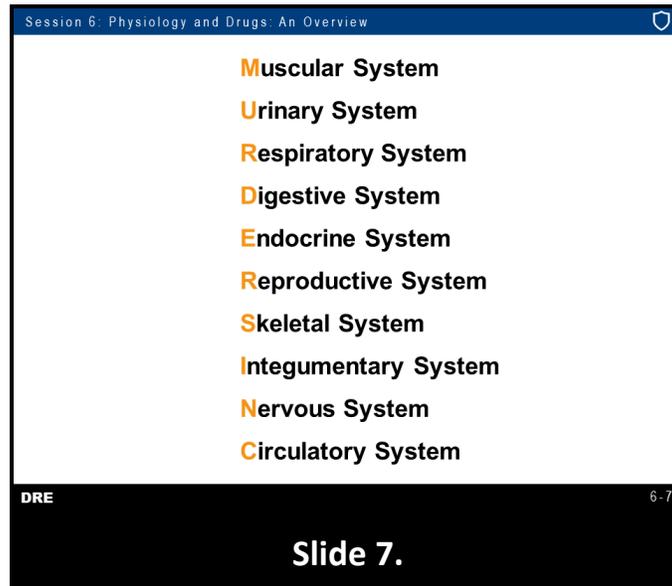
Doctor: Differential diagnosis leading to multiple tests, leading to the treatment goal(s).

The DRE DOES NOT make a diagnosis, he/she forms an opinion.



*Emphasize the DRE DOES NOT make a diagnosis, he/she forms an opinion.*

## B. Body Systems



A convenient way of discussing human physiology is to list the ten major systems of the body. The acronym “MURDERS INC” helps us remember the names of the ten systems. Each letter stands for the name of one system. Changes in these systems act as the basis for determining impairment.

**M** is for the **Muscular System**. We assess the muscular system in the drug influence evaluation when we test coordination and balance by administering divided attention tests and when we check for muscle rigidity. The body has three different kinds of muscles. All three types of muscles are examined at various stages of the drug influence evaluation. The heart or cardiac muscle. Smooth muscles, which control the body’s involuntary operations. Examples: Smooth muscles control breathing, the operation of the pyloric valve (a muscle located at the base of the stomach), dilation and constriction of pupils, and all other things we do not consciously control. Striated muscles, which carry out our voluntary movements.

**U** is for the **Urinary System**. The system consists of two kidneys, the bladder, ureters connecting the kidneys to the bladder, and the urethra which transports the urine out of the body. Kidneys filter waste or harmful products, such as drugs and their metabolites, from the blood and these waste products are collected in the bladder. Drugs can usually be detected in the urine and collection of a urine specimen, in many jurisdictions, is an important part of the drug influence evaluation.

The first **R** in “MURDERS INC” stands for the **Respiratory System**. Some drugs cause the user to breathe slowly and shallowly, while others cause rapid breathing. The major parts of the Respiratory System are the lungs and the diaphragm. The diaphragm is a smooth muscle that draws the air into the lungs and forces it out. Lungs take in oxygen and transfer it to the blood and remove carbon dioxide and some other waste products from the blood and expel them into the outside air. Important clues of drug use, i.e., odors of alcoholic beverages, marijuana, chemicals, etc. may be present on a suspect’s breath.

**D** is for the **Digestive System**. Major components of this system are the tongue, teeth, esophagus, stomach, intestines, liver, and pancreas. The Digestive System breaks down large particles of food until they are of a size and chemical composition that can be absorbed in the blood. When drugs are taken orally, they might be retained in the stomach for a while until any food there has been broken down sufficiently to allow passage into the small intestine.

**E** is for the **Endocrine System**. The Endocrine System is made up of a number of different glands that secrete hormones. The glands that make up the Endocrine System include: Thyroid, Parathyroid, Pituitary and Adrenal glands, as well as portions of the pancreas, testes and ovaries. Hormones are complex chemicals that travel through the blood stream and control or regulate certain body processes. Some drugs can mimic the effects of certain hormones or can react with the hormones in ways that alter the hormones’ effects.

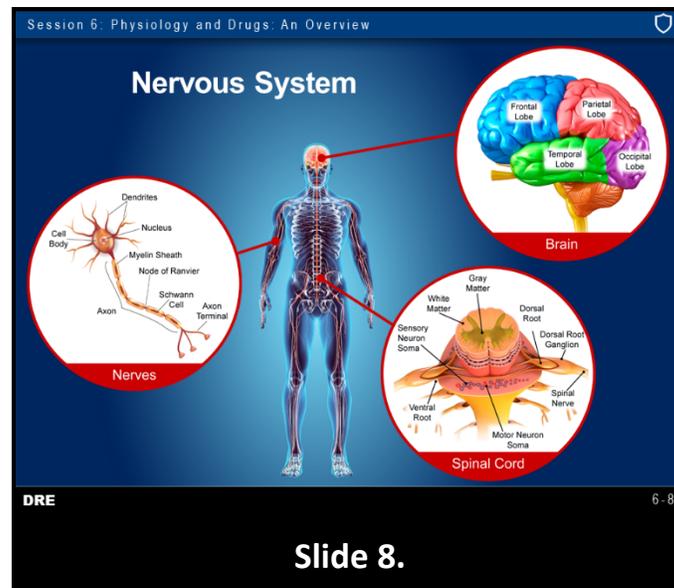
The second **R** in “MURDERS INC” stands for the **Reproductive System**. The functions of the reproductive system fall into two categories: self-producing (cytogenic) and hormone producing (endocrinic). We are primarily concerned with hormone production since the hormones produced by the reproductive system aid the nervous system in its regulatory role.

**S** is for the **Skeletal System**. This consists of bones, cartilage, and ligaments. The Skeletal System provides support to the body, permits movement, and forms blood cells. The Reproductive and Skeletal Systems are the only major components of physiology and are not directly involved in the drug influence evaluation.

The **I** in “INC” stands for the **Integumentary System**. This consists of the skin, hair, fingernails and toe nails, and accessory structures. DREs examine the skin for hypodermic injection sites and for sweating, clamminess, and temperature. The chief functions of the Integumentary System include protection of the body, control of the body temperature, excretion of wastes (i.e., through sweat) and sensory perception.

**N** is for the **Nervous System**. The Nervous System is one of the most important components of physiology as far as the drug influence evaluation is concerned. This system consists of the brain, the brain stem, the spinal cord, and the nerves. Nerves keep the brain informed of changes in the body’s external and internal environments. Clarification: Nerves carry messages to the brain from the sense organs (eyes, ears, nose, etc., and from pain sensors). Nerves also carry messages from the brain to the body’s muscles, tissues, and organs. Clarification: The brain uses nerves to send messages commanding the heart to beat, the fingers to move, the pupils to dilate, etc. The nervous system controls, coordinates, and integrates all physiological processes, so normal body functions can be maintained.

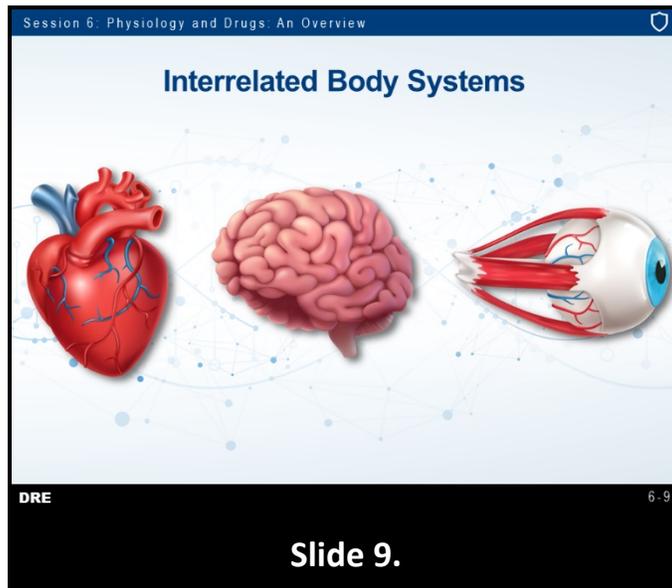
**C** is for the **Circulatory System**. This is another very important component of physiology, as far as the drug influence evaluation is concerned. For our purposes, the most important parts of the Circulatory System are the heart, the blood vessels (e.g., arteries, veins, capillaries, etc.), and the blood. Blood is the body's primary transport mechanism: it carries food, water, oxygen, hormones, antibodies, etc. to the body's tissues and organs. Blood is also primarily responsible for carrying heat throughout the body. Blood is the main transport mechanism for bringing drugs to the brain. The heart, of course, pumps the blood and causes it to circulate throughout the body.



## Nervous System

The nervous system keeps the body apprised of changes in the environment by enabling sight, hearing, smell, taste, and touch. It also keeps the body apprised through sensations of temperature, pressure, pleasure, and pain. The nervous system also enables reasoning, memory, and emotions.

The Central Nervous System (CNS) sends impulses that cause muscles to contract and glands to secrete and it works with all body systems to integrate all physiological processes so normal functions can be maintained. Much of the activity of the nervous system is involuntary and therefore it is carried out below the level of consciousness. The CNS is one of the body's major control systems and the brain is the center of that system.



***Solicit participants' comments and questions about "MURDERS INC," the ten major systems of human physiology. Much more will be covered about the last two systems (Nervous and Circulatory) later in this session.***

All these systems need to work together to maintain a functioning, non-impaired person. This leads to understanding the term "homeostasis", which will be covered in this Session. The primary focus will be on the Central Nervous System (CNS) and the effects it exhibits on other components examined during the drug influence evaluation. These include eyes, blood pressure and pulse, balance and coordination, and body temperature.

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## C. The Concept of Homeostasis

Session 6: Physiology and Drugs: An Overview

### Homeostasis

Homeostasis is a dynamic, self-regulating process by which the body maintains a balanced or constant state while adjusting to internal and external conditions



DRE 6-10

**Slide 10.**

Homeostasis is “a dynamic, self-regulating process by which the body maintains a balanced or constant state while adjusting to internal and external conditions” (Britannica, T. Editors of Encyclopaedia, 2020). “Homeo” means similar or the same elements and “stasis” means balance. The rhythm of the heart, breathing, constancy of body temperature, and the steady level of blood pressure under specific circumstances or conditions are all manifestations of homeostatic mechanisms at work within the body. This balance impacts physiological and psychological functions via the central and peripheral nervous systems and neurotransmitters.

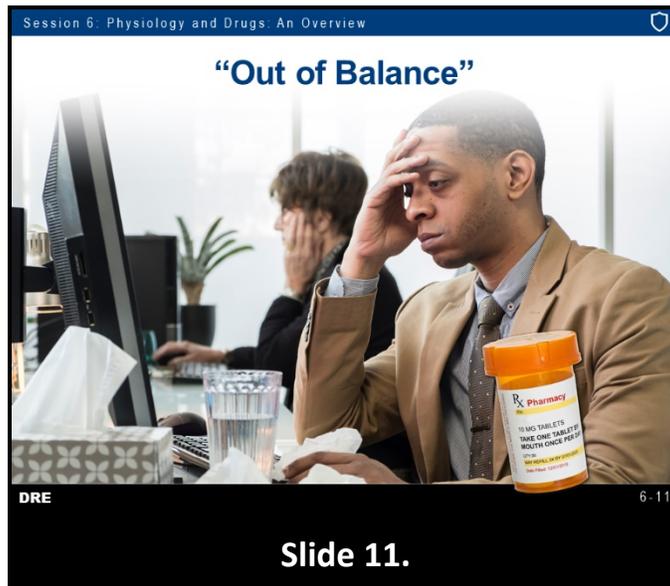


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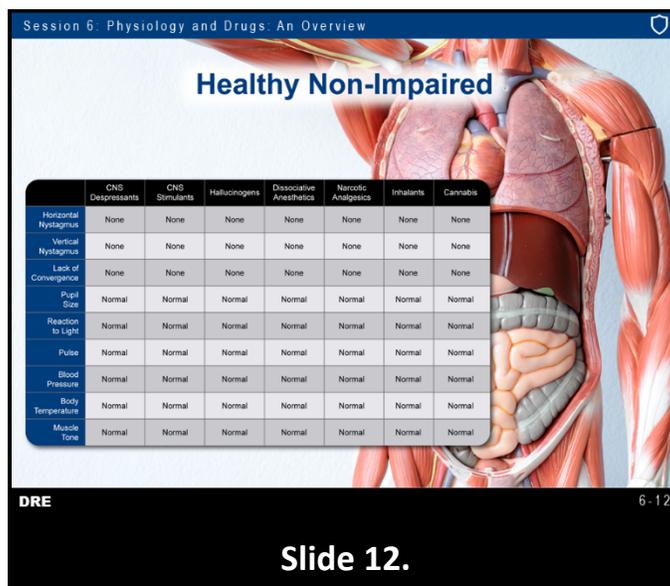
Britannica, T. Editors of Encyclopaedia. (2020, May 27). *homeostasis*. Retrieved from Encyclopedia Britannica:  
<https://www.britannica.com/science/homeostasis>

The human body is exposed to a constantly changing external environment, which influences the internal environment. Changes are neutralized by the internal environment – the blood. Oxygen, foods, water, and other substances are constantly leaving bodily fluids to enter cells, while carbon dioxide and other wastes are leaving the cells to enter these fluids. Yet, the chemical composition of these fluids remains within very narrow limits. This phenomenon is called homeostasis. This involves message sending and actions triggered by the balance within the autonomic nervous system (sympathetic and parasympathetic), hormones, and neurotransmitters.

Drugs interfere with the homeostatic mechanisms and produce signs and symptoms that can be recognized by a trained DRE.



Non-substance-abusing people who are sick have signs and symptoms of being “out of balance.” In other words, their homeostasis is “out of balance”, and they do not want to experience these effects. They want to get their homeostasis back “in balance” to feel better (“like usual”), so physicians may prescribe them drugs or medications to help put them in balance.



Homeostasis is indicated in the above slide. It represents average (expected) values for the clinical indicators used by the DRE to assist in making an opinion of impairment and medical drug related causes.

Session 6: Physiology and Drugs: An Overview

### Adverse (negative) effects of Methamphetamine

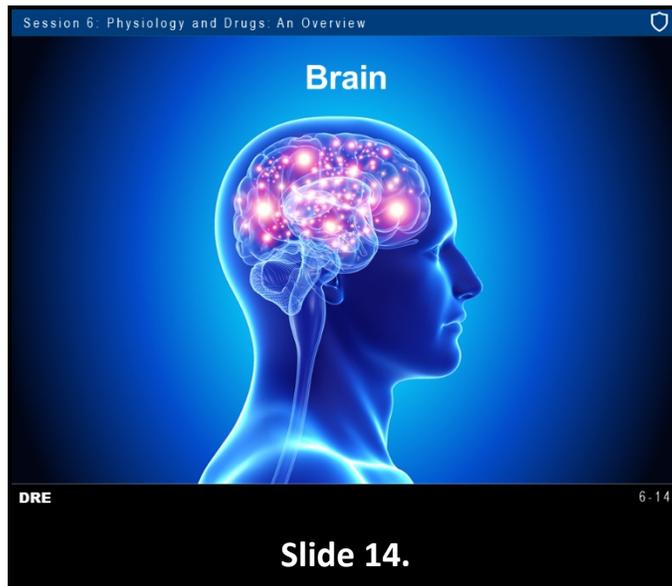
- Heart**
  - Chest pain
  - Rapid heart rate
  - Heart attack
- Mouth**
  - Grinding of teeth
- Psychological**
  - Insomnia
  - Aggressive behavior
  - Paranoia
  - Incessant conversations
  - Decreased appetite
  - Increased alertness
  - Irritability
  - Slurred speech
  - Dizziness
  - Confusion
  - Obsessive behaviors
  - Depression
  - Panic attacks
- Respiratory**
  - Shortness of breath
- Circulatory**
  - High blood pressure
  - Vessel damage in brain
  - Clotting and stroke
- Kidneys**
  - Damage
- Liver**
  - Damage
- Skin**
  - Sweating
  - Numbness
- Systemic**
  - Hyperthermia
  - Malnutrition
  - Impaired immune system
- Muscular**
  - Jerky movements
  - Increased activity
- Eyes**
  - Dilated pupils

DRE 6 - 13

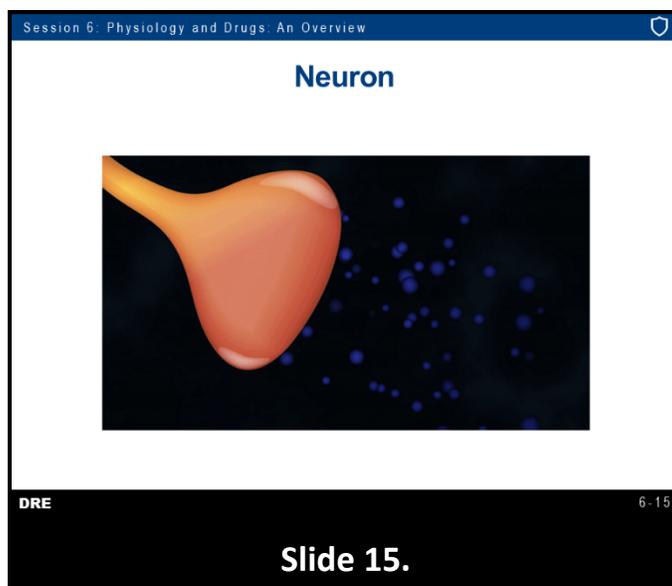
**Slide 13.**

In the above slide, the indicators listed are common with persons impaired by a drug category or categories, in this case CNS Stimulants, or perhaps someone experiencing an immediate medical emergency. Medical conditions will be discussed later in this session.

Whatever the case, they usually will exhibit indicators of impairment. Individuals that are impaired exhibit numerous indicators of impairment. In other words, they generally do not exhibit the DRE average range or expected values for the related indicators.



The brain is made up of billions of nerve cells, also known as neurons. Nerve cells communicate by transferring chemical substances between each other. When a message is sent from one neuron (transmitter), it triggers the release of neurotransmitters and sends the message to another nerve cell which is called the receptor. This is the way nerve cells share information. There are many different types of neurotransmitters and each one has a specific role to play in how the brain and the CNS functions. Some drugs affect the brain because their chemical makeup is similar to the neurotransmitters which occur in the body naturally. In the appropriate dose amount, drugs have a positive influence on how the neurons function. However, in some cases, drugs can cause the release of large amounts of a similar neurotransmitter while others can block the receptors and have a negative influence.



Each neuron, or “wire segment” has three main parts: the cell body, the axon, and the dendrite. The cell body contains the nucleus, which contains the cell's DNA and is responsible for protein production and packaging. The axon is the part of the neuron that sends out the neurotransmitter, or chemical messenger.

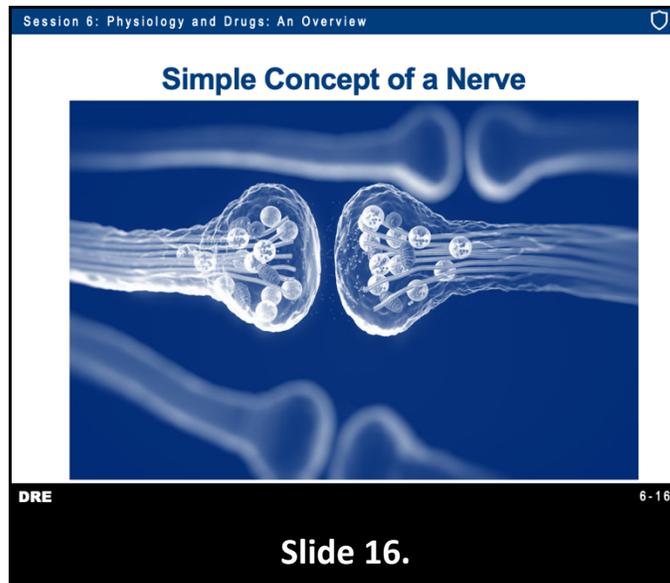


***Baseball analogy: the Axon would be the “pitcher” of the neurotransmitter and the dendrite is the “catcher” of the neurotransmitter.***

The dendrite is the part that receives the neurotransmitter. The gap between two neurons is called a synapse, or synaptic gap.

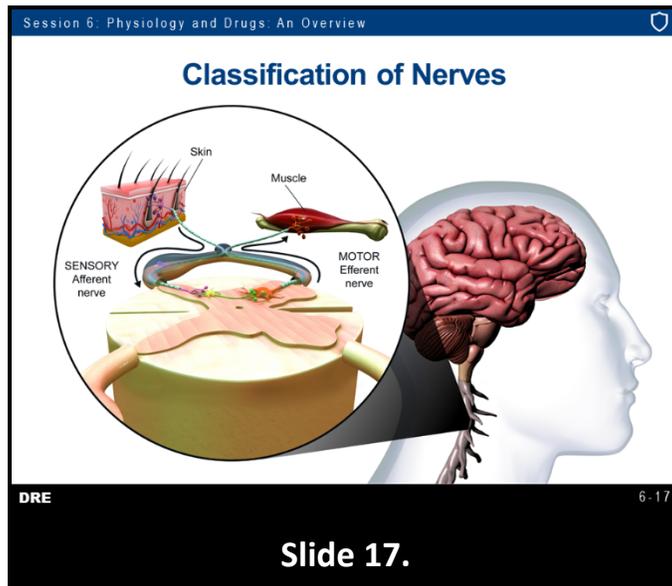


***Solicit participants’ questions about nerve cells (neurons).***



***Point to the close up of the gap.***

We can imagine messages running along the “wire segments” in much the same manner electrical impulses run along electrical wires. When the message reaches the end of the “wire segment,” it triggers the release of chemicals that flow across the gap and contact the next “wire segment.” When the chemical contacts the next wire segment, it generates an electrical impulse which runs along the wire until it reaches the next gap. At that gap, the message again triggers the release of chemicals that flow across to the next “wire segment” and the process continues.

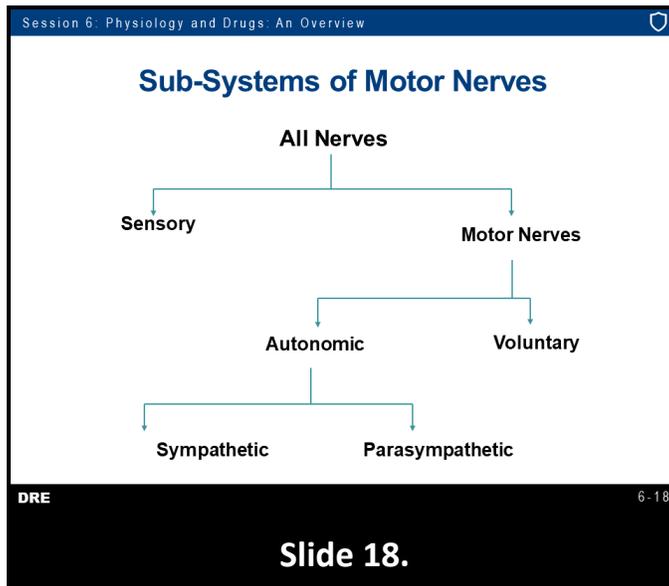


Some nerves carry messages away from the brain to the body's muscles and organs. These are called motor, or efferent nerves. The brain uses motor nerves to send commands to the heart to beat, the lungs to breathe, the muscles to contract or expand, and so forth.

Other nerves carry messages to the brain, i.e., from the eyes, ears, and other senses, from the muscles, etc. These are called Sensory, or Afferent nerves. The brain decodes the messages that come along the sensory nerves to monitor the condition of the body and of the outside world.

A fundamental notion: If something interferes with the messages the brain sends along the motor nerves, the brain's control over the heart, the lungs, the muscles, and other organs will be distorted. Another fundamental notion: if something interferes with the messages the brain receives from the sensory nerves, the brain's perception of the outside world and of the body's status will be distorted. This is basically how drugs work: They interfere with transmission or reception of the messages that travel along nerves.

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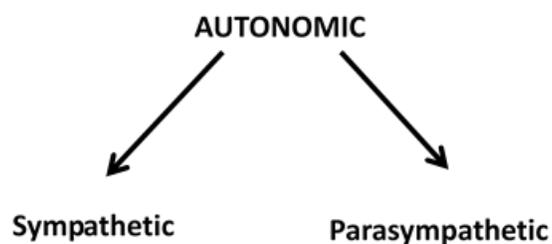


There are two sub-systems of motor nerves. The first is the voluntary nerves, which send messages to the striated muscles that we consciously control. The second is the autonomic nerves, which send messages to the muscles and organs that we do not consciously control, i.e., smooth muscle and cardiac muscle.



*On the dry erase board or easel/easel pad print the word “autonomic,” and then draw two lines from the word “autonomic”, one line angling down toward the left, the other angling down toward the right.*

The Autonomic sub-system is divided into two groups.



The Sympathetic nerves command the body to react in response to fear, stress, excitement, etc.

Clarification: **Sympathetic nerves control the body’s “fight or flight” responses.** Examples: Sympathetic nerves carry the messages that cause the blood pressure to elevate, pupils to dilate, sweat glands to activate, hair to stand on end, heartbeat to increase and strengthen, and blood vessels of the skin to constrict.

Parasympathetic nerves carry messages that produce relaxed and tranquil activities. Examples: Parasympathetic nerves carry messages that cause the pupils to constrict, heartbeat to slow, peripheral blood vessels to dilate, blood pressure to decrease. Certain neurotransmitters (i.e., chemical messengers) aid in the transmission of messages along sympathetic and parasympathetic nerves. Drugs that mimic the neurotransmitter associated with sympathetic nerves are called sympathomimetic drugs.



**Write “Sympathomimetic” on the dry erase board or easel/easel pad.**

Drugs that mimic neurotransmitters associated with parasympathetic nerves are called parasympathomimetic drugs.



**Write “Parasympathomimetic” on the dry erase board or easel/easel pad.**

Some drugs mimic the action of these neurotransmitters: When taken into the body. These drugs artificially cause the transmission of messages along sympathetic or parasympathetic nerves.

Sympathomimetic drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.



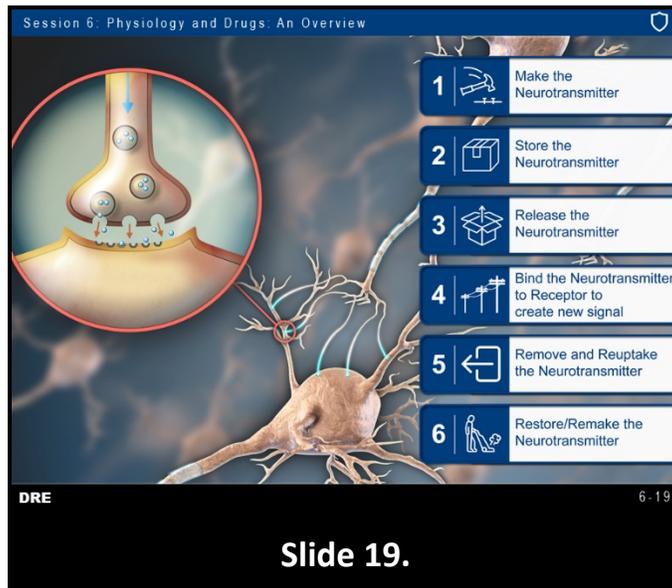
**Ask participants to name a category of drugs that would be considered sympathomimetic. Examples: CNS Stimulants, Hallucinogens, and to some extent Dissociative Anesthetics and Cannabis.**

The Sympathetic subsystem of the autonomic nervous system controls the stimulating type effects of the body. This process is automatic. We can relate this to “adrenaline” as a hormone or “norepinephrine” as a neurotransmitter that tends to speed up the body’s processes. Some of the sympathetic responses include pupil dilation, inhibits the flow of saliva (dry mouth), increased heartbeat, dilates bronchial tubes.

The Parasympathetic subsystem of the autonomic nervous system controls the calming-type effects of the body. This results in the transmission of messages that produce lowered blood pressure, drowsiness, etc. Like the Sympathetic subsystem, this process is also automatic. Some of the Parasympathetic responses include stimulating the flow of saliva, slowing heartbeat, and constricting bronchial tubes (slows breathing).



**Ask participants to name a drug category that would be considered parasympathomimetic. Examples: Narcotic Analgesics and CNS Depressants.**

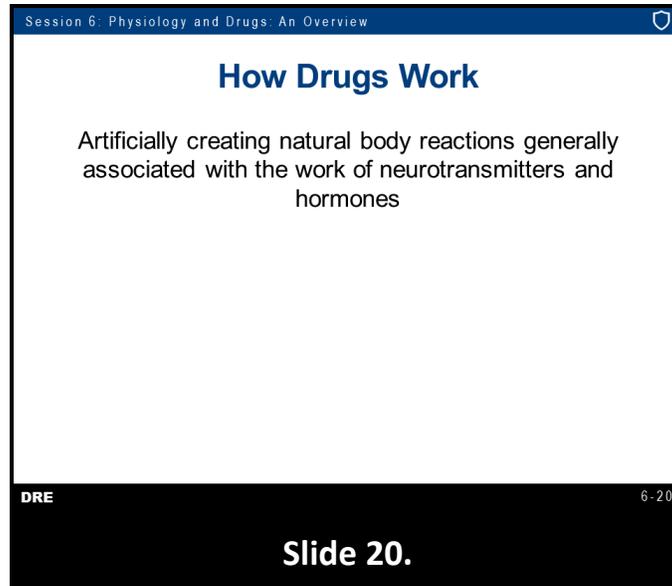


In our simple model of nerves, each “wire segment” corresponds to a nerve cell, called a neuron. The chemical that flows across the gaps separating neurons is called a neurotransmitter. Clarification: neurotransmitters are the body’s chemical messengers.

The body has a number of different neurotransmitters; each carries a different chemical message. The sequence of how a neurotransmitter works is:

1. The neuron makes a neurotransmitter
  2. Synaptic vesicles are small membrane bound structures in the axon terminals of nerve cells that contain neurotransmitters for storage
  3. These vesicles release neurotransmitters into the synaptic gap
  4. The neurotransmitter crosses the synaptic gap and binds to a receptor site on the adjacent neuron to cause the receptor to perform a function, usually generating an electrical impulse to continue onward through that neuron
  5. Removal and Reuptake—the neurotransmitter is either broken down or taken back up into the originating neuron
  6. Restore or Remake—for future reuse
-

## D. How Drugs Work



Session 6: Physiology and Drugs: An Overview

### How Drugs Work

Artificially creating natural body reactions generally associated with the work of neurotransmitters and hormones

DRE 6-20

**Slide 20.**

In very simple terms, drugs work by artificially creating natural body reactions generally associated with the work of neurotransmitters and hormones. Therapeutic doses of legitimate prescription and over-the-counter drugs are designed to produce mild and carefully controlled simulations of the natural action of neurotransmitters and hormones.



***Ask participants: What drug do many people take to artificially overcome the drowsiness they feel in the morning?***

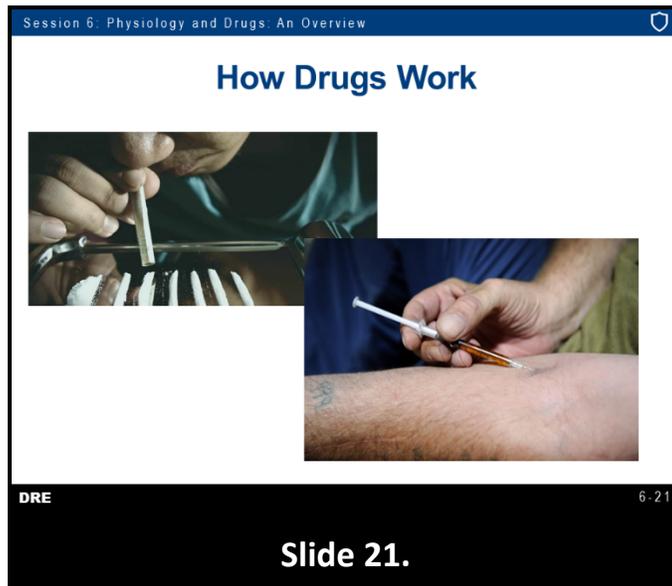
Large, abusive doses of drugs may produce greatly exaggerated simulations of the natural action of hormones and neurotransmitters, sometimes with disastrous results. Example: Cocaine (a sympathomimetic drug) may artificially create a message commanding the heart to beat so rapidly cardiac arrest results.

When a person administers a drug and artificially simulates the natural action of hormones and neurotransmitters, the body's dynamic balance is disrupted.



***Remind participants the body struggles to maintain homeostasis, the dynamic balance of salts, sugars, and other substances.***

The body automatically responds to the presence of the drug by producing other hormones and chemicals that can oppose the drug's effects and bring the body back into balance.



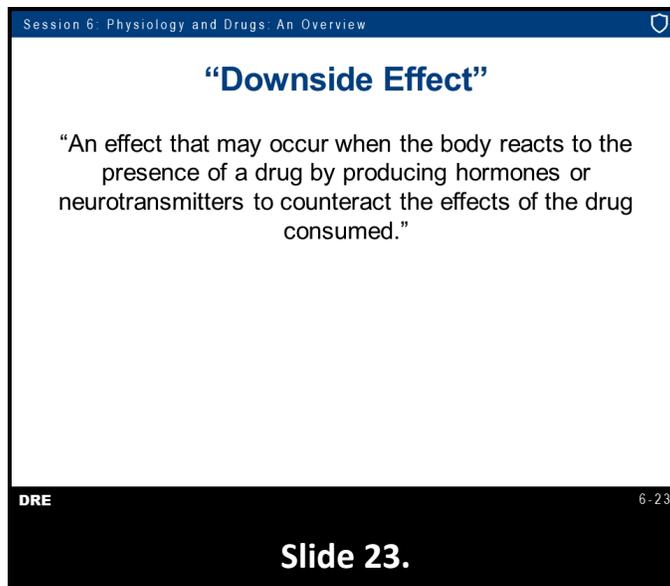
Example Number One: If a person administers a stimulant drug that mimics neurotransmitters associated with the sympathetic nerves, the body may react by excreting hormones that depress the bodily functions the drug is exciting. If a person administers Cocaine, for example, the Cocaine would artificially stimulate the body functions. The body would then produce hormones and neurotransmitters to slow down the body functions to try to maintain homeostasis.

Example Number Two: If a person administers a drug that depresses some bodily function, the body may pour out one of its natural chemicals that stimulate that same function. An interesting situation can occur when the drug is no longer psychoactive. The chemicals produced by the body in an effort to counteract the drug may still be active. These natural chemicals have exactly the opposite effect on the body the drug had: after all, that is precisely why the body produced those chemicals. As a result, the person may feel, appear and act in a manner exactly opposite to the way he or she would feel, appear and act when under the influence of the drug.

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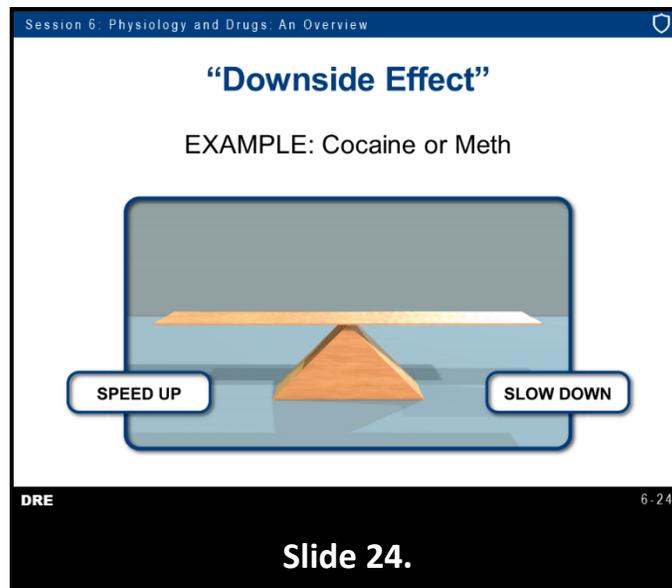
***Play Mouse Party video.***



***Write "Downside" on the dry erase board or easel/easel pad.***

It is not uncommon for a DRE to encounter someone on the "downside" as a result of drug administration. The definition of downside is "an effect that may occur when the body reacts to the presence of a drug by producing hormones or neurotransmitters to counteract the effects of the drug consumed."

The neurotransmitters and hormones persist in the body longer than the drug they are responding to, resulting in the demonstration of opposite findings after the drug is gone from the body until the hormones and neurotransmitters are eliminated. In other words, after drinking several drinks, a person may become drowsy, go to bed, and fall asleep quickly. But, after a few hours, when it is still the middle of the night, they suddenly awaken and are wide awake, unable to fall asleep again. What has happened is the alcohol has worn off, but the natural CNS Stimulants the body produced to counteract the alcohol are still around. We call this situation being on the “downside” of the drug.



One example of the downside effect can be seen with an individual abusing Stimulant drugs, such as Cocaine or Methamphetamine. Example: with Cocaine (a drug metabolized or broken down by the body fairly quickly) the user may be exhibiting drowsiness and general depression by the time the DRE is called to the scene. The concept of “downside” will be especially important to us when we discuss the effects of CNS Stimulants and drug combinations.



***Point out persons on the “downside” can be dangerous when trying to operate a motor vehicle.***

***Point out two common examples of “downside” occur with Cocaine and Methamphetamine. Both drugs stimulate the body.***

An example is the body attempts to “counteract” the stimulant effects. When the effects of the drug diminish, the results may mimic a Narcotic Analgesic. This is the body’s efforts to return to homeostasis.

Session 6: Physiology and Drugs: An Overview



Drug administered hits the GAS pedal, Speeds Up and Brakes Not Working!



DRE 6-25

**Slide 25.**

A simple analogy is using a vehicle's gas pedal and brake. While the drug is present and active in the body—applying the gas pedal in this Stimulant example—the body triggers its systems to apply the brakes to try to regain homeostasis. This involves engagement of the parasympathetic nervous system to attempt to regulate and slow the sympathetic system, as well as release of inhibitory neurotransmitters and hormones into the blood stream. The hormone system is the slowest to engage and the slowest to disengage.

As time passes, the (Stimulant) drug ingested “wears off” by metabolism to inactivate the foreign chemical and prepare it for elimination from the body. This results in a reduced pressure on the gas pedal. While this is occurring, the body's effort at “braking” to counter the Stimulant's pressure on the gas pedal is still ramping up and engaging to try to regain homeostasis.

The Stimulant drug ingested is now essentially eliminated, or its effect has worn off, so there is no pressure on the gas pedal.

The body's attempt at braking to regain homeostasis is now in full swing and is UNOPPOSED, so effects the OPPOSITE of the original drug ingested (Stimulant) can be seen on evaluation (Narcotic Analgesic).



## Tolerance

- May exhibit relatively little evidence of impairment
- Even tolerant drug users, when impaired, usually exhibit clinical evidence (i.e., vital signs, eye signs, etc.)

DRE

6-26

**Slide 26.**Instructor  
Note

***Write “Tolerance” on the dry erase board or easel/easel pad.***

Habitual users of drugs may develop tolerance to the drug. As a result, they may exhibit relatively little evidence of impairment on the psychophysical tests. “Tolerance” means the same dose of the drug will produce diminishing effects or conversely a steadily larger dose is needed to produce the same effects.

As with nearly all drugs of abuse, the effects produced depend on the tolerance the user has developed for the drug. A user who has developed tolerance and who is using his or her “normal” dose of the drug may exhibit little or no evidence of intellectual or physical impairment. As a result, they may exhibit relatively little evidence of impairment on the psychophysical tests. Even tolerant drug users, when impaired, usually exhibit clinical evidence (i.e., in the vital signs and eye signs). Impairment is more evident with new users and with tolerant users who exceed their “normal” doses.

Instructor  
Note

***Physical Dependence: Write “Physical Dependence” on the dry erase board or easel/easel pad.***

Another result may be physical dependence, or addiction.

Instructor  
Note

***Pose this question to the class: Why do people take drugs? Solicit responses.***

In simplest terms, people take drugs because they like the feelings the drugs produce. The artificial simulation of the natural action of hormones and neurotransmitters appears to permit the user to create any feeling or mood he or she desires. As time goes on, negative feedback may develop. The body may cease producing the natural chemicals that the drug simulates, and if the drug is not taken, the user does not return to a normal, non-drug-using state. He/she feels much worse in the opposite direction of the substance used. So, one additional reason for physical dependence or addiction is to PREVENT WITHDRAWAL SYMPTOMS and ALLOW “NORMAL” FUNCTIONING. The habitual user must externally supply some of the drug just to feel like a typical, non-drug-using person would.

Session 6: Physiology and Drugs: An Overview

### Metabolite

Chem	Loc	S/N	Results	Units
AMPH	(11)	503380 2MZ	353.28	mA/mir
BARB	(12)	503110 1PN	365.24	mA/mir
ENZ	(13)	501223 11D	383.11	mA/mir
CM	(14)	505015 10D	357.56	mA/mir
TD	(15)	501221 0LV	356.40	mA/mir
	(16)	504053 0QC	483.92	mA/mir
	(17)	503105 0EJ	295.97	mA/mir

DRE 6-27

**Slide 27.**



**Write “Metabolite” on the dry erase board or easel/easel pad.**

One final concept is important for an understanding of how drugs work. A metabolite is a product of metabolism which is the chemical changes that take place when the drug reacts with enzymes and other substances in the body.

Metabolism is defined as the combined chemical and physical processes that take place in the body involving the distribution of nutrients and resulting in growth, energy production, the elimination of wastes, and other body functions. There are two basic phases of metabolism: anabolism, the constructive phase during which molecules resulting from the digestive process are built up into complex compounds that form the tissues and organs of the body; and catabolism, the destructive phase during which larger molecules are broken down into simpler substances with the release of energy.

The body uses chemical reactions to break down the drug, and ultimately to eliminate it.

Example: when we drink alcohol, we initiate a series of chemical reactions that ultimately transform the alcohol into harmless carbon dioxide and water. Sometimes, metabolites of the original drug are themselves drugs, and cause impairment. For example, the body quickly metabolizes Heroin into morphine and it is the morphine that actually produces the effects the heroin user experiences.



***Solicit participants' questions and comments about how drugs work.***

Session 6: Physiology and Drugs: An Overview

### Neurotransmitters ("Chemical Messengers")

- Norepinephrine (Noradrenaline)
- Acetylcholine
- Dopamine

DRE 6-28

**Slide 28.**

Although there are more than 100 chemicals in the brain, only about two dozen probably are true neurotransmitters. The primary neurotransmitters identified are listed below.



***Write these neurotransmitters on the dry erase board or easel/easel pad.***

Norepinephrine (also called Noradrenaline).

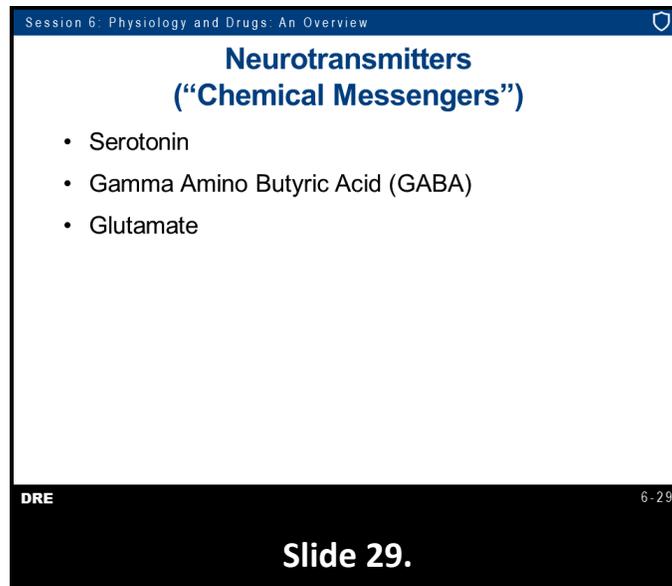


***Point out Norepinephrine is a neurotransmitter that produces effects on the body similar to the effects produced by Adrenaline (a hormone). Many neurotransmitters correspond to hormones that produce similar effects.***

Acetylcholine – Plays an important role in muscle control and affects neuromuscular or myoneural junctions. Acetylcholine also plays an important role in learning and memory.

Dopamine – Plays a role in mood control. It is necessary for mental concentration, alertness, high energy, motivation, hunger regulation, and sex drive. Dopamine functions in the brain's reward pathway, release making you feel good. It is an EXCITATORY neurotransmitter and acts like the “gas pedal” in a car.

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Session 6: Physiology and Drugs: An Overview

## Neurotransmitters ("Chemical Messengers")

- Serotonin
- Gamma Amino Butyric Acid (GABA)
- Glutamate

DRE 6-29

**Slide 29.**

Serotonin – A vasoconstrictor, thought to be involved in sleep, wakefulness, and sensory perception. Tryptophan is a precursor to Serotonin and has been used to treat insomnia. Serotonin is strongly associated with mood — overall state of mind — and deficiency is associated with depression.

Gamma Amino Butyric Acid (GABA) – Inhibits various neurotransmitters and also causes a release of growth hormones. GABA is the major INHIBITORY neurotransmitter in the brain and acts like the “brake pedal” in a car.

Glutamate – Functions as an “on switch” in the brain and is classified as an excitatory neurotransmitter. Glutamate is the most common EXCITATORY neurotransmitter in the brain.

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Session 6: Physiology and Drugs: An Overview

## Endorphins and Enkephalins

- Body's natural pain relievers
- Many drugs artificially induce the effects of neurotransmitters and hormones

DRE 6-30

**Slide 30.**

These are the body's natural pain relievers. They may be released in response to influences that may cause pain to the person. There are many drugs that artificially induce the effects of neurotransmitters and hormones.



***Solicit participants' questions and comments about nerves and neurotransmitter.***

### E. Medical Conditions That May Mimic Drug Impairment

Session 6: Physiology and Drugs: An Overview

## Medical Conditions That May Mimic Drug Impairment

Certain medical conditions or injuries may cause signs and symptoms similar to those of drug impairment.

DRE 6-31

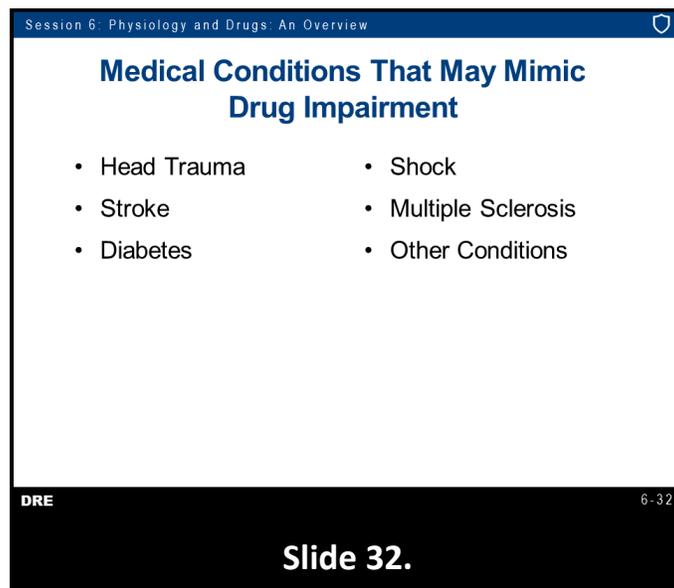
**Slide 31.**

Certain medical conditions or injuries may cause signs and symptoms similar to those of drug impairment.

There are times when a DRE may encounter situations where a subject arrested for drugged driving may be suffering from a medical condition that has affected the subject's ability to operate a vehicle safely. If the DRE makes the determination that a possible medical issue is the likely cause of impairment (observable signs and symptoms), the DRE should consider taking the appropriate steps to ensure the subject is referred to the proper medical personnel.

In such cases, the DRE should prepare the drug influence evaluation report documenting his or her findings and indicating in their opinion they suspect medical impairment as the cause of the impairment that has affected the subject's ability to operate a vehicle safely. Appropriate discretion should be applied by the arresting officer whether or not an impaired driving charge is relevant, but the person should receive prompt, formal medical attention, as necessary.

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The image shows a presentation slide titled "Medical Conditions That May Mimic Drug Impairment". The slide is part of "Session 6: Physiology and Drugs: An Overview". It lists six medical conditions in two columns: Head Trauma, Stroke, Diabetes, Shock, Multiple Sclerosis, and Other Conditions. The slide includes a "DRE" logo in the bottom left and "6-32" in the bottom right. Below the slide, the text "Slide 32." is displayed.

Session 6: Physiology and Drugs: An Overview

### Medical Conditions That May Mimic Drug Impairment

- Head Trauma
- Stroke
- Diabetes
- Shock
- Multiple Sclerosis
- Other Conditions

DRE 6-32

**Slide 32.**

There are various medical conditions and injuries that may cause subjects to appear to be impaired by alcohol and/or other drugs. Some of the more common medical conditions that may mimic drug impairment include head trauma, stroke, diabetes, shock, Multiple Sclerosis, and other conditions.

Session 6: Physiology and Drugs: An Overview

## Head Trauma

- Disorientation
- Confusion
- Lack of coordination
- Slowed responses
- Speech impairment
- Unequal pupils
- Unequal tracking



DRE 6-33

**Slide 33.**

A severe blow or bump to the head may injure the brain and create disorientation, confusion, lack of coordination, slowed responses, speech impairment, unequal pupil size, and eyes do not track equally. Because the injury usually affects one side of the brain more than the other, disparities usually will be evident in the subject's eyes. Sometimes the pupils will be noticeably different in size or one eyelid may droop while the other appears normal. Additionally, the eyes may not be able to track equally while following a stimulus.

Session 6: Physiology and Drugs: An Overview

## Stroke

- Unequal pupils
- Weakness on one side of the body
- Slurred speech
- Facial droop
- Confused and/or frightened



DRE 6-34

**Slide 34.**

A medical condition caused by a rupture or obstruction (as if by clot) of an artery of the brain. A stroke will usually produce many of the same effects and indicators associated with head trauma. Stroke victims often will have pupils noticeably different in size. One pupil may remain fixed and exhibit no visible reaction to light, while the other reacts normally. Paralysis, physical weakness, and other observable signs are often more predominant on one side of the body than the other. Additionally, subjects suffering from a stroke will often have a dazed appearance and be confused and/or frightened.

## Diabetes

- Confused or non-responsive
- Sweat profusely
- Cold, clammy skin
- Rapid, weak pulse
- May require immediate medical attention



DRE

6-35

**Slide 35.**

Diabetes is an endocrine disorder where the pancreas fails to properly produce a sufficient amount of insulin. A diabetic is most likely to be mistaken for a person impaired by alcohol and/or drugs when they have too much insulin, causing the blood sugar level to become dangerously low. This low blood sugar condition is referred to as insulin shock, or hypoglycemia. A diabetic in insulin shock may appear very confused, be non-responsive, sweat profusely, have an elevated pulse, and elevated blood pressure. Their speech may be slurred, and they may be non-communicative.

Another diabetic condition is hyperglycemia, or high blood sugar. This condition is where a person has not enough insulin or too much blood sugar. A person in this condition may appear flushed, dry skinned, irritable, confused, and may have a sweet, fruity breath odor known as acetone breath. Symptoms may include headaches and blurred vision.

Session 6: Physiology and Drugs: An Overview

## Shock

Occurs when the body is not getting enough blood flow  
Requires immediate medical attention

- Dazed
- Uncoordinated
- Non-responsive

DRE 6-36

**Slide 36.**

Shock is a life-threatening condition that occurs when the body is not getting proper blood flow. This can damage multiple organs and lead to death. Subjects in shock may have a dazed appearance, be uncoordinated, and non-responsive. Other indicators include extremely low blood pressure, fast but weak pulse, dizziness, cold clammy skin, profuse sweating, rapid shallow breathing, blue lips and fingernails. Shock requires IMMEDIATE medical treatment and can get worse very rapidly.

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Session 6: Physiology and Drugs: An Overview

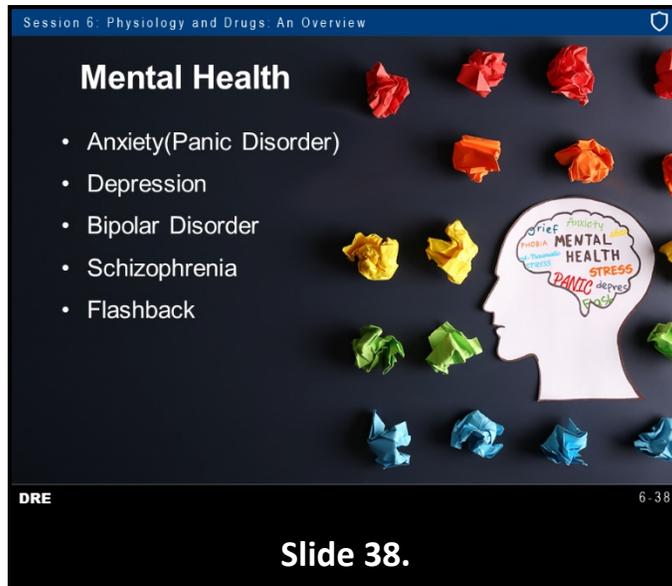
## Multiple Sclerosis

- May lack coordination
- Tremors
- Slurred or garbled speech
- May appear alert and responsive to questions

DRE 6-37

**Slide 37.**

Multiple Sclerosis (MS) is a progressive disease in which the nerve fibers of the brain and spinal cord lose their protective cover. Some signs and symptoms are abnormal sensations in the face or extremities, weakness, double vision, etc. Victims of MS and other degenerative neurological disorders may lack coordination, have tremors, slurred or garbled speech, and many of the other gross motor indicators of intoxication. Unlike subjects impaired by alcohol and/or drugs, MS sufferers usually appear alert.



There are some mental health conditions that may affect vital signs such as Anxiety (panic disorder), Depression, Bipolar Disorder, Schizophrenia, and flashbacks.

Panic disorder is a type of anxiety. The subject may also have physical symptoms such as fast heartbeat (tachycardia), chest pain, breathing difficulty, weakness or dizziness, sweating and/or feeling hot or cold chill.

Depression is a disorder of the brain and can be a serious mental illness. There are a variety of causes including genetic, biological, environmental, and psychological factors. Symptoms can include feeling sad or empty, loss of interest in favorite activities, not being able to sleep or sleeping too much, feeling very tired, feeling hopeless, irritable, anxious, or guilty, aches or pains, headaches, and thoughts of death or suicide.

Symptoms of a Manic Episode	Symptoms of a Depressive Episode
Feeling very up, high, elated, or extremely irritable or touchy	Feeling very down or sad, or anxious
Feeling jumpy or wired, more active than usual	Feeling slowed down or restless
Racing thoughts	Trouble concentrating or making decisions
Decreased need for sleep	Trouble falling asleep, waking up too early, or sleeping too much
Talking fast about a lot of different things (“flight of ideas”)	Talking very slowly, feeling like you have nothing to say, or forgetting a lot

Bipolar disorder is a serious mental illness. People who have it go through unusual mood changes. They go from very happy and active (manic) to very sad, hopeless and inactive (depressive), and then back again.

Schizophrenia is a chronic and severe mental disorder that affects how a person thinks, feels, and behaves. People with schizophrenia may seem like they have lost touch with reality. Symptoms may include hallucinations, delusions, thought disorders (unusual or dysfunctional ways of thinking), movement disorders (agitated body movements), reduced speaking, difficulty understanding information and using it to make decisions, difficulty focusing or paying attention, and impaired short-term memory.



**Source:**

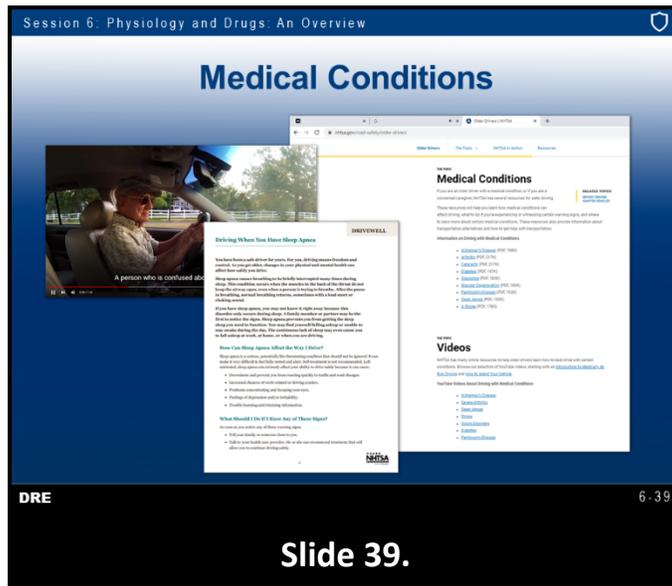
National Institute of Mental Health. (2020, May). Schizophrenia. Retrieved March 30, 2022, from National Institute of Mental Health:  
<https://www.nimh.nih.gov/health/topics/schizophrenia>

A person who has previously used a hallucinogen may experience a flashback, which is a portion of a prior hallucinogenic experience. Flashbacks do not cause all the signs and symptoms expected from an evaluation of a subject under the influence of a hallucinogen. A flashback does not occur because of a residual quantity of drug in the user's body. Instead, a flashback essentially is a very intense daydream. There are three types of flashbacks:

- Emotional: most dangerous - feelings of panic, fear, etc.; the sensations of a "bad trip"
- Somatic: Altered body sensations, tremors, weakness, dizziness, crawly, tingly feelings on the skin
- Perceptual: Distortions of vision, hearing, smell, taste, and touch (associated with original "trip" least harmful, unless driving a motor vehicle)



***Point out subsequent use of the drug may precipitate a flashback, by causing the user to re-experience the frightening illusions of the previous "bad trip."***



How many different medical conditions are there? Depending on source, from about 2,500 to 12,000 diseases and conditions!! An excellent source for medical conditions that impair driving is: Medical Conditions and Driving: A Review of the Literature (1960-2000). The National Highway Traffic Safety Administration (NHTSA) has produced this excellent guide reviewing numerous articles and studies on medical conditions and their effects on driving.

Although this reference will not allow you to make a determination of which medical condition may be affecting a person, it will give you a good reference for understanding how many medical conditions adversely affect driving.

It is recommended the DRE get as much detail when you interview the subject about their medical conditions, the stage of their condition(s), whether it is treated or untreated, if it is in later stages, remission, or under control with medications.

The location of the injury or disease will determine the signs and symptoms — for this reason, we CANNOT generalize a set of specific signs and symptoms for a condition as we do with the drug categories. In many injuries or diseases, the effects will be seen primarily on ONE SIDE of the body. This is the ONE-SIDED (Lateralized) SIGN. Impairment due to drugs will be seen on BOTH sides.

A medical condition will usually not go away in 24 hours as with a drug. It will be present well after the initial stop and arrest. The condition may include conflicting signs in the DRE evaluation.

The DRE may evaluate a subject in which there is a COMBINED medical condition and drug abuse. People with medical conditions also use drugs, both legally and illegally. BOTH situations can have impairing effects and can be present at the time of the DRE evaluation.

## Preliminary Examination for a Possible Medical Impairment

Evaluator	DRE #	Rolling Log #	Evaluator's Agency	Case #
Recorder/Witness	Arresting Officer's Agency			
Arrestee's Name (Last, First, Middle)	Crack: <input type="checkbox"/> None <input type="checkbox"/> First <input type="checkbox"/> Injury <input type="checkbox"/> Property	Date of Birth	Sex	Race
Date Examined / Time / Location	Breath Test: Results	Test Refused <input type="checkbox"/> Increment #	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/>	Test or toxic refused <input type="checkbox"/>
Miranda Warning Given Given by: _____ Time now / Actual	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? _____ How long? _____	When? _____ What have you been drinking? How much? _____ Time of last drink? _____	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No	Coordination:
Are you taking any medications or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No	Attitude:	Breath odor:	Face:	
Speech:				
Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so	<input type="checkbox"/> Hard <input type="checkbox"/> Soft	Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal
Pupil size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain): _____	Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Ability to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No	Bye-bye: <input type="checkbox"/> Normal <input type="checkbox"/> Drugged
Pulse and Time				
1. _____ / _____				
2. _____ / _____				
3. _____ / _____				

DRE

6-40

### Slide 40.

The preliminary examination consists of questions, observations of face, breath, and speech, initial checks of the eyes, and the initial check of the subject's pulse.

The pulse check is part of the examination of the subject's vital signs. Pulse is checked three times during the drug influence evaluation for many reasons, including to exclude nervousness as a factor of elevated pulse. This gives a more accurate and reliable pulse.

Preliminary examination questions deal with injuries or medical problems the subject may have. They include:



**Point out these questions are incorporated into the Drug Influence Evaluation Form, which the participants will use during all of their practice sessions.**

**Briefly discuss the relevance of each question.**

- Are you sick or injured?
- Do you have any physical defects?
- Are you diabetic or epileptic?
- Do you take insulin?
- Are you under a doctor or dentist's care?
- Are you taking any medications or drugs?

It is not only allowable, but recommended the DRE ask more questions related to these areas. This is especially true if the subject answers any of these questions in the affirmative.

Session 6: Physiology and Drugs: An Overview

## Medical Impairment

“An opinion made by a DRE based on the evaluation that the condition of a suspected impaired driver is more likely related to a medical impairment that has affected the subject’s ability to operate a vehicle safely.”

DRE 6-41

**Slide 41.**

There are times when a DRE may encounter situations where a subject arrested for drugged driving may be suffering from a medical condition that has affected the subject’s ability to operate a vehicle safely. In other words, the DRE, through his or her evaluation, has eliminated impairing substances as the probable cause of impairment, and while doing so, identified signs and symptoms consistent with a medical issue. Once the DRE makes the determination, the DRE should consider taking appropriate steps to ensure the subject is referred to the proper medical personnel. In such cases, the DRE should prepare the drug influence report documenting his or her findings that support an opinion of a DRE medical impairment.

For purposes of DRE and the DEC Program, medical impairment is defined as, **“An opinion made by a DRE based on the evaluation that the condition of a suspected impaired driver is more likely related to a medical impairment that has affected the subject’s ability to operate a vehicle safely.”**

The suggested way to document this type of opinion in Step 11 of the DRE report would be: “It is my opinion as a certified Drug Recognition Expert, that (Subject’s name) is unable to operate a vehicle safely due to medical impairment.”

DREs and other police officers will at times encounter individuals with mental illness or intellectual/developmental disabilities. These individuals may exhibit signs and symptoms very similar to those of an individual impaired by drugs and/or alcohol. These individuals may also be experiencing coexisting conditions of mental illness with drug impairment. It is important for DREs to make every effort to prevent violent interactions using an array of tools and resources necessary for positive, successful outcomes.

Using a strategic approach to interactions with individuals with suspected mental health problems or intellectual/developmental disabilities can ensure officer safety through the DRE interaction.

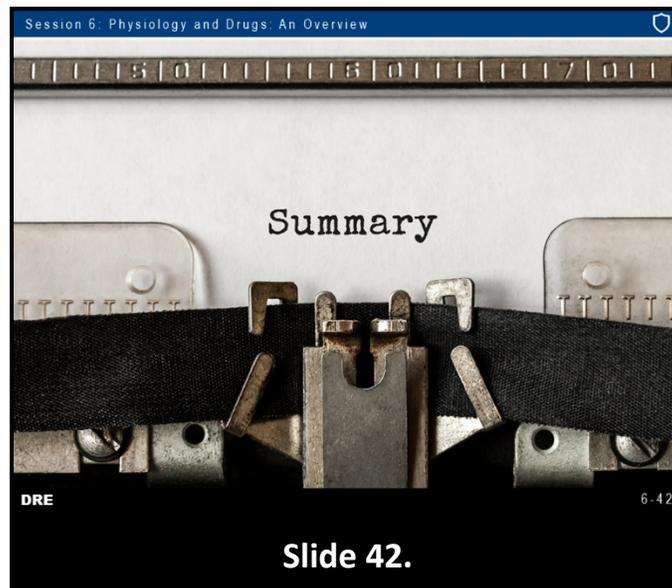
IACP has resources to respond to people in crisis and mental health disorders. This is titled the One Mind Campaign and can be found on the IACP website.

Other recommended Web sites and links for further information that may be beneficial for DREs and other police officers include:

- Substance Abuse and Mental Health Services Administration - [www.samhsa.gov](http://www.samhsa.gov)
- National Alliance on Mental Illness – [www.nami.org](http://www.nami.org)
- National Council for Mental Wellbeing - Mental Health First Aid - [www.mentalhealthfirstaid.org](http://www.mentalhealthfirstaid.org)
- National Coalition for Mental Health Recovery - [www.ncmhr.org](http://www.ncmhr.org)

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## F. Summary



***Briefly review main points of the lesson.***

A basic understanding of how the body works is necessary to understand the general concept of human physiology and understand purposes and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.).



***Emphasize research in drug intoxication and the interaction with neurotransmitters in its infancy.***

This limited overview will not qualify participants as medical specialists. The knowledge gained during this session must be supplemented by additional reading and/or instruction. The body of knowledge in this area is being constantly expanded.



***Point out the best response to questions regarding bodily functions and or specific drug interactions may be “I don’t know. I conducted a series of examinations and documented my observations. Based on my training and experience the results of my observations are consistent with those produced by persons impaired by \_\_\_\_.”***

The body maintains homeostasis (equilibrium) by constantly adjusting to changes in the external and internal environment.



***Point out the body functions as a total unit in an integrated and coordinated manner.***

When drugs are introduced into the body this process comes into play. When drugs interact in the body they tend to speed things up, or slow things down, or confuse signals, or block signals, or some combination of the above.



***Point out this is a very simplistic overview of how drugs work.***

The effects of drugs can be detected and/or observed in the drug influence evaluation.



***Remind the participants detailed instructions on procedures and expected results of the drug influence evaluations will be covered in following sessions. Solicit and answer participants’ questions.***

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Session 6: Physiology and Drugs: An Overview

Questions?

DRE 6-43

Slide 43.



**Solicit participants' comments and questions concerning Physiology and Drugs : An Overview.**

Session 6: Physiology and Drugs: An Overview

### Test Your Knowledge

1. What is a neurotransmitter?
2. What is a hormone?
3. What is a dendrite?
4. What is an axon?
5. What is a synapse?

DRE 6-44

**Slide 44.**

### Test Your Knowledge

1. What is a neurotransmitter?
2. What is a hormone?
3. What is a dendrite?
4. What is an axon?
5. What is a synapse?



- 1. A neurotransmitter is a chemical that passes from the axon of one nerve cell to the dendrite of the next cell and carries messages across the gap between the two nerve cells.**
- 2. Hormones are chemicals produced by the body's endocrine system that are carried through the blood stream to the target organ. They exert great influence on the growth and development of the individual, and they aid in the regulation of numerous body processes.**
- 3. The dendrite is the part of a neuron (nerve cell) that receives a neurotransmitter.**
- 4. The axon is the part of a neuron (nerve cell) that sends out a neurotransmitter.**
- 5. The synapse is the gap or space between two neurons (nerve cell).**



## Test Your Knowledge

6. What are the two types of nerves that make up the Autonomic Nervous Sub-System?
7. Is Cocaine sympathomimetic or parasympathomimetic?
8. Is Heroin sypathomimetic or parasympathomimetic?

DRE

6-45

**Slide 45.**

### Test Your Knowledge

6. What are the two types of nerves that make up the Autonomic Nervous Sub-System?
7. Is Cocaine sympathomimetic or parasympathomimetic?
8. Is Heroin sympathomimetic or parasympathomimetic?



**6. Sympathetic Nerves and Parasympathetic Nerves**

**7. Cocaine is a sympathomimetic drug.**

**8. Heroin is a parasympathomimetic drug.**



## Test Your Knowledge

8. Explain the concept of the “downside effect”.
9. What do we call the nerves that carry messages away from the brain?
10. What do we call the nerves that carry messages toward the brain?

DRE

6-46

**Slide 46.**

### Test Your Knowledge

9. Explain the concept of the “downside effect.”
10. What do we call the nerves that carry messages away from the brain?
11. What do we call the nerves that carry messages toward the brain?

**Instructor  
Note**

- 9. Downside effect occurs when the body reacts to the presence of a drug by releasing neurotransmitters and hormones to counteract the effects of the drug consumed to return to homeostasis.**
- 10. The nerves that carry messages away from the brain are called the Motor Nerves, or the Efferent Nerves.**
- 11. The nerves that carry messages toward the brain are called the Sensory Nerves, or the Afferent Nerves.**

# 7 DRE

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## EXAMINATION OF VITAL SIGNS

### LEARNING OBJECTIVES

- Explain the purposes of the various vital signs examinations in the drug influence evaluation procedure
- Explain the administrative procedures for these examinations
- Explain the indicators obtained from these examinations
- Document the examinations of vital signs accurately and completely

### CONTENTS

A. Purposes of the Examination.....	2
B. Procedures and Clues .....	3
C. Demonstrations .....	17
D. Documentation Procedures .....	17
E. Practice .....	18

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Instructor-Led Demonstrations
- Participant-Led Demonstrations
- Participants' Hands-on Practice
- Reading Assignments

Session 7: Examination of Vital Signs

## Learning Objectives

- Explain purposes of vital signs examinations
- Explain procedures for these examinations
- Explain the indicators for these examinations
- Document examinations of vital signs

DRE 7-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

### A. Purposes of the Examination

Session 7: Examination of Vital Signs

## Drug Influence Evaluation Vital Signs

- Pulse Rate
- Blood Pressure
- Temperature

DRE 7-3

**Slide 3.**

The vital signs relevant to the drug influence evaluation include: Pulse Rate; Blood Pressure; and, Temperature.



***Point out these vital signs on the wall chart.***

Different types of drugs affect these vital signs in different ways. Certain drugs tend to “speed up” the body and elevate these vital signs. Clarification: Pulse may quicken; Blood pressure may rise; Temperature may rise.

Other drugs tend to “slow down” the body and lower these vital signs. Clarification: Pulse may slow; Blood pressure may drop; Temperature may drop.

Systematic examination of the vital signs gives us much useful information concerning the possible presence or absence of various categories of drugs.

---

## B. Procedures and Clues

Session 7. Examination of Vital Signs

### Definitions Concerning “Pulse”

- Pulse
- Pulse Rate
- Artery
- Vein



DRE 7-4

**Slide 4.**

Pulse is the rhythmic dilation and relaxation of an artery that results from the beating of the heart. Pulse Rate is the number of pulsations in an artery per minute. The Artery is a strong, elastic blood vessel that carries blood from the heart to the body tissues. A Vein is a blood vessel that carries blood back to the heart from the body tissues.



**Measurement of Pulse Rate: Point out pulse rate is equal to the number of contractions of the heart per minute.**

**For your information: technically speaking, pulse rate is not quite the same thing as heart beat rate. There are rare and very serious conditions that could cause the heart to beat so weakly it is unable to force blood through some or all arteries. In that case, there might be no discernable pulse even though the heart is beating. But with a normal, healthy heart, pulse rate will equal heart beat rate.**

As stated above, an artery is a strong, elastic blood vessel that carries blood from the heart to the body tissues and a vein is a blood vessel that carries blood back to the heart from the body tissues. When the heart contracts, it squeezes blood out of its chambers into the arteries. The surging blood causes the arteries to expand. By placing your fingers on the skin next to an artery and pressing down, you can feel the artery expand as the blood surges through.



***Emphasize: the “surge” can be felt as the blood is squeezed from the heart through an artery. The pulse cannot be felt in a vein.***

By keeping your fingers on the artery and counting the number of pulses that occur in thirty seconds and doubling that value, you will determine the pulse rate.



***Demonstrate this, by holding your fingers on your own radial artery.***

Pulse is easy to measure once you locate an artery close to the surface of the skin.

---

Session 7: Examination of Vital Signs

### Radial Artery Pulse Point

Subject's wrist position can be up or down



DRE 7-5

**Slide 5.**

One convenient pulse point involves the radial artery. The radial artery can be located in or near the natural crease of the wrist on the side of the wrist next to the thumb.



***Hold your left hand out.***  
***Point to the radial artery pulse point on your own wrist.***  
***Demonstrate this.***

Place the tips of your right hand's index finger and middle finger into the crease of your wrist and exert a slight pressure.



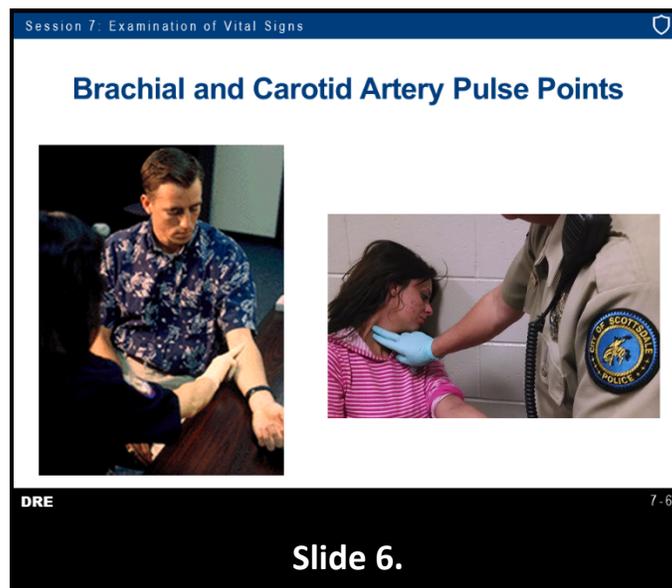
***Demonstrate this.***

You should be able to feel the pulse in your radial artery.



***Point out the DRE can have the subject position his/her palm up or down for this examination and the DRE should use a position that will best permit an accurate measurement.***

***Ask participants whether they can feel their pulses. Coach any participants who have difficulty in locating the pulse.***



Another pulse point involves the brachial artery. The brachial artery can be located in the crook of the arm, halfway between the center of the arm and the side of the arm closest to the body.



***Point to the brachial artery pulse point in your own arm.***

***Instruct participants to roll up their sleeves, if necessary, to expose their brachial artery pulse points.***

***Hold your left hand out with the palm up.***

***Demonstrate this.***

Place the tips of your right hand's index and middle fingers into the crook of your left arm and exert a slight pressure.



***Demonstrate this.***

You should be able to feel the pulse in your brachial artery.



***Ask participants whether they can feel their pulses. Coach any participants who have difficulty locating the pulse.***

*Carotid Artery Pulse Point:* Another pulse point involves the carotid artery. The carotid artery can be located in the neck, on either side of the center of the throat.



***Point out the carotid artery pulse point on your own neck.***

Place the tips of your right hand's index and middle fingers alongside the right side of the center of your throat.



***Demonstrate this.***

You should be able to feel the pulse in your carotid artery.



***Ask participants whether they can feel their pulses. Coach any participants who have difficulty locating the pulse.***



### Proper Procedures of Measuring Pulse

- Don't use your thumb to apply pressure while measuring a subject's pulse
- When measuring the pulse rate, use time intervals of 30 seconds

DRE

7-7

### Slide 7.

Don't use your thumb to apply pressure while measuring a subject's pulse.



Instructor  
Note

***Point out there is an artery located in the thumb close to the surface of the skin. If you apply pressure with the thumb, you may unintentionally measure your own pulse when you think you are measuring the subject's.***

If you use the carotid artery pulse point, don't apply pressure to both sides of the center of the throat as this can cut off the supply of blood to the brain. When measuring the pulse rate, use time intervals of 30 seconds. The DRE average range or expected range for pulse rate is 60-90 beats per minute.

---



## Pulse Rate Technical Terms

- Tachycardia – abnormally rapid heart rate
- Bradycardia – unusually slow heart rate
- Arrhythmia – abnormal heart rhythm

DRE

7-8

### Slide 8.

Tachycardia is abnormally rapid heart rate. Bradycardia is unusually slow heart rate. Arrhythmia is abnormal heart rhythm.



**Participants' Initial Practice at Measuring Pulse Rate: Instruct participants to work in pairs, taking turns measuring each other's pulse.**



**Tell participants to record on paper their partner's pulse rate.**

**Monitor, coach, and critique the participants' practice.**

**Allow the practice to continue for only about 5 minutes.**



**PRINT the following lists on the dry erase board or easel/easel pad.**

<b>50 or less</b>	<b>76-78</b>
<b>52-54</b>	<b>80-82</b>
<b>56-58</b>	<b>84-86</b>
<b>60-62</b>	<b>88-90</b>
<b>64-66</b>	<b>92-94</b>
<b>68-70</b>	<b>96-98</b>
<b>72-74</b>	<b>100 or more</b>



**TABULATE the numbers of participants whose pulse rates were in each of the listed intervals.**

**Point out there is a wide variation in human pulse rates.**

**Point out the DRE average range or expected range for pulse rate is 60-90 beats per minute.**

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Session 7: Examination of Vital Signs

## Blood Pressure

- Millimeters of Mercury = mmHg
- Systolic Pressure
- Diastolic Pressure

DRE 7-9

**Slide 9.**

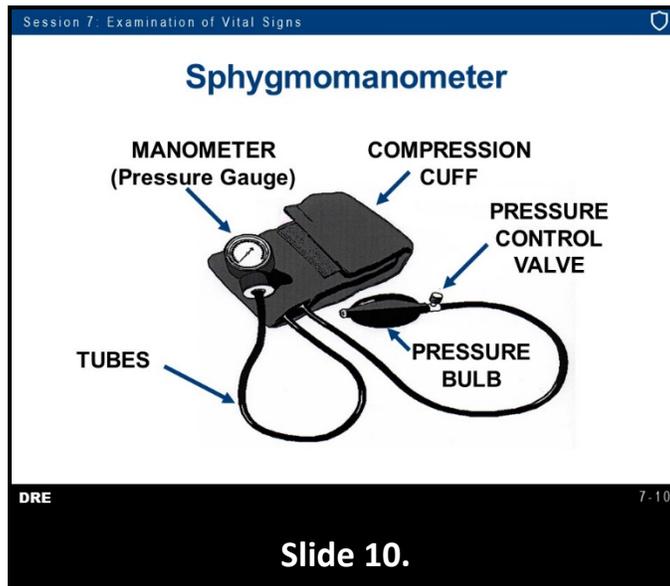
Blood Pressure is the force the circulating blood exerts on the walls of the arteries. Blood pressure is measured in millimeters of mercury. Example: a blood pressure of 120 means the blood is pressing on the walls of the artery with enough force to push liquid mercury 120 millimeters (mm) up a glass tube. We commonly abbreviate “millimeters of mercury” as mmHg.



**Write “mmHg” on the dry erase board or easel/easel pad.**

**For your information: “Hg” is the chemical symbol for the element Mercury. It comes from Hydrargyrum, the Latin word for Mercury.**

Blood Pressure changes constantly as the heart contracts and relaxes. Blood Pressure reaches its maximum as the heart contracts and sends the blood surging through the arteries. This is called the systolic pressure. Blood Pressure reaches its minimum when the heart is fully expanded. This is called the diastolic pressure. It is always necessary to measure and record both the systolic and diastolic blood pressure. As a memory aid, Systolic: “S” for “Superior” and Diastolic: “D” for “Down”. Systolic is the higher number and diastolic is the lower number.



The device used for measuring blood pressure is called a sphygmomanometer. The sphygmomanometer has a special cuff that can be wrapped around the subject's arm and inflated with air pressure.



***Exhibit a sphygmomanometer.***

***Select a participant to come before the class. Have the participant sit in a chair facing the class and roll up a sleeve (if necessary) to expose a bicep.***

***Advise participants to check for birth control implants in the upper arm. If the subject has an implant or has a Dialysis Fistula (enlarged vein procedure), blood pressure should be taken on the opposite arm and documented.***

***Wrap the cuff around the participant's arm and inflate it.***

As the pressure in the cuff increases, the cuff squeezes tightly on the arm. When the pressure gets high enough, it will squeeze the artery completely shut.



***Ask the participant whether they can feel the pressure of the cuff.***

Blood will cease flowing through the brachial artery. And, since the brachial artery "feeds" the radial artery, blood will also cease flowing through the radial artery.



***Familiarization with the Sphygmomanometer: Ensure sufficient stethoscopes and sphygmomanometers are available for participants.***

The compression cuff contains an inflatable rubber bladder.



***Point out components of the sphygmomanometer on the slide.***

***Point out blood pressure cuffs come in three sizes: child, adult, and extra-large, depending on the size of the bladder.***

A tube connects the bladder to the manometer, or pressure gauge. **The manometer displays the air pressure inside the bladder. In the DEC Program, an aneroid (without fluid) pressure gauge is used. Only manual blood pressure cuffs with stethoscopes are approved for DRE evaluations.**

Another tube connects the bladder to the pressure bulb, which can be squeezed to inflate the bladder.

The pressure control valve permits inflation of the bladder and regulates the rate at which the bladder is deflated. To inflate the bladder, the pressure control valve must be twisted all the way to the right.



***Demonstrate this.***

When the valve is twisted all the way to the right, air can be pumped into the bladder, but no air can escape from the bladder. To deflate the bladder, twist the valve to the left. The more the valve is twisted to the left, the faster the bladder will deflate.



***Ask participants: “What artery is located in the crook of the arm?” (Point to that location on the participant’s arm.)***

***Release the pressure in the cuff on the participant’s arm.***

If we slowly release the air in the cuff, the pressure on the arm and on the artery will start to drop. Eventually, the pressure will drop enough so blood will once again start to flow through the artery.



***Ask participants: “How far must the pressure in the cuff drop before the blood can start to squeeze through the artery?”***

Blood will start flowing in the artery once the pressure inside the artery equals the pressure outside the artery. The two pressures will become equal when the air pressure in the cuff drops down to the systolic pressure. When that happens, blood will spurt through the artery each time the heart contracts.

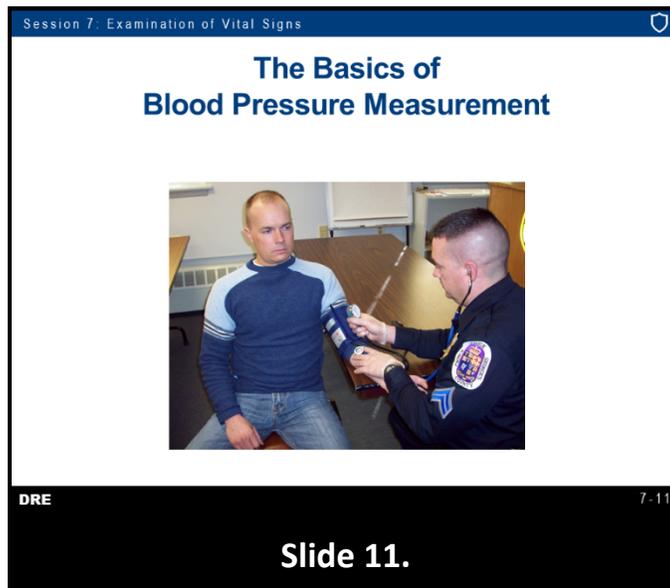


**Ask participants: “What would happen if we allowed the pressure in the cuff to drop down to the systolic level and held the air pressure at that level?”**

**Point out the blood would spurt through the artery each time the heart contracted but would cease flowing when the heart expanded.**

**Ask participants: “How far down must the air pressure in the cuff drop before the blood will flow through the artery continuously?”**

Once the air pressure in the cuff drops down to the diastolic level, the blood will flow continuously through the artery.



*Overview of Procedures for Measuring Blood Pressure:* Apply enough air pressure to the cuff to cut off the flow of blood through the artery.



**Demonstrate, using the participant volunteer (apply pressure to the cuff).**

Slowly release the pressure in the cuff.

Slowly release the air pressure until the blood just begins to spurt through the artery: that level will be the systolic pressure.

Continue to release the air pressure until the blood flows continuously through the artery: that level will be the diastolic pressure.



**Ask participants:**

***“How can we tell when the blood starts to spurt through the artery?”***

***“How can we tell when the blood is flowing continuously through the artery?”***

***We can listen to the spurting blood, using a stethoscope.***

***Exhibit a stethoscope.***

***Details of Blood Pressure Measurement: Select a participant to serve as a blood pressure subject. Demonstrate the procedures using the participant.***

If it proves difficult to hear the Korotkoff sounds, simply have the subject elevate their arm and squeeze their fist several times. The Korotkoff sounds will get louder. The manometer (pressure gauge) may be clipped on the subject’s sleeve, so it is readily viewable.

Twist the pressure control valve all the way to the right.

Apply the stethoscope to the skin directly above the artery.



***Demonstrate, using the participant.***

***Inflate the cuff on the participant’s arm.***

Apply pressure to the cuff, enough to cut off the flow of blood. When no blood is flowing through the artery, we hear nothing through the stethoscope.

Slowly release the air from the cuff, letting the pressure start to drop.



***Release the air in the cuff.***

When we drop to the systolic pressure, we start to hear a spurting sound. This begins as a clear, tapping sound. As we continue to allow the air pressure to drop, the surges of blood become steadily longer. The sounds take on a swishing quality and become fainter. When we drop to the diastolic pressure, the blood flows steadily and all sounds cease.

Put the stethoscope earpieces in your ears. Make sure the earpieces are turned forward, i.e., toward the nose.

Place the diaphragm or bell of the stethoscope over the brachial artery.

Rapidly inflate the bladder to a pressure of approximately 180-200 mmHg. If the subject's blood pressure is very elevated, it may be necessary to inflate the bladder to a higher pressure.

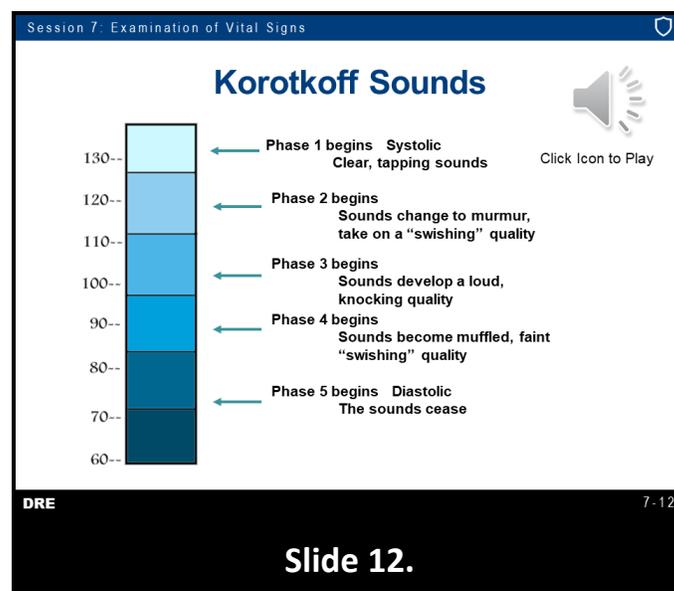
Twist the pressure control valve slightly to the left to release the pressure slowly. If the pressure drops too fast, the needle will sweep down the gauge too quickly to be read accurately. The pressure should be released at a speed that takes one full second for the needle to move a single gradation (i.e., 2 millimeters of mercury) on the gauge.

Keep your eyes on the gauge and listen for the Korotkoff sounds. The needle on the pressure gauge generally will "bounce" slightly when blood starts to spurt through the artery.



***Excuse the participant and thank him or her for participating. Solicit participants' questions concerning these procedures.***

For DRE purposes, the average ranges or expected ranges of blood pressure are: Systolic: 120 – 140; Diastolic: 70 – 90. People can have significantly different blood pressures.



The sounds we listen to are called Korotkoff Sounds. They are divided into 5 phases:



***This slide contains a sound clip of the Korotkoff sounds.***

Phase 1 – the first appearance of clear, tapping sounds that gradually increase in intensity.



***Point out the beginning of Phase 1 corresponds to the systolic pressure.***

Phase 2 – the sounds change to a murmur and take on a swishing quality. Phase 3 – the sounds develop a loud, knocking quality (not quite as clear as the Phase 1 sounds). Phase 4 – the sounds become muffled and again have a faint swishing quality. Phase 5 – the sounds cease.



***Point out the beginning of Phase 5 corresponds to the diastolic pressure.***

***On the slide, click on the speaker icon to play the Korotkoff Sounds.***

---

If you inflate the bladder and then need to repeat the measurement, wait at least three minutes to ensure an accurate reading. Don't re-inflate cuff once you start releasing the pressure.



***Point out: DREs use manual sphygmomanometers that have only even numbered markings on the manometer.***

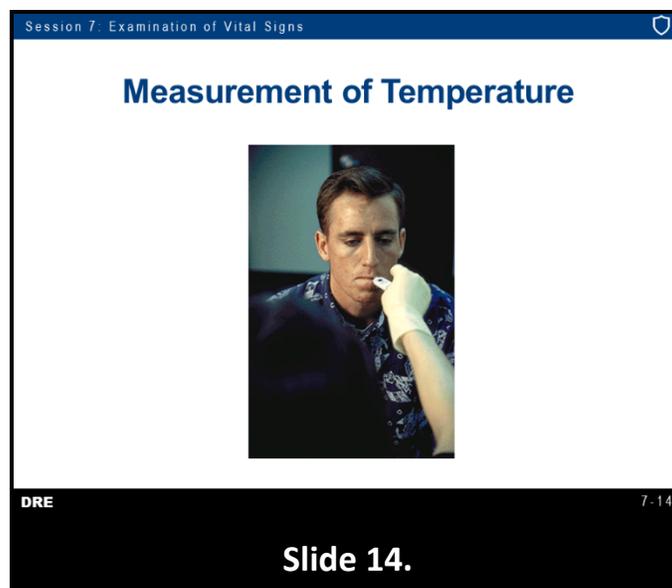
Some technical terms associated with blood pressure are: Hypertension: abnormally high blood pressure; and, Hypotension: abnormally low blood pressure.



**Participants Initial Practice at Measuring Blood Pressure:** *If at least one sphygmomanometer and stethoscope are available for every two participants, instruct participants to practice in pairs. Otherwise, assign participants to practice in teams of 3 or 4 members. Monitor, coach, and critique the participants' practice.*

*Allow this practice to continue for only about 10 minutes. If a dual hearing training stethoscope is available, this would be a good opportunity for instructors to check on how the participants do in detecting the blood pressure measurements.*

*Remind participants when they measure and record blood pressure it is not necessary to use the symbols "mmHg." Simply record the numbers.*



Body temperature is measured using an oral digital thermometer.



**Exhibit this.**

A digital thermometer with plastic sleeves is used for this measurement. When measuring temperature, ensure the thermometer remains under the subject's tongue. DREs should also try to refrain from letting the subject drink hot or cold fluids immediately prior to measuring temperature. Make sure a fresh disposable mouthpiece is used each time.



**Solicit participants' comments and questions concerning this overview of procedures and cues.**

## C. Demonstrations

Session 7: Examination of Vital Signs

### Demonstrations/Practice



DRE 7-15

**Slide 15.**



***Pulse Rate Measurement: Select two participants to come before the class.***

***Radial Artery Pulse Point: Instruct the first participant to measure the second participant's pulse using the radial artery pulse point. (Simultaneously, the instructor should measure the subject's pulse using a carotid artery pulse point).***

***Carotid Artery Pulse Point: Instruct the second participant to measure the first participant's pulse using the carotid artery pulse point. (Simultaneously, the instructor should measure the subject's pulse using a radial artery pulse point).***

***Excuse the two participants and thank them for participating.***

***Blood Pressure Measurement: Select two other participants to come before the class. Instruct the first participant to measure the second participant's blood pressure. Have the participants reverse roles.***

***Excuse the two participants and thank them for participating.***

## D. Documentation Procedures



***Review the sections of the Drug Influence Evaluation Form used to record vital signs measurements.***

## E. Practice

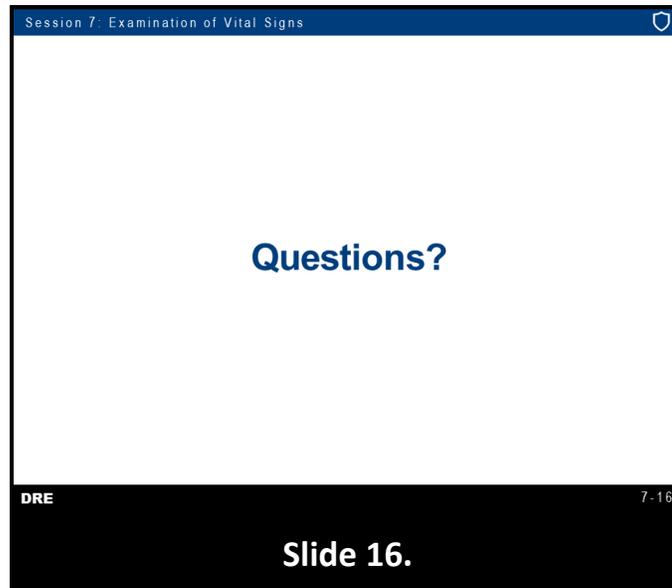


***Instruct participants to practice in teams of 2 – 4 members, taking in turns measuring each other's vital signs.***



***Monitor, coach, and critique the participants' practice.***

---



***Solicit participants' questions and comments about the Examination of Vital Signs.***

---



## Test Your Knowledge

1. Where is the Radial Artery pulse point?
2. Why should you never attempt to feel a subject's pulse with your thumb?
3. Does an artery carry blood to the heart or from the heart?
4. What does the symbol "Hg" represent?

DRE

7-17

### Slide 17.

### Test Your Knowledge

1. Where is the Radial Artery pulse point?
2. Why should you never attempt to feel a subject's pulse with your thumb?
3. Does an artery carry blood to the heart or from the heart?
4. What does the symbol "Hg" represent?



Instructor  
Note

1. *Crease of the wrist*
2. *You can mistakenly measure your own pulse*
3. *Away from the heart*
4. *Mercury (Hydrargyrum)*



## Test Your Knowledge

5. What is Diastolic pressure?
6. When do the Korotkoff Sounds begin?
7. Name and describe the major components of a Sphygmomanometer.
8. Hypotension is an abnormally \_\_\_\_\_ blood pressure.

DRE

7-18

### Slide 18.

### Test Your Knowledge

5. What is Diastolic pressure?
6. When do the Korotkoff Sounds begin?
7. Name and describe the major components of a Sphygmomanometer.
8. Hypotension is an abnormally \_\_\_\_\_ blood pressure.



5. *The pressure when the heart relaxes*
6. *At the systolic level when the blood begins to spurt through the brachial artery.*
7. *Compression cuff, Pressure bulb, Manometer, Pressure control valve, Tubes*
8. *Low*

# 8 DRE

---

## DEMONSTRATIONS OF THE EVALUATION SEQUENCE

### LEARNING OBJECTIVES

- Describe the sequence in which examinations and other activities are performed during the drug influence evaluation procedure

### CONTENTS

- A. Live Demonstrations.....3

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Instructor-Led Demonstrations
- Video Presentations
- Reading Assignments



## Learning Objective

- Describe the sequence in which examinations and other activities are performed during the drug influence evaluation procedure

DRE

8-2

Slide 2.

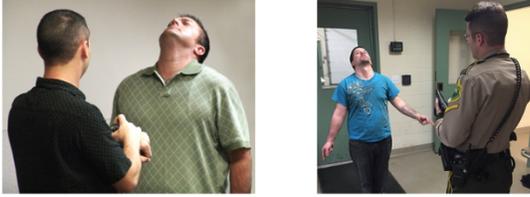


*Briefly review the objectives, content, and activities of this session.*

## A. Live Demonstrations

Session 8: Demonstrations of the Evaluation Sequence

### Live Demonstrations Preliminary Examinations



DRE 8-3

**Slide 3.**



*For these live demonstrations, participants must be grouped into teams of not more than 12 members. Each team must be taken to a separate classroom. At least two instructors must work with each team. This is to ensure all participants have the opportunity for a close and detailed observation of the demonstrations.*

*Instructors should conduct at least two complete demonstrations of the evaluation sequence, articulating each step in the process.*

*Instruct participants to follow along with copies of the drug influence evaluation form.*

*Refer participants to the 12-Step checklist and DRE Facesheet in their guide.*



*Select a participant or one of the volunteer drinkers for Session 12 (prior to drinking) to serve as the “subject” for the preliminary examination.*



**Ask each question, exactly as it should be asked, during an actual preliminary examination.**

**Explain the kinds of indicators and other evidence that may be obtained during the preliminary examination.**

**Ensure participant examiner checks:**

- **The participant-subject's eyes for tracking, equal pupil size, resting nystagmus, and eyelid condition.**
- **The participant-subject's pulse.**

**Solicit participants' comments or questions about the preliminary examination.**

**Excuse participant-subject and thank him/her for participating in the demonstration.**



**Select another participant or a volunteer drinker to serve as the "subject" for the eye examinations, which will include:**



**Conduct a complete demonstration of an eye examination.**

**Explain the kinds of indicators and other evidence that may be obtained during the eye examinations.**

**Solicit participants' comments or questions about the eye examinations.**

**Excuse the participant and thank him or her for participating in the demonstration.**



**Select another participant or a volunteer drinker to serve as the "subject" for the psychophysical tests, which include:**



**Conduct a complete set of psychophysical tests on the participant-subject.**

**Explain the kinds of indicators and other evidence that may be obtained during the psychophysical tests.**

**Solicit participants' comments or questions about the psychophysical tests.**

**Excuse the participant-subject and thank them for participating in the demonstration.**



**Select another participant to serve as the "subject" for the vital signs examinations, which include:**



***Conduct a complete set of vital signs examinations on the participant-subject.***

***Explain the kinds of indicators and other evidence that may be obtained during the vital signs examinations.***

***Solicit participants' comments or questions about the vital signs examinations.***

***Excuse the participant subject and thank them for participating in the demonstration.***



***Select another participant to serve as the "subject" for the dark room examination.***



***Point out this portion of the drug influence evaluation procedure is to be carried out in a darkened room. However, this demonstration will be conducted in normal room light so that all participants can observe the proper procedures for using the penlight.***

***Conduct a complete set of "dark room" examinations on the participant-subject.***

***Explain the kinds of indicators and other evidence that may be obtained during the dark room examinations.***



***Point out checks of the oral and nasal cavities actually are part of the examination for signs of administration.***



***Solicit participants' comments or questions about the dark room examinations.***

***Excuse the participant-subject and thank them for participating in the demonstration.***



**Select another participant to serve as the “subject” for this portion of the examination.**

**Point out Heroin is not the only drug that abusers inject: “puncture marks” in the skin may also be found on the arms (and elsewhere) of abusers of several other drugs.**

**Explain how to check for injection sites and muscle rigidity on the participant-subject.**

**Solicit participants’ comments or questions about this portion of the examination.**

**Excuse the participant-subject and thank them for participating in the demonstration.**



**Explain the statements and admissions and other evidence that may be obtained during the subject interview.**



**Give examples of typical statements or behaviors of drug-impaired subjects.**

**Solicit participants’ comments or questions about the subject interview.**



**Point out participants subsequently will learn the clues and indicators of the various categories of drugs.**



Session 8: Demonstrations of the Evaluation Sequence

## The DRE 12-Step Process



DRE 8-4

**Slide 4.**



***Be sure to conduct at least two complete live demonstrations of the drug influence evaluation procedure.***

***Review of the 12-Step Process***

***Show the video on the 12-Step Process as a review if time permits.***

Session 8: Demonstrations of the Evaluation Sequence

## Questions?

DRE 8-5

**Slide 5.**

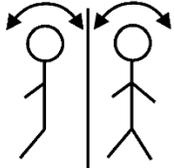
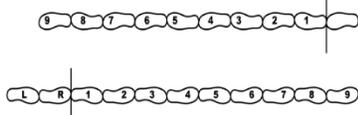
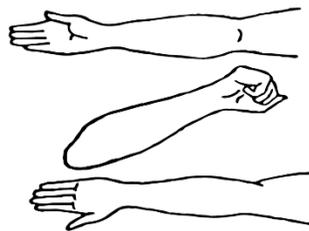
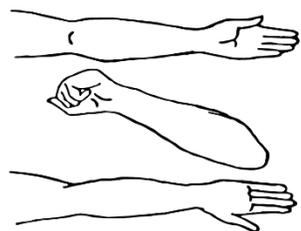


***Solicit participants' comments and questions concerning the entire drug influence evaluation procedure.***

**International Association of Chiefs of Police  
Drug Evaluation and Classification Program  
Drug Influence Evaluation Checklist**

- \_\_\_\_\_ 1. Breath alcohol test
- \_\_\_\_\_ 2. Interview of arresting officer
- \_\_\_\_\_ 3. Preliminary examination and first pulse  
(Note: Gloves must be worn from this point on.)
- \_\_\_\_\_ 4. Eye examinations
- \_\_\_\_\_ 5. Divided attention tests:
  - \_\_\_\_\_ Modified Romberg Balance
  - \_\_\_\_\_ Walk and Turn
  - \_\_\_\_\_ One Leg Stand
  - \_\_\_\_\_ Finger to Nose
- \_\_\_\_\_ 6. Vital signs and second pulse
- \_\_\_\_\_ 7. Dark room examinations
- \_\_\_\_\_ 8. Check for muscle tone
- \_\_\_\_\_ 9. Check for injection sites and third pulse
- \_\_\_\_\_ 10. Interrogation, statements, and other observations
- \_\_\_\_\_ 11. Opinion of evaluator
- \_\_\_\_\_ 12. Toxicological analysis

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case #	
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency			
Arrestee's Name (Last, First, Middle)		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time /Location / /		Breath Test: Results:		Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When?		What have you been drinking? How much?		Time of last drink?	
Time now/ Actual /	When did you last sleep?	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No			Attitude:		Coordination:		
Speech:		Breath odor:		Face:			
Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids <input type="checkbox"/> Normal <input type="checkbox"/> Droopy		Pulse and Time		HGN		Left Eye	
1. _____ / _____ 2. _____ / _____ 3. _____ / _____		Lack of Smooth Pursuit		Right Eye		Convergence	
Modified Romberg Balance Approx.    Approx.		Maximum Deviation		Angle of Onset		/30 <b>One Leg Stand</b> /30	
		Walk and Turn Test		Cannot keep balance _____			
				Starts too soon _____		1st Nine    2nd Nine	
				Stops walking _____		L    R	
				Misses heel-toe _____		Sways while balancing	
				Steps off line _____		Uses arm(s) to balance	
				Uses arm(s) _____		Hopping	
				Actual steps taken _____		Puts foot down	
Time Estimation _____ estimated as 30 seconds		Describe turn		Cannot do test (explain)		Type of footwear:	
Finger to Nose (Draw lines to spots touched)		PUPIL SIZE		Room light (2.5 - 5.0)		Darkness (5.0 - 8.5)	
		Left Eye		Direct (2.0 - 4.5)		Nasal area:	
		Right Eye		Rebound Dilation: <input type="checkbox"/> Yes <input type="checkbox"/> No		Oral cavity:	
Blood Pressure /		Temperature °F		RIGHT ARM		LEFT ARM	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:					
What drugs or medications have you been using?		How much?		Time of use?		Where were the drugs used? (Location)	
Date / Time of arrest: /		Time DRE was notified:		Evaluation start time:		Evaluation completion time:	
Officer's Signature:		Reviewed/approved by / date:				DRE #	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol		<input type="checkbox"/> CNS Stimulant	
		<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input type="checkbox"/> Dissociative Anesthetic	
				<input type="checkbox"/> Hallucinogen		<input type="checkbox"/> Narcotic Analgesic	
						<input type="checkbox"/> Inhalant	
						<input type="checkbox"/> Cannabis	

# 9 DRE

## CENTRAL NERVOUS SYSTEM DEPRESSANTS

### LEARNING OBJECTIVES

- Describe a brief overview of the Central Nervous System (CNS) Depressant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs, and other effects associated with this category
- Explain the typical time parameters, i.e., onset and duration of effects, associated with this category.
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs

### CONTENTS

A. Overview of the Category .....	3
B. Possible Effects .....	11
C. Onset and Duration Effects .....	12
D. Overdose Signs and Symptoms .....	14
E. Expected Results of the Evaluation .....	15
F. Review of the DEC Program Exemplars .....	18

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Review of the DEC Program Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations



## Learning Objectives

- Describe a brief overview of the CNS Depressant category of drugs
- Identify common drug names and terms
- Identify common methods of administration
- Describe signs, symptoms, and other effects
- Explain typical time parameters
- Describe indicators likely to emerge

DRE

9-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

***Ask this question before advancing to the next slide: "What is the single most commonly-abused drug?"***

## A. Overview of the Category



The CNS Depressant category includes the single most commonly abused drug in America. Alcohol has been used and abused since prehistoric times. Alcohol and its effects are familiar to most people. Alcohol is a model for the CNS Depressant category. With some exceptions, all depressants produce effects quite similar to the effects of alcohol.

Anytime there is a positive BAC reading during an evaluation, the DRE must list alcohol (ETOH) as part of their opinion.



***Point out the remainder of the session will focus on the non-alcohol CNS depressants.***

CNS Depressants are generally characterized by effects that “slow down” the central nervous system by increasing or mimicking the activity of sedating (inhibitory) neurotransmitters and/or decreasing or blocking the activity of excitatory (stimulating) neurotransmitters.



***Point out another common name for CNS Depressants is “downers.”***

CNS Depressants first affect those areas of the brain that control a person’s conscious, voluntary actions such as judgment, inhibitions, and reaction time. As the dose is increased, depressants begin to affect the parts of the brain that control the body’s automatic processes, heartbeat, respiration, etc.



## Subcategories of CNS Depressants

- Antipsychotics
- Antidepressants
- Sedative-Hypnotics
- Other

DRE

9-4

**Slide 4.**

For the purposes of this training, CNS Depressants are subdivided into four major classifications: Antipsychotics, Antidepressants, and Sedative-Hypnotics based upon primary purpose of use and shared mechanisms of action. CNS Depressants that do not belong to one of these three classes, including antihistamines, antiepileptics, and designer CNS Depressants, are characterized as Other.



***Briefly review these examples.***

### Antipsychotics Examples

Drug	Brand Name
Aripiprazole	Abilify
Chlorpromazine	Thorazine
Fluphenazine	Prolixin
Haloperidol	Haldol
Olanzapine	Zyprexa

DRE

9-5

**Slide 5.**



*If available, display slides of these various drugs.*

*Refer participants to the most current DEA Intelligence Report – Drug/Slang Code Words.*

Antipsychotics are used in psychiatry to manage psychotic symptoms such as delusions, hallucinations, disorganized thinking, and inappropriate emotions that are frequently associated with schizophrenia and bipolar disorder. First introduced in the 1950's, they primarily work by blocking dopamine and serotonin receptors. Some are also used to augment or supplement the effects of other psychotropic medications, such as antidepressants or combined with other drugs to achieve therapeutic goals. Such combinations may also diminish driving ability to an extent not expected from any of the drugs individually.

#### Antipsychotics

Drug Name	Brand Name
Aripiprazole	Abilify
Chlorpromazine	Thorazine
Fluphenazine	Prolixin
Haloperidol	Haldol
Olanzapine	Zyprexa



## Antidepressants Examples

Drug	Brand Name
Bupropion	Wellbutrin
Citalopram	Celexa
Duloxetine	Cymbalta
Fluoxetine	Prozac
Paroxetine	Paxil

DRE

9-6

### Slide 6.

Antidepressants, are used to treat certain mental disorders, including depression, anxiety, obsessive compulsive disorder (OCD), and many others by influencing brain chemistry. The most common classes of these are selective serotonin reuptake inhibitors (SSRIs), serotonin–norepinephrine reuptake inhibitors (SNRIs), tricyclic antidepressants (TCAs) and monoamine oxidase inhibitors (MAOIs). While these classes of drugs share similar core features, they may have some unique effects and side effects. Some antidepressants, such as SSRIs, SNRIs, and TCAs, may elevate pulse rate, and they usually cause pupil dilation.

### Antidepressants

Drug Name	Brand Name
Bupropion	Wellbutrin
Citalopram	Celexa
Duloxetine	Cymbalta
Escitalopram	Lexapro
Fluoxetine	Prozac
Mirtazapine	Remeron
Paroxetine	Paxil
Sertraline	Zoloft
Trazodone	Desyrel
Venlafaxine	Effexor

Session 9 Central Nervous System Depressants

### Sedative-Hypnotics Examples

Drug	Brand Name
Alprazolam	Xanax
Clonazepam	Klonopin
Diazepam	Valium
Lorazepam	Ativan
Oxazepam	Serax

DRE 9-7

**Slide 7.**

Session 9 Central Nervous System Depressants

### Sedative-Hypnotics Examples

Drug	Brand Name
Carisoprodol	Soma
Eszopiclone	Lunesta
Methaqualone	Quaaludes
Pentobarbital	Nembutal
Zolpidem	Ambien

DRE 9-8

**Slide 8.**

Sedative-Hypnotics are used to reduce tension and anxiety and induce calm (sedative effect) or sleep (hypnotic effect). These drugs may exert a quieting or calming effect at low doses and a sleep-inducing effect in larger doses. Sedative-hypnotic drugs tend to depress the CNS. Since CNS depression and sedation are the main effects of these drugs, they work on pathways other than those affected by the Narcotic Analgesics which also cause sedation. However, symptomatology between these two categories of drugs is quite different.

Types of sedative-hypnotics include benzodiazepines, barbiturates, certain sleep aids, and muscle relaxers. Common benzodiazepines include alprazolam (Xanax), chlordiazepoxide (Librium), diazepam (Valium), lorazepam (Ativan), and oxazepam (Serax). Common barbiturates include butalbital (Fioricet), pentobarbital (Nembutal), and secobarbital (Seconal). Common sleep aids include zolpidem (Ambien), eszopiclone (Lunesta), and zaleplon (Sonata). They are often prescribed for patients with anxiety and sleeping difficulties. Other sedative-hypnotics include carisoprodol (Soma), methaqualone (Quaalude), and chloral hydrate.

## Sedative Hypnotics

Drug Name	Brand Name
Alprazolam	Xanax
Butalbital	Fioricet
Carisoprodol	Soma
Chloral Hydrate	
Chlordiazepoxide	Librax
Clonazepam	Klonopin
Diazepam	Valium
Estazolam	ProSom
Eszopiclone	Lunesta
Lorazepam	Ativan
Meproamate	
Methaqualone	Quaaludes
Midazolam	Versed, Nayzilam, Seizalam
Oxazepam	Serax
Pentobarbital	Nembutal
Phenobarbital	Luminal
Secobarbital	Seconal
Temazepam	Restoril
Triazolam	Halcion
Zaleplon	Sonata
Zolpidem	Ambien

---

Session 9: Central Nervous System Depressants

### Other CNS Depressants Examples

Drug	Brand Name
Cyclobenzaprine	Amrix
Diphenhydramine	Benadryl
Etizolam	
Gabapentin	Neurotin, Gralise, Horizant
GHB	Xyrem

DRE 9-9

**Slide 9.**

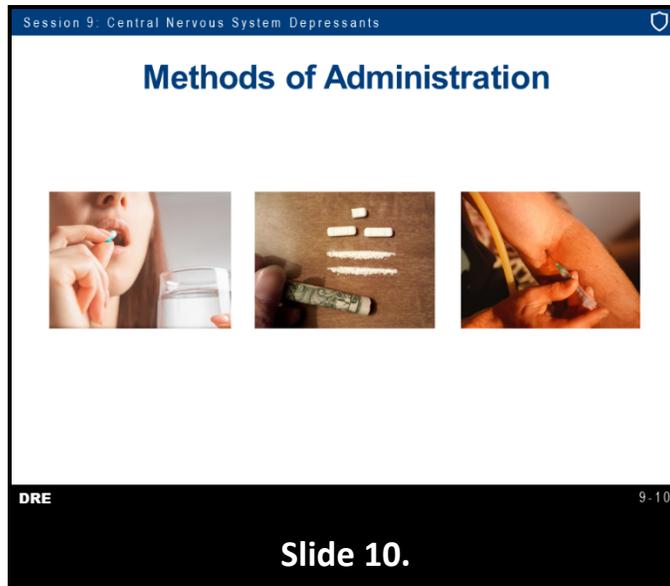
CNS Depressants that do not fit neatly into the above three subcategories include antihistamines, antiepileptics, some designer CNS Depressants, and more. Some antihistamines may cause sedation and psychomotor impairment at therapeutic dosing. Antiepileptics are used for their ability to suppress seizures, but some have other applications such as treating neuropathic pain or psychotic/mental disorders. Some designer CNS Depressants are legal pharmaceuticals in other countries, while others are synthesized for illicit use. Many are chemically and functionally similar to benzodiazepines but are significantly more potent than typical benzodiazepines found in the United States. They may be found in counterfeit preparations that appear to be pharmaceuticals, such as Xanax. They may also be found in various preparations on the internet being sold as "research chemicals".

Another example is gamma-hydroxybutyrate (GHB), originally used as an anesthetic and hypnotic agent. The only FDA approved version is sodium oxybate (Xyrem), which is approved for the treatment of narcolepsy.

Drug Name	Brand Name
Clonazepam	
Cyclobenzaprine	Amrix (formerly Flexeril)
Diphenhydramine	Benadryl
Etizolam	
Flualprazolam	
Gabapentin	Neurotin, Gralise, Horizant
Gamma-Hydroxybutyrate (GHB) or Sodium Oxybate	Xyrem
Lithium	Lithobid
Phenytoin	Dilantin
Promethazine	Promethagan



**Direct participants to appendix at the end of this session for additional resources about specific CNS Depressant drugs.**



The most common and easiest method of administration is for the drug to be taken orally. This method results in a slower onset and longer duration of effects. For faster and more intense effects, abusers may crush the tablets and snort the powder, or inject the drug. More information on the injection method of administration will be provided in the session on Narcotic Analgesics. Some abusers experience a “flash” or “rush” from intravenous injection of Barbiturates they do not experience from oral administration.

The injection sites on the skin of a Barbiturate abuser appear quite different from those who inject Narcotic Analgesics. For example, large swelling, about the size of a quarter or fifty cent piece, will frequently appear at the Barbiturate injection site.



***Point out these effects result from the skin’s reaction to the high alkaline content of the Barbiturate solution.***

Necrosis may occur i.e., a decaying of the body’s tissue at the injection site.



***If available, display a slide showing ulcerated injection sites.***

The Barbiturate user who injects the drug usually will not display the same type of track marks as the heroin user who uses repeated injections along the same vein.



***Stress that participants should be familiar with all of the drug names in this category.***

## B. Possible Effects

Session 9: Central Nervous System Depressants

### Possible Effects of CNS Depressants

- Divided attention impairment
- Impaired judgment and concentration
- Impaired vision
- Lack of coordination
- Relaxed inhibitions
- Slowed reflexes
- Slurred, mumbled or incoherent speech
- Wide variety of emotional effects

DRE 9-11

**Slide 11.**

CNS Depressants produce impairments of the human mind and body that essentially mirror alcohol impairment. These effects will not necessarily appear in a predictable sequence as dose increases.



***Solicit examples from the participants how each of the following effects could be present while driving or during a drug influence evaluation.***

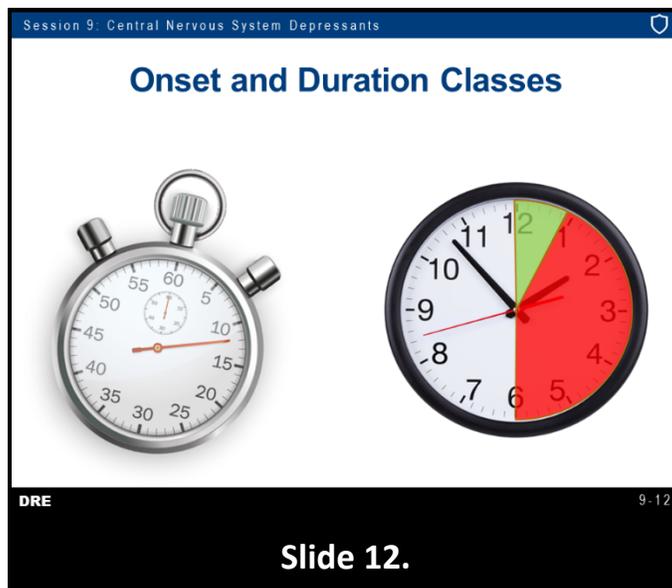
- Divided attention impairment – Clarification: impede the person’s ability to concentrate on more than one thing at a time
- Impaired judgment and concentration
- Impaired vision – Ability to focus eyes may be impaired; “double vision” may develop (Diplopia)
- Lack of coordination
- Relaxed inhibitions
- Slowed reflexes
- Slurred, mumbled, or incoherent speech
- Produce a variety of emotional effects, such as euphoria, depression, suicidal tendencies, laughing or crying without provocation, etc.

The extent to which a CNS Depressant user will exhibit these effects will depend, in part, on the user’s tolerance to these drugs. Persons habituated to a drug often won’t exhibit its effects as clearly as will a novice user. Generally speaking, a person under the influence of CNS Depressants will look and act drunk.



**Solicit participants' questions and comments concerning possible effects of CNS Depressants.**

### C. Onset and Duration Effects



Some CNS Depressants are very fast acting with very brief effects. They take effect in a matter of seconds and the effects last only a few minutes. These are very rarely the “drugs of choice” for drug abusers. These are sometimes used at the beginning of a surgical operation, in conjunction with an inhaled anesthetic.

Other CNS Depressants take effect about one hour after administration and typically last 8 – 14 hours. Again, these are generally not the “drugs of choice” for abusers, however, some people will abuse the long-acting Depressants if others are not readily available. Long-acting Depressants are used medically in the control of epilepsy and of other conditions that can cause convulsions. They can also be used to provide continuing sedation to patients suffering from extreme anxiety.

Most CNS Depressants of abuse fall in between these two extremes. While the duration of effects of these drugs varies widely, the onset is generally within 30 minutes and the effects last between 4 – 8 hours. These drugs are frequently prescribed as a treatment for insomnia or may be used as a pre-anesthetic medication to calm a patient prior to surgery. Fairly often abused, the effects last long enough for users who desire a longer lasting state of intoxication.

Examples of drugs of intermediate duration include alprazolam, carisoprodol, chloral hydrate, clordiazepoxide, clonazepam, diazepam, and lorazepam. In addition, methaqualone, oxazepam, zolpidem, and gamma hydroxy butyrate also have a similar duration of effect.

Type	Onset	Duration
Ambien	Rapid	4 to 5 hours
Klonopin	1 hour	6 to 12 hours
Soma	30 minutes	4 to 6 hours
Valium	30 minutes	12 to 24 hours
Xanax	10 to 20 minutes	6 to 8 hours
GHB	10 to 20 minutes	2 to 5 hours



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.



***Alcohol as a Specific Example – Ask participants: “How would you classify Alcohol in terms of the onset and duration of its effects?”***

***Probe question: Suppose an average person drank two shots of whiskey. How long would it be before he or she started to feel the effects? (Solicit responses).***

***Probe question: How long would the average person continue to feel the effects of those two shots? (Solicit responses)***

***Solicit participants’ questions and comments about the onset and duration of effects of CNS Depressants.***

## D. Overdose Signs and Symptoms

Session 9: Central Nervous System Depressants

### Overdose Signs and Symptoms



DRE 9-13

**Slide 13.**

Overdoses from CNS Depressants produce symptoms essentially identical to those of alcohol overdoses. The subject may become extremely drowsy and pass out. The heartbeat (pulse) will be rapid and weak. Skin may feel cold and clammy. Subject may lapse into a coma.

Respiration will become shallow. One major danger with CNS Depressant overdoses is death from respiratory failure. A sufficiently high dose of CNS Depressant can suppress the portions of the brain that control respiration.

Death can occur from alcohol intoxication. However, a drinker will usually pass out before he or she consumes enough alcohol to suppress respiration completely.



***Point out CNS Depressants are often used as a means of suicide.***

Another major danger with CNS Depressants occurs when they are combined with alcohol. The combination of alcohol and certain other CNS Depressants may produce an effect greater than the sum of the effects of the two drugs independently.

There is at least an additive effect when alcohol and another depressant are taken together. With many CNS Depressants, there may be more than an additive effect. Coroners have reported a number of cases in which neither the alcohol level nor the depressant level independently would have been close to a fatal dose. The additive effect of alcohol and other depressants can be fatal.

It is not possible to predict how great of an effect will occur when alcohol is mixed with another depressant. However, it is clear the combination is always risky.



***Solicit participants' questions and comments concerning overdose signs and symptoms of CNS Depressants.***

## E. Expected Results of the Evaluation

Session 9: Central Nervous System Depressants

### CNS Depressant Symptomatology Chart

HGN	Present
VGN	Present (High dose for that individual)
LOC	Present
Pupil Size	Normal <sup>(1)</sup>
Reaction to Light	Slow
Pulse Rate	Down <sup>(2)</sup>
Blood Pressure	Down
Temperature	Normal
Muscle Tone	Flaccid

<sup>(1)</sup> Soma, Methaqualone and some antidepressants usually dilate  
<sup>(2)</sup> ETOH, Methaqualone, and some antidepressants may elevate

DRE 9-14

**Slide 14.**

Observable Evidence of Impairment: If a person is under the influence of a combination of alcohol and some other CNS Depressant, the onset angle of HGN will not be consistent with the person's BAC; in other words, the eyes will start to jerk earlier than would be expected due to the alcohol alone.

Horizontal Gaze Nystagmus (HGN) will be present with subjects under the influence of CNS Depressants.

Vertical Gaze Nystagmus (VGN) may be present, with high doses, of depressants for that individual.

Lack of Convergence (LOC) will be present with subjects under the influence of CNS Depressants.

Performance on Modified Romberg Balance (MRB), Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) tests will be similar to that of subjects impaired by alcohol. The subject's estimation of time (on MRB) may be impaired.



**Source:**

Richman, J.E. (2010). Review of Romberg Test for 30 Second Estimate of Time: Brief Report. *IACP, DEC Program Technical Advisory Panel Report*

Vital Signs – Pulse will be Down (2).



***Ask participants if the Pulse will be down with all CNS Depressants. Solicit their responses and then point out the Footnote (2)***

(2) ETOH, Methaqualone, and some antidepressants may elevate. Blood pressure will be Down. Body temperature generally will be in the normal range.



***Point out “normal” refers to body temperature generally being in the DRE average ranges.***

Dark Room Examinations – Pupil sizes will generally be normal.



***Point out “normal” refers to pupil size generally being in the DRE average ranges.***

***Ask the participants if the pupil size will be normal with all CNS Depressants. Solicit their responses and then point out the foot note (1) to the participants.***

(1) Soma, Methaqualone and some antidepressants usually dilate pupils. Pupillary reaction to light will be slowed.



***Point out “Normal” references refer to the DEC Program averages for those specific examinations, such as pupil size, pulse rate, temperature, reaction to light, etc.***

Muscle Tone – Muscle tone will be Flaccid.



## Evaluation of Subjects Under the Influence of CNS Depressants

### General Indicators:

- Disoriented
- Droopy eyelids (ptosis)
- Drowsiness
- Drunk-like behavior
- Slow, sluggish reactions
- Thick, slurred speech
- Uncoordinated
- Unsteady walk

DRE

9-15

**Slide 15.**

### General Indicators

- Disoriented
- Droopy eyelids (ptosis)
- Drowsiness
- Drunk-like behavior
- Slow, sluggish reactions
- Thick, slurred speech
- Uncoordinated
- Unsteady walk

**NOTE:** Alcohol, Methaqualone, and some antidepressants may elevate the pulse. Soma, Methaqualone, and some antidepressants usually dilate pupils.



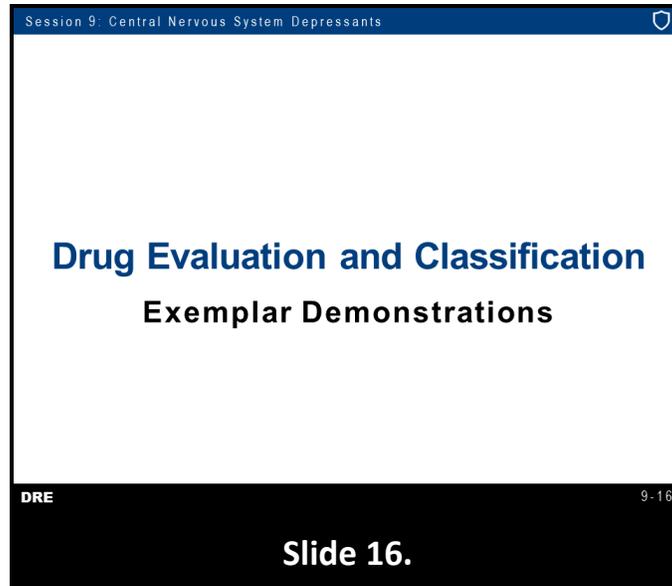
***Emphasize speech may also be incoherent. Analogy: drunken behavior without the odor of alcoholic beverages.***

***But remind participants: subjects may have consumed alcohol and some other CNS Depressant. Hence, odor of alcoholic beverage may also be present.***

***For more information and details regarding possible effects refer to***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## F. Review of the DEC Program Exemplars



***Refer participants to the exemplars found at the end of Session 9 of their participant guides.***

***Point out the exemplars are examples and serve as a guide.***

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.



***Relate the items on the exemplars to the CNS Depressant Symptomatology Chart.***



Session 9: Central Nervous System Depressants

## CNS Depressants



DRE 9-17

**Slide 17.**



**VIDEO DEMONSTRATION:** *Click video to begin.*

*Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.*

*Show video example of subject under the influence of a CNS Depressant.*

*(Approximately 24 minutes).*

*Relate behavior and observations to the CNS Depressant Symptomatology Chart.*

*Solicit participants' questions or suggestions concerning Expected Results of the Evaluation of subjects under the influence of Depressants.*

Session 9: Central Nervous System Depressants

## Questions?

DRE 9-18

**Slide 18.**



*Solicit participants' comments and questions concerning Central Nervous System Depressants.*

Session 9: Central Nervous System Depressants

## Test Your Knowledge

1. Besides some antidepressants, what other CNS Depressants usually dilate pupils?
2. Xanax is an example of a \_\_\_\_\_ CNS Depressant drug?
3. What is easiest and most common method of administration for CNS Depressants?

DRE 9-19

**Slide 19.**

### Test Your Knowledge

1. Besides some antidepressants, what other CNS Depressants usually dilate pupils?
2. Xanax is an example of a \_\_\_\_\_ CNS Depressant drug?
3. What is easiest and most common method of administration for CNS Depressants?



1. *Carisoprodol (Soma), methaqualone (Quaaludes)*
2. *Sedative-hypnotic*
3. *Oral*

Session 9: Central Nervous System Depressants

### Test Your Knowledge

4. Name a CNS Depressant drug that may elevate pulse rate.
5. What is the brand name for the drug carisoprodol?
6. What is a brand name for the drug diazepam?

DRE 9-20

**Slide 20.**

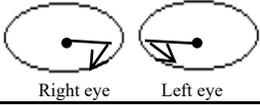
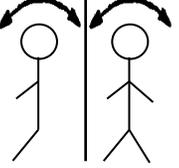
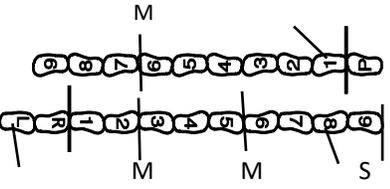
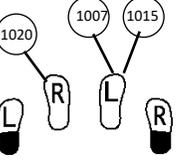
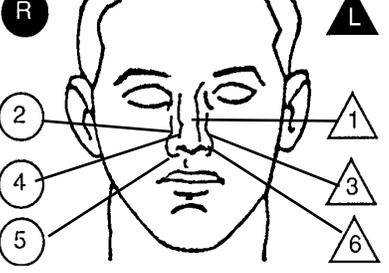
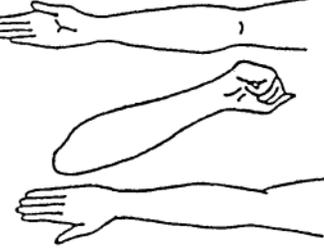
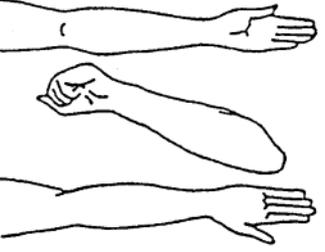
#### Test Your Knowledge

4. Name a CNS Depressant drug that may elevate pulse rate.
5. What is the brand name for the drug carisoprodol?
6. What is the brand name for the drug diazepam?



4. *ETOH, methaqualone (Quaaludes), or some antidepressants*
5. *Soma*
6. *Valium*

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Margaret Nunley</b>		DRE # <b>30094</b>	Rolling Log # <b>22-015-0158</b>	Evaluators Agency <b>California Borough</b>	Case# <b>(Session IX - #1)</b>
Recorder/Witness <b>Tpr. Craig Johnson, PA State Police</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Lititz Police Department</b>	
Arrestee's Name (Last, First, Middle) <b>Ludes, Lucy Dunn</b>		Date of Birth <b>04/12/1982</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Tyler Weinoldt #31606</b>
Date Examined / Time / Location <b>08/06/22 / 0145 / Lititz Police Dept.</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>63305</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: Ofc. Weinoldt	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Soup and sandwich</b>	When? <b>About 4 pm</b>	What have you been drinking? How much? <b>Nothing, just some water</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>Midnight / 0150</b>	When did you last sleep? <b>Last night</b>	How long? <b>6 or 7 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"Some anxiety issues"</b>		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Some pills from my brother"</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Staggering</b>	
Speech: <b>Slurred</b>		Breath odor: <b>Normal</b>		Face: <b>Normal</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Pulse/Time 1. <u>56</u> / <u>0202</u> 2. <u>58</u> / <u>0218</u> 3. <u>58</u> / <u>0240</u>		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye <b>Present</b>	Right Eye <b>Present</b>	Convergence  Right eye    Left eye
<b>Modified Romberg Balance</b> Approx. 2" 2"    Approx. 2" 2" 		<b>Walk and Turn Test</b>  <i>Slow movements. Stopped and asked for directions on turn.</i>		<b>One Leg Stand</b> 22/30    25/30  L    R    L    R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Reminded to look at extended foot	
<b>Time Estimation</b> <u>46</u> estimated as 30 seconds		Describe turn <b>Stopped. Asked for directions.</b>		Cannot do test (explain) <b>N/A</b>	
<b>Finger to Nose</b> (Draw lines to spots touched)  Slow hand and arm movements		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>
		<b>Left Eye</b>	4.0	6.0	3.5
		<b>Right Eye</b>	4.0	6.0	3.5
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Slow</b>	
		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 	
Blood Pressure <b>110 / 66</b>		Temperature <b>98.2 °F</b>			
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		<b>Nothing observed</b>			
Comments: What drugs or medications have you been using? <b>"Don't know. Something my brother gave me."</b>		How much? <b>"Couple of pills"</b>		Time of use? <b>About 10 pm</b>	Where were the drugs used? (Location) <b>Brothers house</b>
Date / Time of arrest: <b>08/06/22 0015</b>	Time DRE was notified: <b>0130</b>	Evaluation start time: <b>0145</b>	Evaluation completion time: <b>0300</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>M. Nunley</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input checked="" type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Ludes, Lucy Dunn**

- Location:** The drug influence evaluation was conducted in the Interview Room at the Lititz Police Department. The floor surface is smooth tile and free of obstructions. The room is well illuminated and has adequate lighting for conducting the evaluation. The darkroom examinations were conducted in a restroom at that location.
- Witnesses:** Trooper Craig Johnson of the PA State Police observed and recorded the entire evaluation.
- Breath Alcohol Test:** A breath test was administered to the suspect prior to my arrival and a 0.00 BAC result was obtained.
- Notification and Interview of the Arresting Officer:** I was on duty and was requested to contact Officer Weinholdt of the Lititz PD regarding a drug evaluation. After contacting Officer Weinoldt, it was determined he had stopped the suspect on East Main Street after observing her vehicle weaving in and out of her traffic lane. Upon contacting the driver, Officer Weinoldt noted she was disoriented and exhibited drunk-like behavior. However, he did not detect an odor of an alcoholic beverage on her breath. He determined the suspect did not have any injuries or physical problems and administered SFSTs. He observed six clues on the Horizontal Gaze Nystagmus (HGN) test, four clues on the Walk and Turn (W&T) test, and three clues on the One Leg Stand (OLS) test. According to Officer Weinoldt, the suspect appeared intoxicated, displayed poor balance and coordination throughout the contact, and several times used the side of her vehicle to steady herself. The suspect told Officer Weinoldt she was not drunk, just tired. Officer Weinoldt arrested the suspect for DWI and transported her to the Lititz PD for breath testing. After obtaining a .00 BAC result, Officer Weinoldt requested a DRE to assist with the investigation.
- Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the Lititz PD. She seemed cooperative but was non-responsive at times. Her speech was slurred, her face appeared normal, and there was no odor of an alcoholic beverage on her breath. Her eyes were watery, and her eyelids appeared to be droopy. When she walked, she at times staggered, and several times used the wall to steady herself. I introduced myself and advised her I had been requested to conduct a drug evaluation. I asked if she would consent to the evaluation and she responded, "Okay, but I'm not drunk. I'm just really tired." I confirmed that she had been advised of her Miranda Rights, and she stated, "Yes. When I got arrested. But I don't know why." I noted the suspect was wearing blue jeans, a Steelers tee-shirt, and white lace-up athletic shoes without socks.
- Medical Problems and Treatment:** The suspect stated she had no injuries or physical problems, and none were mentioned or observed during the evaluation. She stated she was not under the care of a physician or dentist, was not diabetic or epileptic, and did not take insulin. She stated she had been having "some anxiety issues" due to a break-up with her boyfriend and had taken some pills she got from her brother. When asked what kind of pills they were, she did not know, but said they made her "a little sleepy."
- Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, each one was explained and demonstrated to the suspect. She indicated she understood the instructions and agreed to do the tests. The following psychophysical tests were administered to the suspect:

**Modified Romberg Balance:** During this test, the suspect's time estimation was slow, estimating 30 seconds in 46 seconds. She had a front to back sway of approximately two inches in each direction and a side-to-side sway of approximately two inches in each direction.

**Walk and Turn:** For this test, a line in the tile floor was used. The suspect lost her balance one time to the right during the instructions stage. She also attempted to start the test too soon one time. During the walking stage, she missed stepping heel to toe two times on the first nine steps, and one time on the second nine steps. She stepped off the line once in each direction, used her arms for balance twice on the first nine steps and once on the second nine steps. On her ninth step, she stopped and asked for directions on how to complete the turn. Her movements were slow, and her counting was at times difficult to hear.

**One Leg Stand:** Per DRE protocol, this test was conducted twice, once standing on the left foot and once standing on the right foot. When attempting to stand on her left foot, she swayed while balancing throughout the test, used her arms to balance once, and put her foot down at count 1,020. She counted slowly reaching 1,022 in 30 seconds. While attempting to stand on her right foot, she swayed while balancing throughout the test, used her arms to balance once, and put her foot down at 1,007 and 1,015. She again counted slowly reaching 1,025 at the conclusion of the 30 seconds. She also had to be reminded numerous times to look at her extended foot.

**Finger to Nose:** During this test, the suspect displayed slow hand and arm movements. She did not touch the tip of her nose with the tip of her index finger as directed on any of the six attempts.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited all six clues of HGN, with an angle of onset of approximately 35 degrees. Vertical Gaze Nystagmus was not detected. She was not able to converge her eyes as instructed. This test was conducted twice and on both attempts her eyes moved inward and then downward and back out. During the pupil size examinations, her pupils were estimated at 4.0 mm in both eyes in Room Light, 6.0 mm in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. All three estimates were within the DRE average range. Rebound dilation was not present. She had a slow pupillary reaction to light.

**Vital Signs:** The suspect's pulse rates were checked three times during the evaluation: 1) 0202 hours - 56 beats per minute (bpm); 2) 0218 hours - 58 bpm; and 3) 0240 hours - 58 bpm. All three were below the DRE average range of 60 - 90 bpm. Her blood pressure was measured at 110/66. Both the systolic and diastolic measurements were below the DRE average ranges. Her body temperature was measured at 98.2°, which was within the DRE average range. Her muscle tone was flaccid.

**9. Signs of Ingestion:** The suspect's nasal area and oral cavity were clear. No indicators of injection sites were observed.

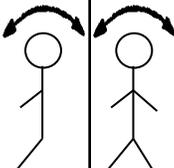
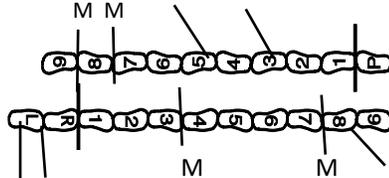
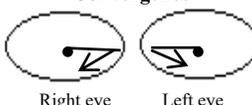
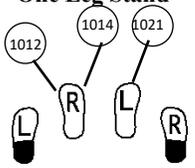
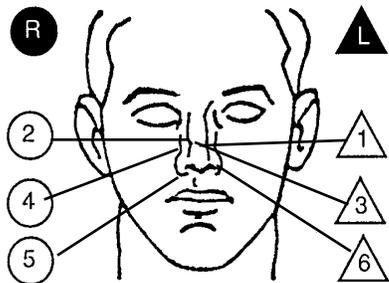
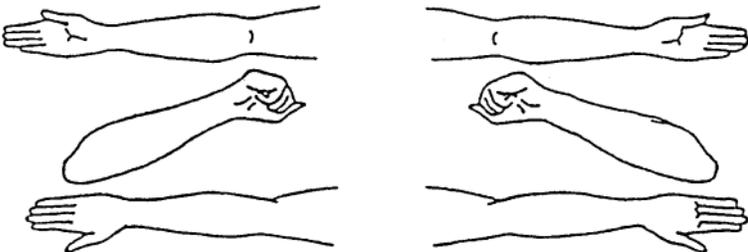
**10. Suspect's Statements:** Officer Weinoldt had advised the suspect of her Miranda Rights and she agreed to waive her rights and answer questions. She stated she had received "some pills" from her brother to help her with anxiety issues she was having. She stated she had taken a "couple of pills" at about 10 pm. She stated she took the pills at her brother's house and that they made her tired. She was unable to provide the name of the pills she used and only described them as a small oval white tablet.

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a CNS Depressant and unable to operate a vehicle safely.

**12. Toxicological Sample:** After the evaluation, Officer Weinoldt transported the suspect to Penn Medicine Hospital where a blood sample was collected at 0355 hours. Officer Weinoldt submitted the blood sample as evidence pending analysis by the PA Crime Laboratory.

**13. Miscellaneous:** Refer to Officer Weinoldt's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Russ Kenney</b>		DRE # 9296	Rolling Log # 22-008-0075	Evaluator's Agency Milford PD	Case# (Session IX - #2)
Recorder/Witness <b>Sgt. Sam Criswell, Ohio State HP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Ohio State Highway Patrol</b>	
Arrestee's Name (Last, First, Middle) <b>Downers, Dudley Duwin</b>		Date of Birth 04/02/1986	Sex M	Race W	Arresting Officer (Name, ID#) <b>Trooper Christopher Ellison #22367</b>
Date Examined / Time / Location 03/16/22 / 2130 / Clermont SHP Office		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #: 87264	
Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>		Miranda Warning Given Given by: Tpr. Ellison		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No What have you eaten today? <b>Ham sandwich &amp; chips</b> When? <b>6 pm</b> What have you been drinking? How much? <b>Water</b> N/A Time of last drink? <b>N/A</b>	
Time now/ Actual <b>11 pm / 2135</b>		When did you last sleep? <b>Last night</b> How long? <b>About 7 hours</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>sleeping pills</i>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Unsteady</b>	
Speech: <b>Slurred, Thick</b>		Breath odor: <b>Normal</b>		Face: <b>Normal</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>54</u> / <u>2145</u> 2. <u>52</u> / <u>2155</u> 3. <u>54</u> / <u>2218</u>		HGN Lack of Smooth Pursuit <b>Present</b> Maximum Deviation <b>Present</b> Angle of Onset <b>40</b>		Left Eye <b>Present</b> Right Eye <b>Present</b>	
Modified Romberg Balance Approx. 3" 3" 2" 2" 		Walk and Turn Test  Slow, deliberate steps		Convergence  Right eye Left eye Cannot keep balance <b>2</b> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken	
Time Estimation <u>38</u> estimated as 30 seconds		Describe turn <b>Lost balance</b>		25/30 <b>One Leg Stand</b> 24/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Counted slowly	
Finger to Nose (Draw lines to spots touched)  Slow hand & arm movements. Pads of fingers on #1, #4 & #6		PUPIL SIZE Left Eye Right Eye		Room light (2.5 - 5.0) Darkness (5.0 - 8.5) Direct (2.0 - 4.5)	
Blood Pressure <b>118 / 58</b>		Temperature <b>98.0 °F</b>		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Reaction to Light: <b>Slow</b>	
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Nothing observed		RIGHT ARM LEFT ARM 	
What drugs or medications have you been using? <b>"Some medicine to help me sleep"</b>		How much? <b>1 pill</b>		Time of use? <b>About 9 pm</b>	
Where were the drugs used? (Location) <b>At work</b>		Date / Time of arrest: 03/16/22 2020		Time DRE was notified: 2055	
Evaluation start time: 2130		Evaluation completion time: 2230		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <i>Russ Kenney</i>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

### Suspect: Downers, Dudley Duwin

1. **Location:** The drug evaluation was conducted in the Interview Room at the Clermont Ohio State Highway Patrol Office. The flooring in the Interview Room is a tile surface free of obstructions, and there is sufficient lighting for conducting an evaluation. The darkroom examinations were conducted inside the staff restroom.
2. **Witnesses:** Sgt. Sam Criswell of the Ohio State Highway Patrol witnessed and recorded the evaluation.
3. **Breath Alcohol Test:** A breath test was administered to the suspect with a 0.00% result.
4. **Notification and Interview of the Arresting Officer:** I was off duty and contacted by the State Highway Patrol Dispatch Center and requested to conduct a drug evaluation for Trooper Ellison. I responded to the Clermont Office and after contacting Trooper Ellison it was determined he had stopped the suspect for failure to maintain a single lane of travel on I-275. When Trooper Ellison contacted the suspect, he appeared to be impaired, but there was no detectable odor of an alcoholic beverage on his breath. The suspect had poor balance with slow, unsteady movements. Trooper Ellison administered SFSTs at roadside and observed six clues of Horizontal Gaze Nystagmus (HGN) along with severe divided attention impairment during the Walk and Turn (W&T) and One Leg Stand (OLS) tests. According to Trooper Ellison, the suspect had just left work and was on his way home. The suspect admitted taking some medication to help him sleep prior to leaving work. Trooper Ellison arrested the suspect for OVI and transported him to Clermont Office for processing. After obtaining a 0.00 breath test, he requested the assistance of a DRE.
5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the Clermont Office. He was cooperative, but at times was slow to respond to questions. His speech was slurred and thick. There was no detectable odor of an alcoholic beverage on his breath. His eyes appeared normal, and his pupils appeared to be equal in size. When standing, the suspect swayed noticeably, and when walking, he was unstable and at times used a nearby chair to steady himself. I introduced myself and requested that the suspect complete a drug influence evaluation, which he agreed to do. I asked if he recalled his Miranda rights being given to him by Trooper Ellison, which he indicated he did. He agreed to answer my questions. The suspect was wearing blue dress pants, a plaid gray long-sleeve shirt and black lace-up dress shoes.
6. **Medical Problems and Treatment:** The suspect indicated that he did not have any physical or medical problems. During the evaluation, none were mentioned or observed. Several times he indicated he was tired and yawned numerous times.
7. **Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, each test was explained and demonstrated to the suspect. After each demonstration, he indicated he understood the instructions and agreed to do the tests, which included the following:

**Modified Romberg Balance:** During this test, the suspect had a slow time estimation, estimating 30 seconds in 38 seconds. He had a front to back sway of approximately three inches in each direction, and a side-to-side sway of approximately two inches in each direction. When asked how he estimated the 30 seconds, he said he counted by one-thousands.

**Walk and Turn:** A line on the tile floor was used for this test. The suspect lost his balance two times to the right during the instructions stage. During the walking stage, he missed touching heel to toe two times on the first nine steps and two times on the second nine steps. He also stepped off the line once during the first nine steps and twice on the second nine steps. He also used his arms for balance twice during each of the nine steps. When attempting the turn, he lost his balance and had to regain his balance before starting the second nine steps. Throughout the test, he took slow, deliberate steps. He was wearing

lace-up dress shoes and was given the opportunity to remove them for the test. However, he requested to leave them on.

**One Leg Stand:** This test was conducted with the suspect standing on his left foot and then standing on his right foot. When standing on his left foot, the suspect swayed while balancing once, used his arms to balance once, and put his foot down at count 1,012 and 1,014. He counted slowly, making it to 1,025 at the conclusion of the 30 seconds. While standing on his right foot and extending his left foot, he swayed while balancing three times, used his arms to balance once, and put his foot down at 1,021. He again counted slowly, making it to 1,024 at the conclusion of the 30 seconds.

**Finger to Nose:** During this test, the suspect displayed slow hand and arm movements. He failed to touch the tip of his nose with the tip of his index finger as instructed on all six attempts. He used the pads of his index fingers on attempts #1, #4 and #6.

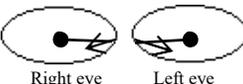
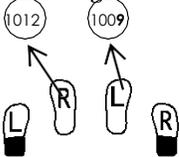
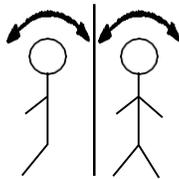
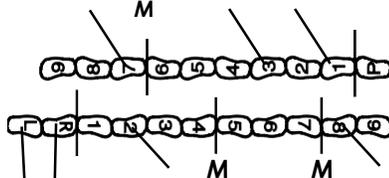
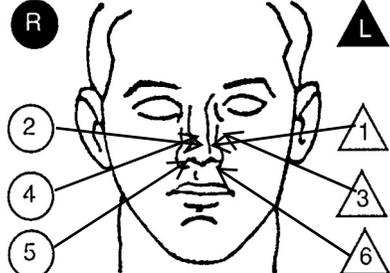
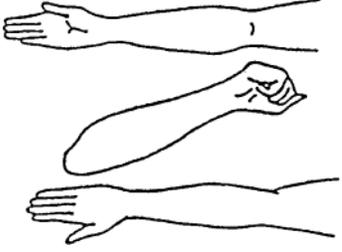
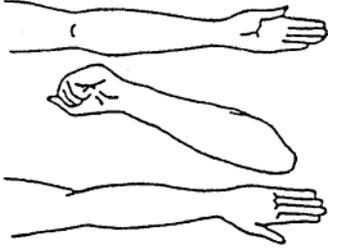
## **8. Clinical Indicators of Impairment:**

**Eyes Signs:** The suspect exhibited six clues of HGN with an angle of onset of approximately 40 degrees. Vertical Gaze Nystagmus was not present. The converge test was administered twice and both times his eyes did not converge bouncing back to center and downwards. During the pupil size examinations, his pupils were estimated at 4.5 mm in both eyes in Room Light, 6.5 mm in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. All were within the DRE average ranges for the lighting levels. Rebound dilation was not present and he had a slow pupillary reaction to light.

**Vital Signs:** The suspect's pulse rates were checked three times during the evaluation and were 54 beats per minute (bpm), 52 bpm, and 54 bpm. All three were below the DRE average range of 60-90 bpm. His blood pressure was measured at 118/58, which was also below the DRE average ranges. His body temperature was measured at 98.0°, which is within the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect's nasal area and oral cavity were clear. There were no indicators of injection sites observed.
10. **Suspect's Statements:** Trooper Ellison advised the suspect of his Miranda Rights and he agreed to answer questions. He stated he had taken something to help him sleep at "around 9 pm" when he left work. He mentioned numerous times how sleepy and tired he was. When asked about taking other drugs or medications, he indicated that he occasionally takes a sleeping pill and nothing else. He was asked if he had a prescription for the medication and if he remembered the name of it. He indicated it was his wife's medication and the name started with a "Z" but he could not remember the name of it.
11. **DRE's Opinion:** It is my opinion as certified Drug Recognition Expert that the suspect is under the influence of a CNS Depressant and is unable to operate a vehicle safely.
12. **Toxicological Sample:** A blood sample was collected from the suspect and was witnessed by Trooper Ellison, who submitted it into evidence pending delivery to the state crime laboratory for analysis.
13. **Miscellaneous:** The suspect was disoriented regarding the time throughout the evaluation. At the beginning of the evaluation, he believed it was 11 pm (actual time was 2135), and he thought he had taken his sleeping pill at 9 pm. He was arrested at 2020 hours. Refer to Trooper Ellison's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sergeant Elicer Ayala</b>		DRE # <b>11472</b>	Rolling Log# <b>22-007-0062</b>	Evaluator's Agency <b>New Jersey State Police</b>	Case # <b>(Session IX - #3)</b>
Recorder/Witness <b>Sgt. Michael Gibson NJSP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>West Long Branch PD</b>	
Arrestee's Name (Last, First, Middle) <b>Flynn, Mickey</b>		Date of Birth <b>03/11/80</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Jeffrey Hanlon #14172</b>
Date Examined / Time / Location <b>09/06/22 WLB PD</b>		Breath Test: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>12010</b>	
Chemical Test: Oral Fluid <input type="checkbox"/>		Urine <input checked="" type="checkbox"/>		Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Ofc Hanlon</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Cheeseburger &amp; fries</b>		When? <b>6</b>	What have you been drinking? How much? <b>Diet Coke N/A</b>
Time of last drink? <b>N/A</b>		Time now/ Actual <b>7 PM / 1915</b>		When did you last sleep? <b>Last night</b>	
How long? <b>4-5 hours</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Dr. Smith (for stress)</b>	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Xanax</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Slow</b>	
Speech: <b>Slurred, Thick at times</b>		Breath odor: <b>Normal</b>		Face: <b>Normal</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal		Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy	
Pulse/Time <b>1. 58 / 1930</b> <b>2. 58 / 1942</b> <b>3. 56 / 2000</b>		HGNC Lack of Smooth Pursuit <b>Present</b>		Left Eye <b>Present</b>	
Maximum Deviation <b>Present</b>		Right Eye <b>Present</b>		Convergence 	
Angle of Onset <b>NP</b>		<b>NP</b>		28/30 <b>One Leg Stand</b> 28/30 	
<b>Modified Romberg Balance</b> Approx. 3" 3"    Approx. 3" 3" 		<b>Walk and Turn Test</b> 		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Steps off line <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Uses arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Actual steps taken 1st Nine: <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 2nd Nine: <input checked="" type="checkbox"/>	
Type of footwear: <b>Slip-on shoes</b>		Type of footwear: <b>Slip-on shoes</b>		L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms to balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down	
<b>Time Estimation</b> <u>50</u> estimated as 30 seconds		Describe turn: Lost balance		Cannot do test (explain) N/A	
<b>Finger to Nose</b> (Draw lines to spots touched) 		PUPIL SIZE		Room light (2.5 - 5.0)	
Swayed forward. Slow movements.		Left Eye		4.0	
		Right Eye		4.0	
		Darkness (5.0 - 8.5)		6.5	
		Direct (2.0 - 4.5)		2.5	
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Slow</b>	
Blood Pressure <b>106/68</b>		Temperature <b>98.0 °F</b>		<b>RIGHT ARM</b> 	
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments: <b>Nothing observed</b>		<b>LEFT ARM</b> 	
What drugs or medications have you been using? <b>"Just some Xanax"</b>		How much? <b>"A couple today"</b>		Time of use? <b>12 &amp; 6 pm</b>	
Where were the drugs used? (Location) <b>McDonald's</b>		Date / Time of arrest: <b>09/06/22 / 1820</b>		Time DRE was notified: <b>1845</b>	
Evaluation start time: <b>1910</b>		Evaluation completion time: <b>2020</b>		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>Elicer Ayala</b>		Reviewed/approved by / date:			DRE# <b>11472</b>
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Flynn, Mickey**

1. **Location:** The drug evaluation was conducted in an interview room at West Long Branch Police Department. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting for conducting a drug evaluation and have a smooth tile floor.
2. **Witnesses:** The evaluation was witnessed and recorded by Sergeant Michael Gibson with the New Jersey State Police. Officer Jeffrey Hanlon witnessed the psychophysical test portion of the evaluation.
3. **Breath Alcohol Test:** A breath test was administered to the suspect by Officer Hanlon. The result of the breath test was a 0.00.
4. **Notification and Interview of the Arresting Officer:** I was contacted by the NJSP dispatch and notified that the West Long Branch Police Department was requesting a DRE at their office. I arrived and spoke with Officer Hanlon. Hanlon stated that the suspect's vehicle was found stopped partially blocking the southbound lane of Cedar Ave. Hanlon found the suspect slumped over the steering wheel and he appeared to be sleeping. After waking the suspect, it was determined he was the driver of the vehicle and was not injured or experiencing a medical emergency. When questioned about being stopped partially in the travel lane, the suspect told Officer Hanlon that he was tired and thought he had pulled off the roadway. Officer Hanlon had the suspect exit the vehicle and asked him to do SFSTs. According to Officer Hanlon, he observed four clues of HGN, three clues during the WAT, and three clues during the OLS. Officer Hanlon did not smell an odor of alcoholic beverage on the suspect's breath. He was asked about using drugs or medication and the suspect told Officer Hanlon that he was taking Xanax for stress because of the closure of his business. The suspect was arrested and transported to West Long Branch PD and after obtaining a .00 BAC result, Officer Hanlon requested assistance of a DRE.
5. **Initial Observation of the Suspect:** I first observed the suspect in the interview room at West Long Branch PD. He was partially slumped over in a chair and had a "drunk-like" appearance. He appeared cooperative. His speech was slurred and thick tongued at times. When he stood, his coordination was poor, and his movements were slow. His pupils appeared to be average in size and his eyelids were droopy. I explained why I had been called and asked him to submit to a drug evaluation. He agreed and stated, "Well, okay. I'm not drunk. You know that don't you?" I confirmed that he had been read his Miranda warnings and was willing to answer my questions. He agreed but was slow to respond to my questions. He stated that he had just gotten off work and was on his way home. He stated he had a very stressful day due to having to close his deli business. He was wearing tan khaki pants, an open collared blue shirt, and brown, slip-on shoes.
6. **Medical Problems and Treatment:** The suspect stated that he had no physical or medical problems. He stated that he sees a doctor for treatment of stress and his doctor had prescribed some medication that sometimes makes him tired and feeling a little groggy.
7. **Psychophysical Indicator of Impairment:** Each of the psychophysical tests were explained and demonstrated. The suspect stated that he understood each test prior to attempting it.

**Modified Romberg Balance:** The suspect's time estimation was slow at 50 seconds. He stated, "I just tried to count in my head" when asked how he estimated the 30 seconds. He had an approximate three-inch side-to-side and front-to-back sway.

**Walk and Turn:** On this test the suspect lost his balance to the right two times during instructions stage. During the first nine steps, he missed touching heel-to-toe twice, stepped off the line twice, and used his arms to balance three times. When he attempted the turn, he lost his balance and had to regain his feet positioning. During the return nine steps, he missed heel-to-toe once, stepped off the line three times, and used his arms to balance three times. Each of his steps were slow and wobbly. He was given an opportunity to remove his shoes for the test, but he declined.

**One Leg Stand:** While standing on his left foot and extending his right foot off the floor, the suspect swayed once, used his arms for balance once, and put his foot down at his count of 1,012. He counted to 1,028 in the 30 second timed period. While standing on his right foot and extending his left foot, the suspect swayed while balancing throughout the test, used his arms for balance once, and put his foot down at his count of 1,009. The suspect again counted to 1,028 in the 30 second timed period. After the test was completed, he staggered to the right and used the wall to steady himself.

**Finger to Nose:** The suspect swayed forward on each of the six attempts to touch his nose. He missed the tip of his nose on all six attempts (see diagram). His movements were slow and deliberate. He appeared to be searching for the tip of his nose on each attempt.

## **8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect showed four clues of HGN. An estimated angle of onset was not detected. VGN was not observed. The suspect had lack of convergence with both pupils moving away from his nose then back to center. This test was conducted twice with the same results. His pupils were estimated at 4.0 mm in Room Light, 6.5 mm in Near Total Darkness, and 2.5 mm in Direct Light. His pupils had a slow reaction to light.

**Vital Signs:** The suspect's pulse was below the DRE average range during all three checks (58, 58, and 56 bpm). His blood pressure was 106/68 mm Hg, which is below the DRE average range. His body temperature was measured at 98.0 degrees, which is within the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect's nasal area and oral cavity were clear and there were no indicators of injection sites.
10. **Suspect's Statements:** Officer Hanlon advised the suspect of his Miranda warnings when arrested and he agreed to waive his rights and answer questions. When asked how much Xanax he had used, he stated, "a couple today" and thought he had last taken it around 12 noon and 6 pm. He indicated he had taken the last one when he stopped for a meal at McDonald's while on his way home. When asked about the milligram dosage he was using, he thought it was 1 milligram tablets. When asked about how long he had been taking Xanax, his reply was, "Probably too damn long."
11. **DREs Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a CNS Depressant and is unable operate a vehicle safely.
12. **Toxicological Sample:** A urine sample was collected from the suspect by Officer Hanlon and was submitted into evidence for laboratory testing.
13. **Miscellaneous:** According to drugs.com, Xanax (Alprazolam) is a benzodiazepine used to treat anxiety and panic disorders, and anxiety caused by depression. Warnings concerning this drug include "Because of its CNS depressant effects, patients receiving Xanax should be cautioned against engaging in hazardous occupations or activities requiring complete mental alertness such as operating machinery or driving a motor vehicle."

# 10 DRE

## CENTRAL NERVOUS SYSTEM STIMULANTS

### LEARNING OBJECTIVES

- Describe a brief overview of the Central Nervous System (CNS) Stimulant category of drugs
- Identify common drug names and terms associated with this category
- Identify methods of administration for this category
- Describe the symptoms, observable signs, and other effects associated with this category
- Describe typical time parameters, i.e., onset and duration of effects, associated with this category
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs

### CONTENTS

A. Overview of the Category.....	3
B. Possible Effects .....	10
C. Onset and Duration of Effects .....	11
D. Overdose Signs and Symptoms .....	13
E. Expected Results of the Evaluation.....	14
F. Review of the DEC Program Exemplars .....	16

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Review of the DEC Program Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations



## Learning Objectives

- Describe a brief overview of the CNS Stimulant category of drugs
- Identify common drug names/terms
- Identify methods of administration
- Describe signs, symptoms, and other effects
- Explain typical time parameters
- Describe indicators likely to emerge

DRE

10-2

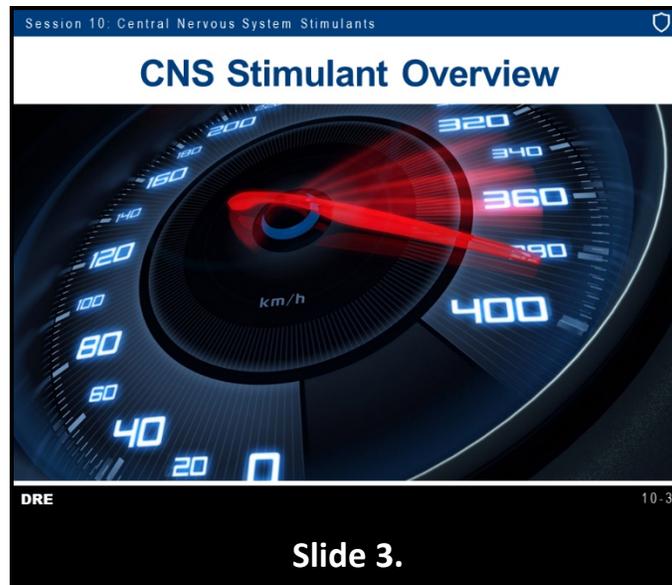
**Slide 2.**



**Instructor  
Note**

***Briefly review the objectives, content, and activities of this session.***

## A. Overview of the Category



CNS Stimulants speed up the operation of the Central Nervous System. “Speed Up” does not mean “improve”. They accelerate the heart rate and many other processes of the body. For that reason, they have also been referred to as “Uppers.” Although there is a great difference in strength, all stimulants increase the chemical and electrical activity in the central nervous system. Stimulants boost energy, raise the heart rate and blood pressure, increase respiration, and reduce appetite.

Legal stimulants can be prescribed for Attention Deficit Hyperactivity Disorder (ADHD), weight loss, and narcolepsy.

Some commonly-abused CNS Stimulants include Cocaine (Crack) which is naturally derived from the leaves of the coca plant. “Crack” is the street name given to Cocaine that has been processed from Cocaine Hydrochloride. Amphetamines includes many prescription drugs such as Adderall and Dexedrine. Methamphetamine is an illegally-produced drug. The only exception is Desoxyn, which is a prescription methamphetamine used to treat narcolepsy and ADHD. Caffeine, Herbal Ecstasy, Ephedrine, Pseudoephedrine, and various energy drinks are other examples.

The abuse of CNS Stimulants does not make the brain work “better” or “smarter.” Rather, they induce the brain to cause many of the body’s organs to work harder, but not better. The “speeding up” results in increased heartbeat, pulse, respiration, blood pressure, and temperature. All of these effects can lead to physical harm to the stimulant user.

The “speeding up” also produces nervousness, irritability, and an inability to concentrate or think clearly. These psychological effects can lead to unpredictable and bizarre behavior by the stimulant user.

Session 10: Central Nervous System Stimulants

## Subcategories of CNS Stimulants

- Cocaine
- Amphetamines
- Others

DRE 10-4

**Slide 4.**

There are three major subcategories of CNS Stimulants.



***Refer participants to***

DEA Intelligence Report. (2018). *Slang Terms and Code Words: A Reference for Law Enforcement Personnel*. doi:DEA-HOU-DIR-022-18

*Cocaine:* Cocaine is made from the leaves of the coca plant and is generally found as a white or off-white powder.

*Amphetamines:* Amphetamines include a large number of pharmaceutical and illegal drugs.

*Others:* There are many “other” CNS Stimulants including Ritalin and caffeine.

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Session 10: Central Nervous System Stimulants

## Coca Plant



DRE 10-5

**Slide 5.**

The scientific name for the Coca plant is *Erythroxylon Coca*. It is a naturally derived CNS stimulant extracted and refined from the leaves of the coca plant (*Erythroxylon coca*), grown primarily in the Andean region of South America and to a lesser extent in India, Africa and Indonesia. The picked coca leaves are dried in the open air and then “stomped” as part of the process to extract the alkaloid, resulting in coca paste and eventually cocaine hydrochloride. “Crack” is the street name given to cocaine that has been processed from cocaine hydrochloride. It is prepared by adding baking soda to aqueous cocaine hydrochloride and heating it until the free-base cocaine precipitates into small pellets. The mixture is cooled and filtered, and then the “rocks” are smoked in a crack pipe.



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

***Emphasize the Coca plant should not be confused with the Cocoa plant from which chocolate is made.***

Archaeological evidence indicates natives of Peru chewed coca leaves 5,000 years ago. Sigmund Freud personally experimented with Cocaine for approximately 3 years. Small quantities of Cocaine originally were included in the formula of Coca Cola. Use of Cocaine in products such as Coca Cola was outlawed by the Pure Food and Drug Law of 1906.

Session 10: Central Nervous System Stimulants

## Amphetamines



DRE 10-6

**Slide 6.**

Amphetamines were first synthesized near the end of the 19th Century. The first use of Amphetamines for medical purposes began in the 1920's. Initial medical application was to treat colds. Amphetamines cause the nasal membranes to shrink. This gives temporary relief from stuffy nasal passages.



***More effective drugs have been developed to treat cold symptoms.***

Amphetamines were prescribed for the treatment of narcolepsy and Attention Deficit Hyperactivity Disorder (ADHD).

Amphetamine use grew rapidly when Amphetamines were distributed to soldiers during World War II.



***Amphetamines are no longer prescribed as cold remedies. In 1971, Amphetamines were scheduled in the United States and prescriptions became required for possession.***

Present-day medical purposes for Amphetamines include:

Control Appetite: Phentermine (Adipex-P, Lomaira, Modaimia) and Methamphetamine HCl (Desoxyn). In addition, many over-the-counter (OTC) appetite control products contain CNS Stimulants as their active ingredient.

Control symptoms of narcolepsy and symptoms of attention deficit hyperactive disorder (ADHD): Amphetamines (Adderall), Dextroamphetamine (Dexedrine), or Methylphenidate HCl (Ritalin).



***Narcolepsy is a disorder that causes the individual to fall asleep compulsively, often several hundred times per day.***

Relieve or prevent fatigue to allow persons to perform essential tasks of long duration: Dexedrine. The U.S. Air Force previously gave pilots Amphetamines to keep them alert on long flights. Amphetamines have also had other short-term military applications. They are also used to treat mild depression.

Antagonize the effects of depressant drugs. Two drugs are antagonistic when the signs and symptoms of one are opposite to the signs and symptoms of the other.

Prevent and treat surgical shock.

Maintain blood pressure during surgery.

Enhance the action of certain analgesic (pain killer) drugs.

D-amphetamine and methylphenidate have enhanced the analgesic effects of opioids along with countering some of the drowsiness associated with opioid medications.



**Source:**

Dalal, S., & Melzack, R. (1998). *Potential of opioid analgesia by psychostimulant drugs: a review. Journal of Pain and Symptom Management* 16(4), 245-253 [https://doi.org/10.1016/S0885-3924\(98\)00084-0](https://doi.org/10.1016/S0885-3924(98)00084-0)

Numerous pharmaceutical companies manufacture Amphetamines for these purposes.

Large quantities of Amphetamines are also illegally manufactured in this country.



***If available, display slides of illicitly-manufactured methamphetamine.***

The most commonly abused illicit Amphetamine is Methamphetamine. Methamphetamine Hydrochloride is a white to light brown crystalline powder or clear chunky crystals resembling ice. Methamphetamine base is a liquid.

The majority of street methamphetamine is produced in clandestine laboratories. Note: Clandestine production normally involves the reaction of l-Ephedrine or d-Pseudoephedrine over red phosphorus and iodine and is condensed with Hydrochloric Acid or involves the reaction of Sodium or Lithium and is condensed with liquid ammonia.

Illicit Methamphetamine is also known as Methedrine or Methamphetamine Hydrochloride. Its more common street names are "Speed," "Crank," "Ice," "Crystal," "Meth," and "Water."

Session 10: Central Nervous System Stimulants

## Other CNS Stimulants

- Ritalin
  - Methylphenidate Hydrochloride
- Ephedrine
- Cathine and Cathinone
- Methcathinone
- Energy Drinks
- OTC



DRE 10-7

**Slide 7.**

There are some other CNS Stimulants, apart from Cocaine or Amphetamines.



***If available, display slides of Ritalin.***

*Ritalin* is a manufactured, non-Amphetamine CNS Stimulant. The generic name Methylphenidate Hydrochloride. Used to treat mild depression, attention deficit disorders, narcolepsy, and drug-induced lethargy produced by CNS Depressants. Example: Ritalin is commonly prescribed for children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) or similar disorders. Has many of the basic clinical effects of Amphetamine.

*Ephedrine* is a licitly-manufactured stimulant primarily used as a nasal decongestant and bronchodilator. It can also be found in herbal preparations and numerous OTC substances.

*Cathine and Cathinone* are the two psychoactive chemicals derived from the Khat plant. It originates from the sub-Saharan regions of Africa. Also known as “Cat.”

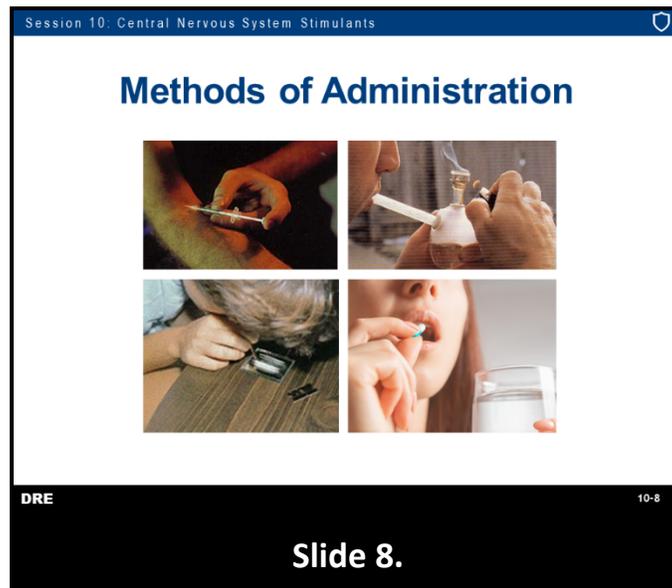
*Methcathinone* is illicitly manufactured from common household chemicals. Effects are very similar to Methamphetamine.

*Energy Drink Phenomenon:* In the 1980's, the marketing and use of energy drinks changed dramatically. With 80 mg or more of Caffeine, an energy drink contains more than twice the amount of Caffeine found in a 12-ounce can of cola (35 mg), but less than 8 ounces of brewed coffee. In addition to high levels of Caffeine, many energy drinks contain Taurine, Ginseng, Guarana, Glucose, and other Caffeine-like chemicals.

The abuse of energy drinks has been implicated in numerous hospital admissions and impaired-driving cases. In large quantities, the effects can mirror the effects of other CNS Stimulants.

There are many types and brands of energy drinks. Some popular brands contain between 120-180 mg of caffeine.

*OTC Stimulants:* Legal CNS Stimulants are often used to boost performance, especially among athletes and students and are available OTC. Besides high-Caffeine energy drinks, there are many abused OTC stimulants which include Ephedra (Ma Huang) and Ephedrine. Ma Huang is a Chinese herb that comes from the Ephedra bush. The active ingredients are Ephedrine (a bronchodilator) and Pseudoephedrine (a nasal decongestant). Ephedra and Ephedrine are commonly used in many legal OTC medications and diet medications.



There are a variety of ways in which the different CNS Stimulants may be administered.

Cocaine is commonly insufflated (snorted), smoked, injected, and taken orally.

In order to be smoked, a pure form of Cocaine is required.

Much of the Cocaine sold in this country is mixed with other materials or chemically bonded to other elements. Various chemical processes can be used to “free” the Cocaine from other elements and impurities. One such process produces pure Cocaine in the form of small chunks. These chunks are known as “Crack” or “Rock Cocaine”. The term “Crack” derives from the cracking sound produced when the chunks are burned for smoking.

Legally-manufactured Amphetamines are taken orally, in the form of tablets, capsules, and liquid elixirs.

Illicitly-manufactured Methamphetamine most commonly is injected or smoked but sometimes may be snorted or taken orally. Bruising is often seen around a Methamphetamine injection site.

The smokable forms of Methamphetamine are known as “Crystal Meth” or “Ice”. They contain the same active chemical compound as powdered Methamphetamine but undergo a re-crystallization process in which some impurities are removed. “Ice” is a clear crystal similar in appearance to rock candy, crushed ice, or broken glass. “Crystal Meth” is generally a colorless form of D-Methamphetamine resembling shiny blue-white rocks or fragments of glass.



**Source:**

Marnell, T. (2021). *Drug Identification Bible* (2022/2023 ed.).

Amphetamine Sulfate usually is produced in tablet form (called “Mini Bennies”) and is taken orally.



***Stress that participants should be familiar with all of the drug names in this category.***

***Solicit participant questions and comments about the overview of CNS Stimulants.***

## B. Possible Effects

Session 10: Central Nervous System Stimulants

### Possible Effects of CNS Stimulants

- Euphoria
- Hyperactivity
- Relaxed inhibitions
- Impaired perception of time and distance
- Grinding of the teeth (Bruxism)



DRE 10-9

**Slide 9.**

Cocaine, Amphetamines, and most stimulants produce euphoria, a feeling or state of intense excitement and happiness. A feeling of super strength and absolute self-confidence may also be present. With Cocaine, but not with Amphetamines, there is an anesthetic effect.



***Emphasize that Cocaine is a CNS Stimulant that has anesthetic properties.***

CNS Stimulant users tend to become hyperactive, indicated by nervousness, extreme talkativeness, an inability to sit still, and users may grind their teeth (which is called Bruxism).

CNS Stimulants tend to relax inhibitions allowing users to commit acts they normally would avoid.

CNS Stimulant users misperceive time and distance. Example: to the subject, time seems to be speeded up so two hours may seem like two minutes.

Persons under the influence of CNS Stimulants become easily confused and may have difficulty concentrating. This lack of concentration makes it very difficult for the user to perform divided attention tests successfully.



***Solicit participants' questions and comments concerning possible effects of CNS Stimulants.***

### C. Onset and Duration of Effects



The faster the absorption the more intense and rapid the high, but the shorter the duration of action. Injecting cocaine produces an effect within 15-30 seconds. A hit of smoked crack produces an almost immediate intense experience and will typically produce effects lasting 5-15 minutes. Similarly, snorting cocaine produces effects almost immediately and the resulting high may last 15-30 minutes. The effects onset more slowly after oral ingestion (approximately one hour). General effects will persist for 1-2 hours depending on the dose and late phase effects following binge use may last several days.

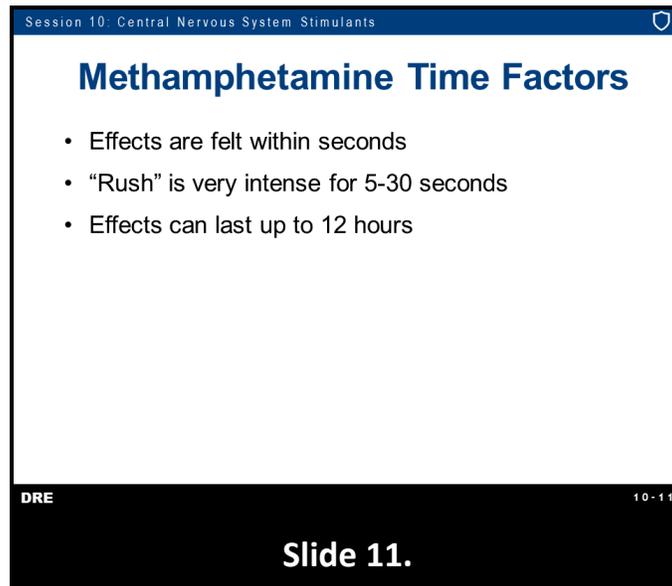


***Source:***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

It is very possible a Cocaine user may not be examined by a DRE until at least 30 minutes following the use of the drug. Often, much more time will have elapsed. For this reason, Cocaine use may be difficult to ascertain from the drug evaluation. As the effects wear off, it becomes very difficult to observe evidence of impairment. If the subject is not evaluated by a DRE fairly soon after the subject has been apprehended, the DRE may not uncover evidence of the CNS Stimulant

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Session 10: Central Nervous System Stimulants

### Methamphetamine Time Factors

- Effects are felt within seconds
- “Rush” is very intense for 5-30 seconds
- Effects can last up to 12 hours

DRE 10-11

**Slide 11.**

### *Methamphetamine*

*Injected:* When Methamphetamine is injected, the initial effects are very similar to the injection of Cocaine. The user begins to feel a “rush” within seconds. Unlike Cocaine, Methamphetamine’s effects are longer and may last 4 – 8 hours with residual effects lasting up to 12 hours after injection.

*Smoked:* When Methamphetamine is smoked, the rush is also very intense. Like with injection, the effects typically last 4 – 8 hours with residual effects lasting up to 12 hours.



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

*Snorted and Orally:* When taken orally the onset of effects is delayed, the rush is much less intense, and the effects last longer.



Instructor  
Note



Website  
Resource

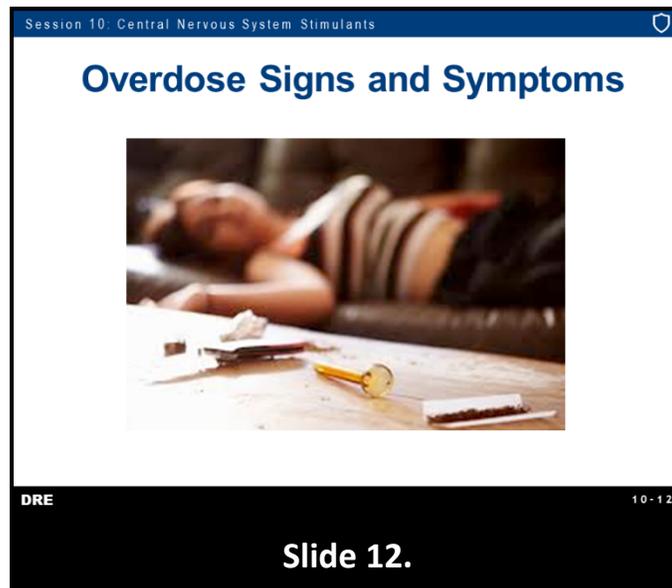
**Source:**

U.S. Drug Enforcement Administration

[http://www.justice.gov/dea/druginfo/drug\\_data\\_sheets/Methamphetamine.pdf](http://www.justice.gov/dea/druginfo/drug_data_sheets/Methamphetamine.pdf)

***Solicit participants' comments and questions concerning time parameters of Cocaine and Methamphetamine.***

## D. Overdose Signs and Symptoms



Instructor  
Note

***Write on dry erase board or easel/easel pad "Cocaine Psychosis or Methamphetamine Psychosis."***

The overdose of Cocaine, Amphetamines, and Methamphetamine can cause the pleasurable effects to turn into panic and often violent behavior resulting in psychosis. This is commonly referred to as Cocaine Psychosis or Methamphetamine Psychosis. Hallucinations may occur. For example, the feeling that bugs are crawling under the skin is also known as "Coke Bugs", "Crank Bugs", "Meth Mites." The medical term for this condition is formication. Subject may also suffer a stroke, heart attack, or organ damage.



Instructor  
Note

***Direct participants to the link below for more information.***



Website  
Resource

For more information regarding the term "formication": <https://www.merriam-webster.com/medical/formication>

Death can occur from sudden respiratory failure, or from heart arrhythmia, leading to cardiac arrest. Another danger is subjects may attempt to treat CNS Stimulant overdoses with Barbiturates, possibly leading to overdose of CNS Depressants.



***Emphasize it is important officers are aware of this to avoid custody deaths. Solicit participants' comments and questions concerning overdoses of CNS Stimulants.***

## E. Expected Results of the Evaluation

Session 10: Central Nervous System Stimulants

### Major Indicators

HGN	None
VGN	None
LOC	None
Pupil Size	Dilated
Reaction to Light	Slow
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid

DRE 10-13

**Slide 13.**

*Observable Evidence of Impairment:* Horizontal Gaze Nystagmus (HGN) will not be present with subjects under the influence of CNS Stimulants.

Vertical Gaze Nystagmus (VGN) will not be present.

Lack of Convergence (LOC) will not be evident.

Performance on Modified Romberg Balance (MRB) should be impaired.



***CNS Stimulants impair the user's perception of time, so the subject's estimate of 30 seconds on the Modified Romberg Balance test may be sped up.***

Performance on Walk and Turn (WAT) may be impaired due to the subject's hyperactivity and inability to concentrate. Example: subject may start too soon on the WAT and may tend to walk fast, thus losing balance or missing heel-to-toe.

Performance on the One Leg Stand (OLS) may be impaired due to the subject's hyperactivity. Example: subject may also count very rapidly on the OLS test

Performance on the Finger to Nose (FTN) test should be impaired. His or her finger movements may be abrupt, jerky, and inaccurate.

Vital Signs: Pulse generally will be increased. Blood pressure will generally be elevated. Body temperature generally will be elevated.

Dark Room Examinations: Pupils generally will be dilated. The technical term for "dilated pupils" is Mydriasis. Pupil reaction to light generally will be slow. Rebound Dilation may be observed.

Muscle Tone: Muscle tone will be Rigid.

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Session 10: Central Nervous System Stimulants

### Evaluation of Subjects Under the Influence of CNS Stimulants

- Anxiety
- Body tremors
- Dry mouth
- Euphoria
- Exaggerated reflexes
- Excited
- Eyelid tremors
- Grinding Teeth (Bruxism)
- Hyperactivity
- Increased alertness
- Insomnia
- Irritability
- Redness to nasal area
- Restlessness
- Runny nose
- Talkative

DRE 10-14

**Slide 14.**

- Anxiety
- Body tremors
- Dry mouth
- Euphoria
- Exaggerated reflexes
- Excited
- Eyelid tremors
- Grinding Teeth (Bruxism)
- Hyperactivity
- Increased alertness

- Insomnia
- Irritability
- Redness to nasal area
- Restlessness
- Runny nose
- Talkative

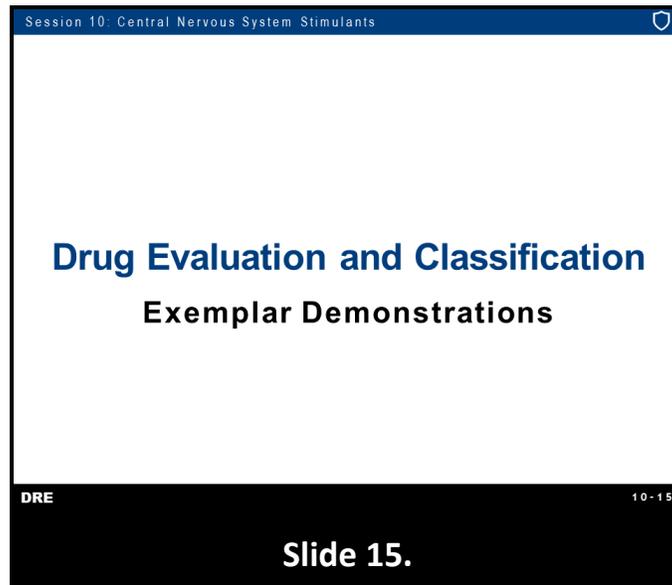


***Mention indicators associated with the nasal area may be evident if the subject is in the habit of snorting Cocaine, Methamphetamine, Heroin, other opioids, Benzos, and diet pills.***

***Source for more information and details regarding possible effects refer to:***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## F. Review of the DEC Program Exemplars



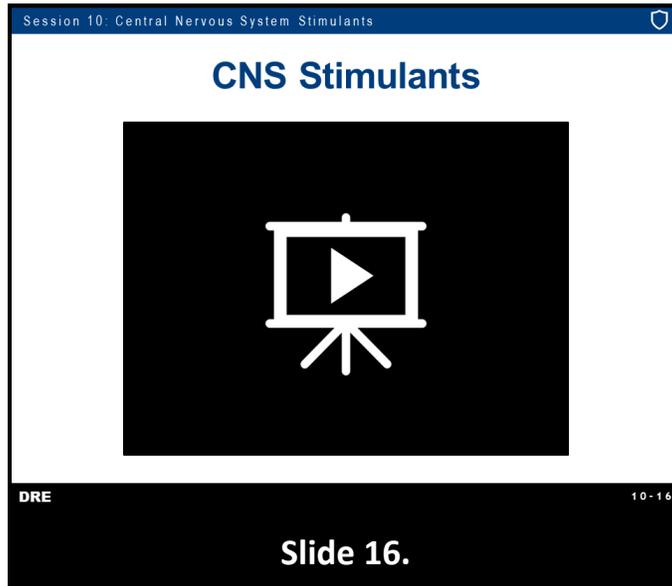
***Refer participants to the exemplars found at the end of Session 10 of their Participant Guides.***

***Point out the exemplars are examples and serve as a guide.***

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.



**Relate the items on the exemplars to the CNS Stimulant Symptomatology Chart.**

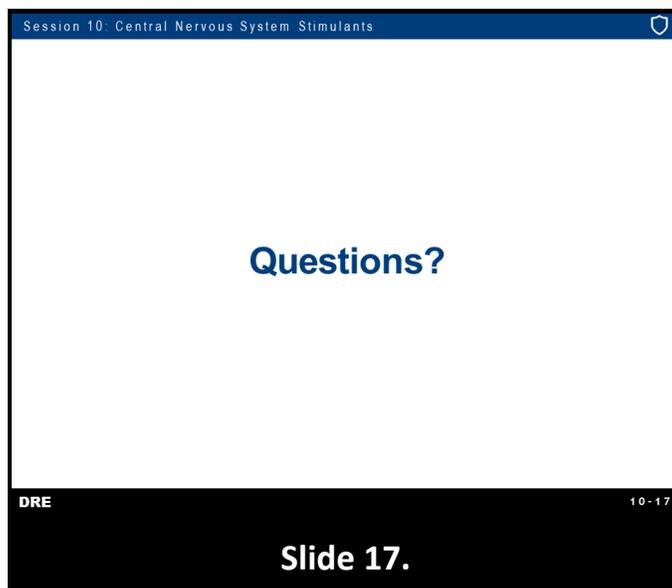


**VIDEO DEMONSTRATION:** *Click video to begin.*

*Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.*

*Show video example of subject under the influence of a CNS Stimulants.*

*(Approximately 24 minutes).*





***Solicit participants' questions or comments concerning expected results of the evaluation of subjects under the influence of CNS Stimulants.***

Session 10: Central Nervous System Stimulants

### Test Your Knowledge

1. Why is it sometimes difficult for a DRE to obtain evidence of CNS Stimulant influence when examining a Cocaine user?
2. Amphetamines produce the same effects as Cocaine with the exception of \_\_\_\_\_
3. Name two CNS Stimulants other than Cocaine or the Amphetamine compounds.

DRE 10-18

**Slide 18.**

#### Test Your Knowledge

1. Why is it sometimes difficult for a DRE to obtain evidence of CNS Stimulant influence when examining a Cocaine user?
2. Amphetamines produce the same effects as Cocaine with the exception of \_\_\_\_\_
3. Name two CNS Stimulants other than Cocaine or the Amphetamine compounds.



- 1. Cocaine, in general, is a fairly fast-acting, but short duration drug.***
- 2. Anesthesia***
- 3. Ritalin and Ephedrine, Methcathinone or Cathinone***



## Test Your Knowledge

4. How do CNS Stimulants usually affect the blood pressure and pulse rate?
5. True or False: A person under the influence of a CNS Stimulant alone usually will not exhibit HGN.
6. What is "bruxism"?

DRE

10-19

### Slide 19.

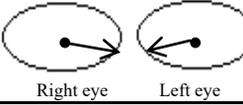
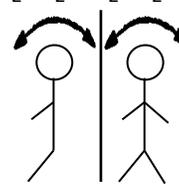
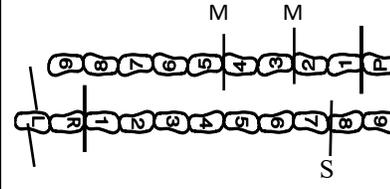
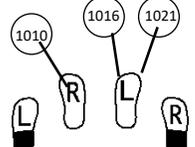
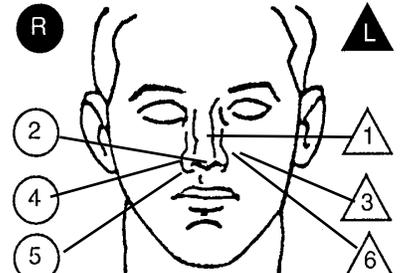
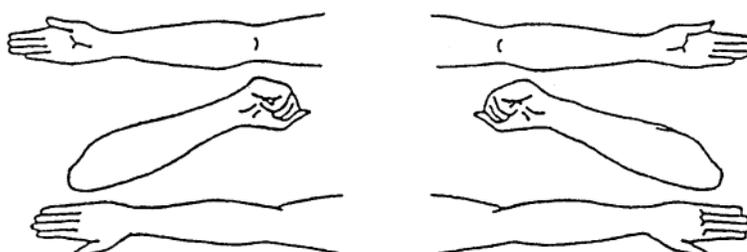
#### Test Your Knowledge

4. How do CNS Stimulants usually affect the blood pressure and pulse rate?
5. True or False: A person under the influence of a CNS Stimulant alone usually will not exhibit HGN?
6. What is "bruxism"?



4. ***CNS Stimulants usually elevate both blood pressure and pulse rate.***
5. ***True***
6. ***Grinding the teeth. This behavior is often seen in persons who are under the influence of Cocaine or other CNS Stimulants.***

# DRUG INFLUENCE EVALUATION

Evaluator <b>Trooper Scott Kedenburg</b>		DRE # <b>16507</b>	Rolling Log # <b>22-005-0039</b>	Evaluator's Agency <b>New York State Police</b>	Case# <b>(Session X - #1)</b>												
Recorder/Witness <b>Deputy Brandon Flicker, Livingston Co. S.O.</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Wyoming County S.O.</b>													
Arrestee's Name (Last, First, Middle) <b>Rocke, Crystal</b>		Date of Birth <b>07/10/1987</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sgt. Aaron Chase #25141</b>												
Date Examined / Time / Location <b>02/08/22 / 2215 / Wyoming Co. S.O.</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>													
Miranda Warning Given Given by: <b>Sgt. Chase</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>"Couple of candy bars"</b>	When? <b>About 8 pm</b>	What have you been drinking? How much? <b>Water N/A</b>	Time of last drink? <b>N/A</b>												
Time now/ Actual <b>11 pm? / 2218</b>	When did you last sleep? <b>Yesterday</b>	How long? <b>2 or 3 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Answered "Nothing" then laughed</b>			Attitude: <b>Cooperative, Animated</b>		Coordination: <b>Jerky movements, Exaggerated</b>												
Speech: <b>Talkative, Dry mouth</b>		Breath odor: <b>Rancid</b>		Face: <b>Acne, Open sores, Sweaty</b>													
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right													
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No													
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy															
Pulse/Time 1. <u>102</u> / <u>2220</u> 2. <u>106</u> / <u>2232</u> 3. <u>104</u> / <u>2252</u>		HGN Lack of Smooth Pursuit: <b>None</b> Maximum Deviation: <b>None</b> Angle of Onset: <b>None</b>		Convergence  Right eye      Left eye													
Modified Romberg Balance Approx. 2" 2"      Approx. 2" 2"  Rigid & Eyelid tremors		Walk and Turn Test  Quick steps. Rigid movements		40/30 <b>One Leg Stand</b> 42/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input checked="" type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down  Jerky movements. Counted quickly.													
Time Estimation <u>22</u> estimated as 30 seconds		Describe turn <b>Quick, spun around</b>		Cannot do test (explain) <b>N/A</b>													
<b>Finger to Nose</b> (Draw lines to spots touched)  Quick, jerky movements. Eyelid tremors.		<table border="1" style="width: 100%; text-align: center;"> <tr> <th>PUPIL SIZE</th> <th>Room light (2.5 - 5.0)</th> <th>Darkness (5.0 - 8.5)</th> <th>Direct (2.0 - 4.5)</th> </tr> <tr> <td>Left Eye</td> <td>7.5</td> <td>9.0</td> <td>6.0</td> </tr> <tr> <td>Right Eye</td> <td>7.5</td> <td>9.0</td> <td>6.0</td> </tr> </table>		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Left Eye	7.5	9.0	6.0	Right Eye	7.5	9.0	6.0	Nasal area: <b>Clear</b>  Oral cavity: <b>Red</b>	
		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)												
		Left Eye	7.5	9.0	6.0												
		Right Eye	7.5	9.0	6.0												
Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Slow</b>															
Blood Pressure <b>172 / 102</b>		Temperature <b>99.8 °F</b>		RIGHT ARM      LEFT ARM 													
Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Nothing observed															
What drugs or medications have you been using? <b>"Meth"</b>		How much? <b>"I smoked about a gram"</b>		Time of use? <b>"Around 7 PM"</b>													
Date / Time of arrest: <b>02/08/22 2100</b>		Time DRE was notified: <b>2140</b>		Where were the drugs used? (Location) <b>"Friend's house"</b>													
Evaluation start time: <b>2215</b>		Evaluation completion time: <b>2315</b>		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation													
DRE/Officer's Signature: <i>scott Kedenburg</i>		Reviewed/approved by / date:			DRE#												
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis																	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Subject: Roche, Crystal**

1. **Location:** The drug evaluation was conducted in the booking room at the Wyoming County Jail. The darkroom examinations were conducted in the staff restroom.
2. **Witnesses:** The evaluation was witnessed and recorded by Deputy Brandon Flickner from the Livingston CO. S.O.
3. **Breath Alcohol Test:** Roche provided a breath test to the arresting officer prior to my arrival. The result was 0.00%.
4. **Notification and Interview of the Arresting Officer:** On 2/8/22 at approximately 2140 hours, I was dispatched to conduct a drug evaluation at the Wyoming County Jail. Once there, I met with Sgt. Chase who advised me that he had stopped the suspect's vehicle for exceeding the speed limit on Hwy 19. He checked her vehicle on radar at 85 mph in a 55-mph zone. Sgt. Chase also reported that her vehicle was drifting in and out of the traffic lane. After signaling the vehicle to stop, it took approximately a mile before the vehicle stopped and when it did, it stopped at an angle to the roadway and almost into a ditch at roadside. During the personal contact, Sgt. Chase did not detect an odor of an alcoholic beverage on the suspect's breath. However, he did notice that she had quick and jerky movements, was very animated and restless. It took a couple of minutes to find her license and registration, first handing him a credit card and a store receipt. According to Sgt. Chase, her pupils were dilated, and she appeared to be sweating despite the cool weather. Sgt. Chase also noticed that her speech was repetitive and rapid. He stated when she exited her vehicle she walked quickly and used the side of her vehicle to steady herself. She consented to doing the SFSTs and Sgt. Chase administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing no clues of HGN, four clues on the W&T, and three clues on the OLS. He related she had difficulty standing still during the instruction phases of the SFSTs. After completing the SFSTs, Sgt. Chase placed her under arrest for DWI, and transported her to the county jail. After obtaining a .00 BAC, he requested the assistance of a DRE.
5. **Initial Observation of the Subject:** I first observed Roche in the booking room at the County Jail. She was seated and was rocking back and forth in her chair. She was tapping both of her feet on the floor and had sporadic head and body twitching. She was wearing jeans, a black sweatshirt, and black boots. Her clothing was soiled, and she appeared to have poor personal hygiene. I introduced myself and asked if she would agree to participate in a drug evaluation. She stated, "Sure, whatever. Am I going to jail?" I asked if the arresting officer had informed her of her Miranda rights and she confirmed that he had. She displayed moderate acne with open sores on her face. Her pupils appeared to be dilated. She told me she was not under the care of doctor or dentist and did not have any injuries. I noticed her breath was rancid and observed her grinding her teeth (Bruxism) at times. As we conversed, she at times displayed sporadic jerky movements with her head, arms, and legs.
6. **Medical Problems and Treatment:** Roche indicated she did not have any injuries or physical problems, nor did she have any physical defects. None were observed or reported during the evaluation. She stated she is not diabetic, does not take insulin, and is not epileptic.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to Roche prior to her attempting them. After each demonstration, she confirmed that she understood the instructions. The following psychophysical tests were administered to Roche:

**Modified Romberg Balance:** While performing this test, she had an approximate two-inch front to back and side to side sway. During the test, she separated her feet and tapped her right foot on the floor. Her time estimation was fast, estimating 30 seconds in 22 seconds. When asked how she estimated the 30 seconds, she laughed and said, "I just counted in my head."

**Walk & Turn:** During this test, a painted line of the floor was used. Rocke stepped out of the instruction stage position twice. Twice she started the test before instructed to do so. During the walking stage, she walked quickly in a straight legged, rigid manner. She stopped walking at step seven. Twice she raised both arms approximately a foot away from her sides. She made an improper turn by making a quick turn to the left by spinning around. On the second nine steps, she missed touching heel-to-toe between steps two and three and four and five. She also raised both arms near shoulder level between steps seven and nine during the return.

**One Leg Stand:** On this test, when she raised her right foot, she had a continuous side to side sway. She also raised both arms for balance throughout the test. She put her foot down on count 1,010. She had jerky movements and failed to look at her feet throughout most of the test. When she raised her left foot, she immediately started hopping from counts 1,001 to 1,005. She also raised both arms for balance throughout the test until it was stopped. She put her foot down on counts 1,016 and 1,021. Her count was quick, reaching 1,040 while raising her right foot and 1,042 when raising her left foot.

**Finger to Nose:** While attempting this test, Rocke missed the tip of her nose with the tip of her index finger as instructed on all attempts except for attempt #2. She completely missed her nose on attempts 3, 4, 5 and 6, touching her face near her nose. She also displayed an approximate 3-inch front to back sway and had quick and jerky movements.

8. **Clinical Indicators of Impairment:**

**Eyes Signs:** The eye exams were conducted in the staff restroom. Rocke exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. HGN and VGN were not present. Her eyes were able to converge as instructed. Her pupil sizes were estimated in three lighting levels: Room Light, Near Total Darkness, and in Direct Light. All three estimations, 7.5 mm in each eye in Room light, 9.0 mm in each eye in Near Total darkness, and 6.0 mm in each eye in Direct Light, were above the DRE average ranges for the lighting levels. Her pupillary reaction was slow, and she did not exhibit rebound dilation.

**Vital Signs:** Rocke's pulse rates were checked three times per DRE protocol and were elevated at 102, 106, and 104 beats per minute (BPM). All three were above the DRE average range. Her blood pressure of 172/102 millimeters of mercury (mmHg) and body temperature of 99.8 degrees were elevated and above the DRE average ranges.

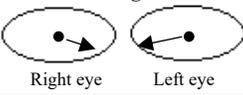
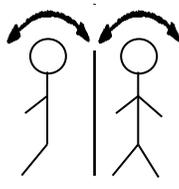
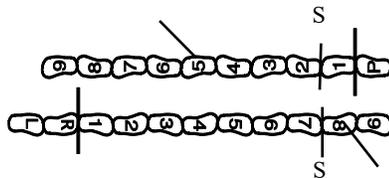
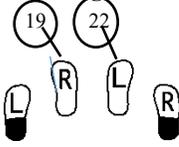
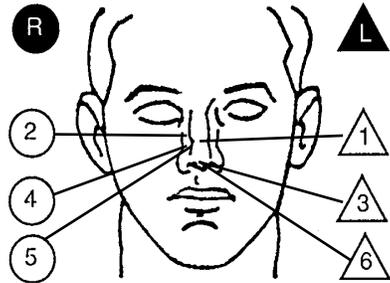
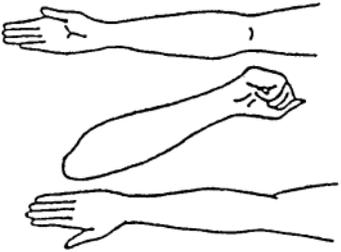
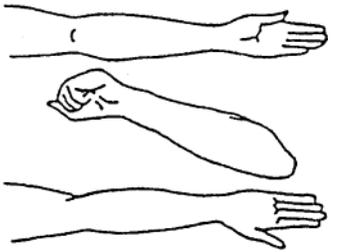
9. **Signs of Ingestion:** Rocke's nasal area was clear and she had no indicators of injection sites on her arms and hands. Her oral cavity was red and appeared inflamed.

10. **Suspect's Statements:** Rocke initially denied consuming any medications or drugs, but later stated she had smoked about a gram of "Meth" (Methamphetamine) around 7 pm. She further stated she rarely uses methamphetamine and is trying to quit using it.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Rocke is under the influence of a CNS Stimulant and is unable to operate a vehicle safely.

12. **Toxicological Sample:** A blood sample was collected from Rocke at 2352 hours and will be forwarded to the State Crime Laboratory for analysis.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Mark Mims</b>		DRE # 14840	Rolling Log # 22-006-0088	Evaluator's Agency Florence PD	Case # (Session X - #2)
Recorder/Witness <b>Sgt. Joseph Zeitner, Mount Pleasant PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency South Carolina HP	
Arrestee's Name (Last, First, Middle) <b>Twecker, Ira</b>		Date of Birth 06/24/78	Sex M	Race W	Arresting Officer (Name, ID#) <b>Trooper Brian Bryson #19850</b>
Date Examined / Time / Location 10/23/22 / 2317 / Florence PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 13005	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: Tpr. Bryson	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Waffles	When? About 6 pm	What have you been drinking? How much? Coffee 3 or 4 cups	Time of last drink? N/A
Time now/ Actual 1 am / 2318	When did you last sleep? Two days ago	How long? 5 hours	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: Cooperative, Restless	Coordination: Quick, Unsteady	
Speech: Talkative, Fast		Breath odor: Bad breath		Face: Flushed, Sweaty	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and Time 1. <u>106</u> / <u>2322</u> 2. <u>108</u> / <u>2334</u> 3. <u>108</u> / <u>2349</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye    Left eye	
Modified Romberg Balance Approx. 3" 3"    Approx. 3" 3"  Body tremors	Walk and Turn Test  Quick choppy steps. Did not look at feet as instructed.			38/30 <b>One Leg Stand</b> 41/30  Jerky movements. Fast count L    R All    1    Sways while balancing 3    All    Uses arms to balance Hopping 1    1    Puts foot down	
	Cannot keep balance _____ Starts too soon    1 Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken	1st Nine    2nd Nine 1    1  1    1 All    All 9    9			
Time Estimation <u>20</u> estimated as 30 seconds	Describe turn Stiff legged. Spun around		Cannot do test (explain) N/A		Type of footwear: Slip-on shoes
Finger to Nose (Draw lines to spots touched)  Jerky quick movements		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	6.5	9.0	6.0
		Right Eye	6.5	9.0	6.0
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Slow
		RIGHT ARM 		LEFT ARM 	
		Nothing detected			
Blood Pressure 168 / 100	Temperature 99.8 °F		Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		
Comments:		What drugs or medications have you been using? "Nothing for 4 or 5 months"		How much? "Nothing Bro"	Time of use? N/A
Date / Time of arrest: 10/23/22 / 2205		Time DRE was notified: 2250	Evaluation start time: 2317	Evaluation completion time: 0025 (10/24/21)	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation
Officer's Signature: <b>Mark Mims</b>			Reviewed/approved by / date:		DRE #
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input checked="" type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic
					<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Tweeker, Ira**

1. **Location:** The drug evaluation was conducted at the Florence Police Department which had adequate lighting for conducting the drug evaluation and smooth tile flooring with no obstructions.
2. **Witnesses:** Sgt. Joseph Zeitner of the Mt. Pleasant PD witnessed and recorded the evaluation.
3. **Breath Alcohol Test:** The suspect was given a breath test by Trooper Bryson with a 0.00% result.
4. **Notification and Interview of the Arresting Officer:** On 10/23/22 at approximately 2250 hours, I was requested to conduct a drug evaluation at the Florence PD. I contacted the arresting officer, Trooper Bryson of the South Carolina HP. Trooper Bryson advised me that he had stopped the suspect's vehicle for failure to drive within a single lane of travel and failure to signal on I-20 at the 141B exist. Trooper Bryson stated that during the stop he observed a small plastic baggie with a white powdery substance on the passenger floorboard of the suspect's vehicle. When asked about it, the suspect stated it was meth and it belonged to his wife. Trooper Bryson reported that the suspect's pupils were dilated, and he was very talkative. He described the suspect's movements as quick, and said he appeared disoriented and excited. When asked about using meth, the suspect told Trooper Bryson that he had not used any meth in the past 4 or 5 months. Trooper Bryson did not detect an odor of an alcoholic beverage on the suspect's breath. The suspect consented to roadside SFSTs and Trooper Bryson administered the HGN, W&T, OLS, and the Modified Romberg Balance (MRB) tests. He did not observe any HGN clues but did observe impairment clues on the W&T and OLS. The MRB test revealed that the suspect had a fast time estimation with body tremors and jerky side-to-side movements. At the conclusion of the SFSTs, Trooper Bryson arrested the suspect for DUI and transported him to the Florence PD for a breath test.
5. **Initial Interview of the Suspect:** When I first observed the suspect, he was seated in a chair and was fidgety acting. He was talking about his marriage and repeatedly saying he wanted to leave town. He was dressed in shorts, a button-up short-sleeve shirt, and slip-on brown canvas shoes. He had bad body odor and his breath was rancid smelling. His pupils appeared to be dilated. I introduced myself and asked if he would consent to a drug evaluation to which he stated, "Okay man. Yeah, whatever." He was cooperative, but restless acting. I asked if he had any medical conditions, injuries, or physical defects, and he stated, "No, sir. I'm just really upset." He told me that he last slept two days ago for approximately five hours. When I asked why, he told me it was due to some problems with his wife. He told he was not using any medications or drugs.
6. **Medical Problems and Treatment:** The suspect indicated that he had no injuries or physical defects. None were mentioned or observed during the evaluation.
7. **Psychophysical Indicators of Impairment:** Prior to asking the suspect to perform the psychophysical tests, each one was explained and demonstrated to him. He indicated he understood the instructions prior to each attempt and the following tests were administered:

**Modified Romberg Balance:** While completing the test, he estimated the passing of 30 seconds in 20 seconds. He swayed noticeably and had an approximate 3" front to back and side to side jerky sway. He also had pronounced body tremors. I asked how he had estimated the 30 seconds and he stated, "I did one-Mississippi, two-Mississippi."

**Walk & Turn:** The suspect was able to maintain his balance while in the instruction stage. However, he maintained a rigid stiff-like stance. While giving he instructions, he did start to perform the test once before instructed to do so. During the walking stage of the test, he took quick, choppy steps. He raised his arms near shoulder level throughout the test. He failed to look at his feet while walking and had to

be reminded several times to do so. On the first nine steps, he stepped off the line once and stopped while walking once. On the second nine steps, he stepped off the line once and stopped while walking once. The turn was performed incorrectly with him spinning around in one motion.

**One Leg Stand:** While balancing on his left foot, he counted to 1,038 when 30 seconds had elapsed and had a continuous jerky side to side sway. He raised both his arms for balance three times, and he put his foot down at count 1,019. He also failed to look at his raised foot from counts 1,020 to 1,038. When balancing on his right foot, he counted to 1,041 when 30 seconds had elapsed. He again had a jerky side to side sway. He raised both arms for balance for the entire test and put his foot down once at count 1,022.

**Finger to Nose:** For this test, the suspect's arm movements were quick and jerky. He failed to touch the tip of his nose with the tip of his index finger as instructed on attempts 1, 2, 4, and 5. He had to be reminded numerous times to remove his finger from his nose and replace his hand back at his sides.

8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. During the Horizontal Gaze Nystagmus test the suspect did not exhibit any clues. Vertical nystagmus was also not observed. A Lack of Convergence was not observed. His pupils were examined under three lighting conditions and his pupil sizes was estimated using a pupillometer. In normal room light his pupil size was estimated at 6.5 mm. In near total darkness his pupils were estimated at 9.0 mm. In direct light his pupils were estimated at 6.0 mm in each eye. All three were dilated and above the DRE average range. The suspect's pupillary reaction was slow, and he did not exhibit rebound dilation.

**Vital Signs:** The suspect's pulse was checked three times during the evaluation and were: 106, 108, and 108 beats per minute. All three were above the DRE average range for pulse rate. His blood pressure was checked with a systolic pressure of 168 mm/Hg and a diastolic pressure of 100 mm/Hg. Both were above the DRE average ranges. His body temperature was 99.8 degrees Fahrenheit, which was above the DRE average range. The suspect's muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal area was checked and appeared red with no nasal hair in the right nostril while the left nostril appeared to be normal. His oral cavity appeared clear. The suspect was checked for injection sites and none were observed.

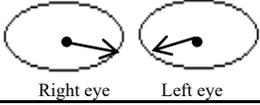
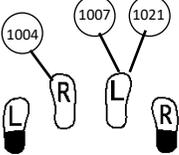
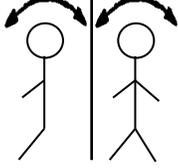
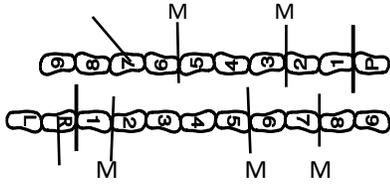
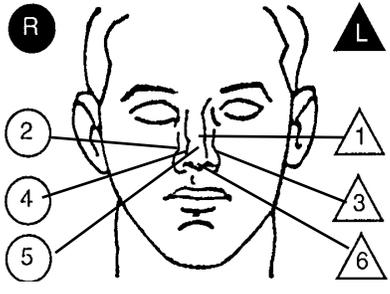
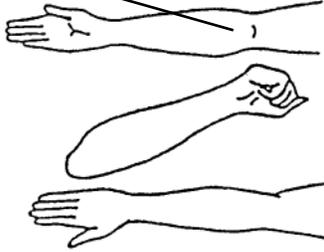
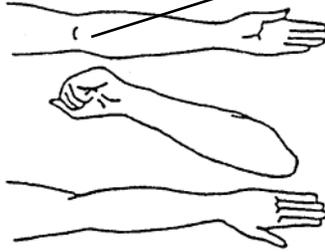
10. **Suspect's Statements:** The suspect denied consuming drugs and said he had not used any drugs in the past four to five months. He said that his wife uses meth, and he has been trying to "stay clean." When asked about the substance located in his vehicle, he stated, "That belongs to my wife."

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of a Central Nervous Stimulant and unable to operate a vehicle safely.

12. **Toxicological Sample:** A toxicological sample of urine was requested from the suspect and was collected. The sample was submitted to the state crime laboratory for forensic analysis.

13. **Miscellaneous:** A presumptive field test was performed on the powdery substance located in the suspect's vehicle. The test was positive for methamphetamine. The substance will be sent to the crime lab for additional testing. Refer to Trooper Bryson's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Jeramey Peters</b>		DRE # <b>12368</b>	Rolling Log # <b>22-017-0087</b>	Evaluator's Agency <b>Auburn Hills PD</b>	Case# <b>(Session X - #3)</b>																
Recorder/Witness <b>Tpr. Troy Meder Michigan SP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Michigan State Police</b>																	
Arrestee's Name (Last, First, Middle) <b>Crank, Christy Dunn</b>		Date of Birth <b>10/09/1995</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sgt. Greg Primeau 18760</b>																
Date Examined / Time / Location <b>09/29/22 / 0130 / Auburn Hills PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>909305</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>																	
Miranda Warning Given Given by: <b>Sgt. Primeau</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Nothing</b>	When? <b>N/A</b>	What have you been drinking? How much? <b>Soda A couple cans</b>	Time of last drink? <b>N/A</b>																
Time now/ Actual <b>1 AM / 0135</b>	When did you last sleep? <b>Yesterday</b>	How long? <b>Maybe 3 or 4 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Shook his head side to side)			Attitude: <b>Irritated</b>	Coordination: <b>Quick, Jerky</b>																	
Speech: <b>Rapid</b>		Breath odor: <b>Normal</b>		Face: <b>Sweaty, Red sores on checks and forehead</b>																	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right																	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy																			
Pulse/Time 1. <u>102</u> / <u>0150</u> 2. <u>98</u> / <u>0210</u> 3. <u>98</u> / <u>0230</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye    Left eye	36/30 <b>One Leg Stand</b> 38/30 																
<b>Modified Romberg Balance</b> Approx. 2" 2" 2" 2"  Leg tremors. Bruxism	<b>Walk and Turn Test</b>  Leg tremors. Jerky, fast movements. Failed to look at feet as directed.		Cannot keep balance <b>1</b> Starts too soon <b>2</b> Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken	<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">1st Nine</td> <td colspan="2">2nd Nine</td> </tr> <tr> <td><b>3</b></td> <td><b>2</b></td> <td><b>1</b></td> <td><b>1</b></td> </tr> <tr> <td><b>All</b></td> <td><b>All</b></td> <td><b>All</b></td> <td><b>All</b></td> </tr> <tr> <td><b>9</b></td> <td><b>9</b></td> <td><b>9</b></td> <td><b>9</b></td> </tr> </table>		1st Nine		2nd Nine		<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>All</b>	<b>All</b>	<b>All</b>	<b>All</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>
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<b>9</b>	<b>9</b>	<b>9</b>	<b>9</b>																		
<b>Time Estimation</b> <u>18</u> estimated as 30 seconds	Describe turn Spinning turn to left.		Cannot do test (explain) N/A		Type of footwear: Flat soled shoes																
<b>Finger to Nose</b> (Draw lines to spots touched)  Used pad of finger on 1, 2, & 6. Jerky movements		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>																
		<b>Left Eye</b>	7.0	9.5	6.0																
		<b>Right Eye</b>	7.0	9.5	6.0																
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Slow																	
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>																	
		Injection marks 		Injection marks 																	
Blood Pressure <b>188 / 96</b>	Temperature <b>99.8 °F</b>	Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid																			
What drugs or medications have you been using? <b>"Meth and Cocaine"</b>		How much? <b>"Not much today"</b>	Time of use? <b>"Meth last night"</b>	Where were the drugs used? (Location) <b>Friend's house</b>																	
Date / Time of arrest: <b>09/29/22 0015</b>	Time DRE was notified: <b>0050</b>	Evaluation start time: <b>0130</b>	Evaluation completion time: <b>0245</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																	
DRE/Officer's Signature: <i>Jeramey Peters</i>		Reviewed/approved by / date:			DRE#																
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant <input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis																					

## DRUG INFLUENCE EVALUATION NARRATIVE

### Suspect: Crank, Christy Dunn

1. **Location:** The evaluation was conducted in the Interview Room at Auburn Hills Police Department. The darkroom examinations were conducted in the staff restroom. Both areas are well illuminated and have smooth tile flooring with no obstructions.
2. **Witnesses:** The evaluation was observed and recorded by Trooper Troy Meder of the MI State Police. The arresting officer, Sergeant Greg Primeau, of the MI State Police witnessed the darkroom examinations.
3. **Breath Alcohol Test:** The suspect's breath test was administered by Sgt. Primeau prior to my arrival. Sgt. Primeau advised the result was 0.00% BAC.
4. **Notification and Interview of the Arresting Officer:** On 09/29/22 at approximately 0050 hours, I was dispatched to conduct a drug evaluation at the Auburn Hills Police Department. Upon arrival, I met with the arresting officer, Sergeant Primeau of the MSP. He advised he had stopped the suspect (Christy Crank) for speeding and failure to drive within a single traffic lane on Interstate 75. During the personal contact, Sgt. Primeau did not detect an odor of an alcoholic beverage on the suspect's breath but observed that she had quick and jerky movements when retrieving her driver's license. He also noted that she had facial perspiration and dilated pupils. She was wearing a short-sleeved shirt and had what appeared to be injection marks on her left forearm. According to Sgt. Primeau, she was very animated, and her speech was fast. She consented to SFSTs and the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS) tests, and Finger to Nose (FTN) tests were administered. No HGN clues were observed, but six clues on the W&T and three clues on the OLS were observed. She also had difficulty with the FTN test, and had quick, jerky movements. Sgt. Primeau arrested the suspect for DWI. After obtaining a 0.00 BAC on the breath test, he requested a DRE to assist with the investigation.
5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the Auburn Hills PD. She was seated in a chair at the table and appeared restless. She displayed poor personal hygiene and her appearance was disheveled. There appeared to be fresh and older injection marks on both of her arms with red and open sores in several areas. Her pupils appeared dilated and her speech was rapid. She was wearing black shorts with pink leggings, a blue tee-shirt, and flat soled shoes. I introduced myself and asked if she would consent to a drug evaluation. She stated, "Yeah, I guess so." She was cooperative, but at times seemed irritated. I asked if she had been informed of her Miranda rights and she indicated she had been. I asked if she had any injuries or physical defects, which she replied "Nope, none." She stated she was not under the care of a doctor or dentist. She told me she had not eaten anything today and had only ingested a couple cans of soda. She denied consuming any medications or drugs. When asked when she last slept, she stated, "Yesterday." When I asked how many hours, she stated, "About 3 or 4. I'm pretty stressed." She claimed she was stressed because she had lost her job. When asked about losing her job, she responded, "It's none of your business." Several times she appeared to be grinding her teeth (bruxism) when she was not talking.
6. **Medical Problems and Treatment:** No medical problems were reported by the suspect and none were observed or detected during the evaluation.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to her attempting them. Several times I had repeat my instructions to ensure she understood them. After confirming she understood the instructions, the following psychophysical tests were given:  
**Modified Romberg Balance:** The suspect had an approximate two-inch side to side sway. Tremors were observed in both legs. Her time estimation was fast, estimating 30 seconds in 18 seconds. I asked her how she had estimated the 30 seconds and she said, "I just counted." At times she was grinding her teeth during the test (Bruxism).

**Walk and Turn:** For this test, a line on the tile floor was used. During the instruction stage, the suspect lost her balance and stepped out of the instruction position with her right foot once. She twice started the test before instructed to do so. During the walking stage, she had poor balance and took fast jerky steps. Leg tremors were present throughout most of the test. She missed heel to toe on steps two, six, and eight on the first nine steps. She made an improper turn by spinning to her left and had to regain her foot positioning. On the second nine steps, she missed heel to toe on steps three and six. She also stepped off the line on step seven. She raised both arms from her sides throughout the test and failed to look at her feet while walking.

**One Leg Stand:** During this test, when the suspect raised her right foot, she had a noticeable side to side sway. She also raised both arms, approximately six inches for balance throughout the entire test. She put her foot down on count 1,004. Leg tremors with jerky movements were observed throughout the test. When she raised her left foot, she again swayed while balancing. She also raised both arms for balance. She put her foot down at counts 1,007 and 1,021. She again had leg tremors throughout the test. Her counting was fast, reaching 1,036 in 30 seconds when standing on her left foot and reaching 1,038 in 30 seconds when standing on her right foot.

**Finger to Nose:** While performing this test, the suspect missed the tip of her nose with the tip of her index finger on all six attempts. She also used the pad of her finger on attempts 1, 2, and 6. On attempt 5, she initially raised her left hand then corrected and used her right hand as instructed. During the test, leg tremors, and jerky arm movements were observed.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited equal tracking and had equal pupil size. No clues of HGN or VGN were observed and her eyes were able to converge as instructed. Her pupil sizes were estimated in three different lighting conditions. In Room Light, her pupils were estimated at 7.0 mm. In Near Total Darkness, her pupils were estimated at 9.5 mm, and in Direct Light, her pupils were estimated at 6.0 mm. All three results were above the DRE average ranges for the lighting conditions. Her pupillary reaction to light was slow, and she did not exhibit rebound dilation.

**Vital Signs:** The suspect's pulse rates were elevated throughout the evaluation, at 102, 98, and 98 beats per minute. All three were above the DRE average range. Additionally, her blood pressure of 188/96 was elevated and above the DRE average range. Her body temperature was above the DRE average range, measured at 99.8 degrees using an oral thermometer. Several times she indicated that she was hot and complained about the heat.

**9. Signs of Ingestion:** The suspect's nasal and oral cavities were clear. However, there were multiple injection marks on the inside of her arms. She also had multiple open and red sores on her arms. When asked about the marks and sores, she advised that she was stressed and has been scratching herself a lot.

**10. Suspect's Statements:** When questioned about drug use, at first, the suspect denied using drugs but later admitted she used methamphetamine the night before and occasionally uses cocaine. She stated, "I use it, but I'm always nervous like this."

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a CNS Stimulant and is unable to operate a vehicle safely.

**12. Toxicological Sample:** The suspect voluntarily agreed to provide a blood sample which was collected at 0338 hours. The blood sample was entered into evidence by Sgt. Primeau and will be forwarded to the state crime laboratory for analysis.

**13. Miscellaneous:** During an inventory search of the suspect's vehicle prior to towing, Sgt. Primeau located several used syringes under the seat and in the vehicle side door compartment.

# 11

# DRE

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## PRACTICE: EYE EXAMINATIONS

### LEARNING OBJECTIVES

- Describe the eye examination procedures
- Conduct examinations of pupil size and reaction to light under both lighted and darkened room conditions
- Document the results of the eye examinations

### CONTENTS

A. Procedures for this Session .....2

B. Room Light Examinations .....3

C. Dark Room Examinations .....4

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participants’ Hands-On Practice
- Instructor-Led Coaching
- Participant-Led Coaching

Session 11. Practice – Eye Examinations

## Learning Objectives

- Describe eye examination procedures
- Conduct pupil size and reaction to light exams
- Document results of eye exams

DRE 11-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

### A. Procedures for this Session

Session 11. Practice – Eye Examinations

## Eye Examinations

- Room light
- Dark room



DRE 11-3

**Slide 3.**

*Team Assignments:* Participants will work in three- or four-member teams.



***Make team assignments.***

At any given time, one member of the team will be engaged in conducting and recording eye examinations of another member. The remaining member(s) will help coach and critique the participant who is conducting the examinations.



***Emphasize participants can help each other learn by pointing out errors of omission or commission.***

***Participants will record their estimations using Eye Examinations Data Sheet. There are copies of the Eye Examination Data Sheet in the Participant Guide.***

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## B. Room Light Examinations

*Pupil Size Estimation:* Pupil size estimation under room light.



***OPTIONAL: For training purposes only, instructors may have participants practice their direct light skills in room light prior to progressing to the dark room portion of this exercise. During an actual evaluation, DREs will conduct the direct light examination from within the near total darkness environment.***



***Monitor teams and coach participants as necessary and appropriate.***

***When the first participant completes the two estimations, have the team members exchange roles. Continue this process.***

Sequence of roles should be as follows:

- Test Administrator
- Test Subject
- Coach
- Test Administrator (continue cycle)



***End this part of the exercise after 20 minutes or after each participant has twice served as a test administrator (whichever comes first).***

***Offer appropriate comments and observations about the participant's performance.***

## C. Dark Room Examinations

*Pupil Size Estimation:* Pupil size estimation under near total darkness. Pupil reaction and size estimation under direct light.



***This exercise should be conducted in a dark room, similar to one used for an evaluation.***



***Allow participants approximately 90 seconds for the eyes to adapt to the darkened conditions.***

***Monitor teams and coach participants as necessary and appropriate.***

***When the first participant completes the two checks, have the team members exchange roles. Continue this process.***

Sequence of roles should be as follows:

- Test Administrator
- Test Subject
- Coach
- Test Administrator (continue cycle)



***End this part of the exercise after 25 minutes or after each participant has twice served as a test administrator (whichever comes first).***

***Offer appropriate comments and observations about the participants' performance.***

Session 11: Practice – Eye Examinations

Questions?

DRE 11-4

**Slide 4.**



*Solicit participants' comments concerning the practice session.*

## EYE EXAMINATIONS DATA SHEET

<p>Subject: _____</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 2px 10px;"></th> <th style="padding: 2px 10px;">Left</th> <th style="padding: 2px 10px;">Right</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">Room Light</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">NTD</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">Direct Light</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">Reaction</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> </tbody> </table>		Left	Right	Room Light			NTD			Direct Light			Reaction			<p>Subject: _____</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 2px 10px;"></th> <th style="padding: 2px 10px;">Left</th> <th style="padding: 2px 10px;">Right</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">Room Light</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">NTD</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">Direct Light</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">Reaction</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> </tbody> </table>		Left	Right	Room Light			NTD			Direct Light			Reaction			<p>Subject: _____</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 2px 10px;"></th> <th style="padding: 2px 10px;">Left</th> <th style="padding: 2px 10px;">Right</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px 5px;">Room Light</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">NTD</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">Direct Light</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> <tr> <td style="padding: 2px 5px;">Reaction</td> <td style="width: 40px; height: 25px;"></td> <td style="width: 40px; height: 25px;"></td> </tr> </tbody> </table>		Left	Right	Room Light			NTD			Direct Light			Reaction		
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# 12 DRE

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## ALCOHOL WORKSHOP

### LEARNING OBJECTIVES

- Properly administer the eye examinations used in the drug influence evaluation procedure
- Properly administer psychophysical tests used in the drug influence evaluation procedure
- Observe and record the subject's performance on the eye examinations and psychophysical tests
- Determine the level of impairment based on the results of the subject's eye examinations and psychophysical tests

### CONTENTS

A. Procedures .....	2
B. Hands-On Practice .....	4
C. Session Wrap-Up .....	4

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant-Led Practice
- Instructor Discussion

Session 12: Alcohol Workshop

## Learning Objectives

- Properly administer eye examinations
- Properly administer psychophysical tests
- Observe and record subject's performance
- Determine level of impairment

DRE 12-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

### A. Procedures

Session 12: Alcohol Workshop

## Examinations and Tests Conducted

- Pupil Size Estimation (Room Light)
- HGN
- VGN
- LOC
- MRB
- WAT
- OLS (Both Legs)
- FTN
- Pulse Rate

DRE 12-3

**Slide 3.**



***Participants will work in three- or four-member teams during this session.***  
***Make team assignments.***  
***Each team will administer tests to each volunteer.***

The preliminary examinations and psychophysical tests include:

- Pupil Size Estimation (Room Light)
- Horizontal Gaze Nystagmus (HGN)
- Vertical Gaze Nystagmus (VGN)
- Lack of Convergence (LOC)
- Modified Romberg Balance (MRB)
- Walk and Turn (WAT)
- One Leg Stand (OLS) (both legs)
- Finger to Nose (FTN)
- Pulse Rate

For the drug influence evaluation, it is important to estimate Angle of Onset for HGN and relate it to Blood Alcohol Concentration (BAC).



***Results/observations of all tests will be recorded on the Drug Evaluation Report form.***

***Point out copies of the report form are in the participant guide. Each team will need one report form for each volunteer.***

***For each volunteer, team members should perform the following duties:***

- ***One team member will administer the tests to the volunteer***
- ***One team member will record the results on the report form***
- ***The other team member(s) will assist the test administrator in observing the volunteer's performance on the tests***

***Emphasize team members will take turns performing the various duties as they deal with the different volunteers.***

Some volunteers will have BACs above 0.10, others will have lower BACs. Each group will collectively estimate the BAC of each volunteer they evaluate. The following safety precautions will be strictly enforced: No weapons will be present and Volunteers will not be left unattended at any time.



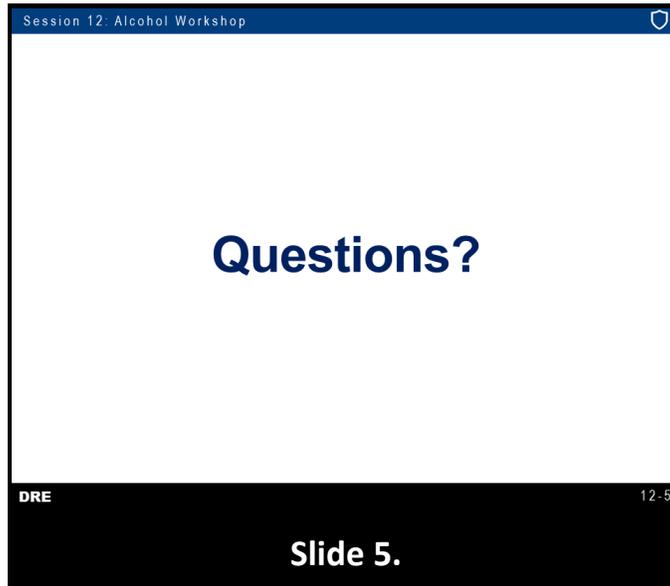
***Solicit participant's questions concerning the procedures for the Alcohol Workshop.***





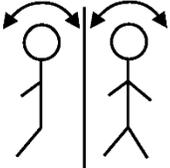
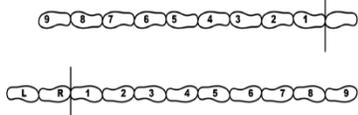
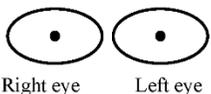
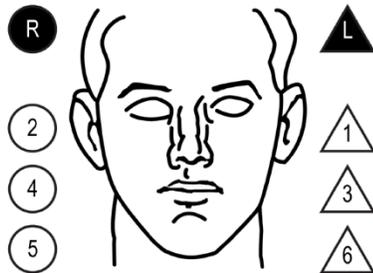
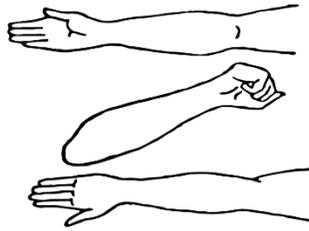
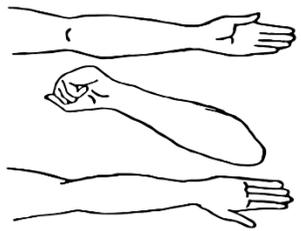
***Feedback of Volunteers' BACs: Make appropriate comments concerning teams' assessment of the volunteers' BACs. These comments should take into account such factors as absorption and elimination rates, differences in tolerance to alcohol, volunteers' medical conditions, etc.***

***Discussion***



***Solicit participants' comments or questions concerning the Alcohol Workshop.***

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #		Evaluator's Agency		Case #
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property			Arresting Officer's Agency		
Arrestee's Name (Last, First, Middle)		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location / /		Breath Test: Results:		Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When?		What have you been drinking? How much?		Time of last drink?	
Time now/ Actual /	When did you last sleep?	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No			Attitude:		Coordination:		
Speech:		Breath odor:			Face:		
Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy		Pulse and Time		HGN		Left Eye	
1. _____ / _____ 2. _____ / _____ 3. _____ / _____		Lack of Smooth Pursuit		Maximum Deviation		Angle of Onset	
Modified Romberg Balance Approx.    Approx.		Walk and Turn Test		Convergence		One Leg Stand	
							
		Cannot keep balance _____		Starts too soon _____		Stops walking _____	
		Misses heel-toe _____		Steps off line _____		Uses arm(s) _____	
		Actual steps taken _____		1st Nine		2nd Nine	
Time Estimation _____ estimated as 30 seconds		Describe turn		Cannot do test (explain)		Type of footwear:	
Finger to Nose (Draw lines to spots touched)		PUPIL SIZE		Room light (2.5 - 5.0)		Darkness (5.0 - 8.5)	
		Left Eye				Direct (2.0 - 4.5)	
		Right Eye					
		Rebound Dilatation: <input type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light:			
Blood Pressure /		Temperature °F		RIGHT ARM		LEFT ARM	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:					
What drugs or medications have you been using?		How much?		Time of use?		Where were the drugs used? (Location)	
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:	
Officer's Signature:		Reviewed/approved by / date:				DRE #	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol		<input type="checkbox"/> CNS Stimulant	
		<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input type="checkbox"/> Hallucinogen	
				<input type="checkbox"/> Dissociative Anesthetic		<input type="checkbox"/> Inhalant	
				<input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Cannabis	

# DRE

---

## DRE REFERENCE SOURCES

### LEARNING OBJECTIVES

- Discuss print resources available to assist Drug Recognition Experts (DREs)
- Learn about other resources available to assist DREs

### CONTENTS

A. Resources Available.....3

### LEARNING ACTIVITIES

- Instructor-Led Presentations



## Learning Objectives

- Discuss print resources available to assist DREs
- Learn about other resources available to assist DREs

DRE

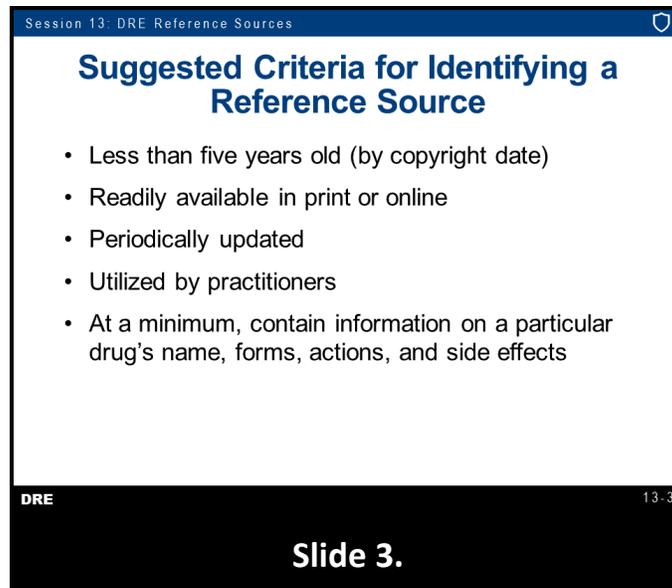
13-2

**Slide 2.**



*Briefly review the objectives, content, and activities of this session.*

## A. Resources Available



Session 13: DRE Reference Sources

### Suggested Criteria for Identifying a Reference Source

- Less than five years old (by copyright date)
- Readily available in print or online
- Periodically updated
- Utilized by practitioners
- At a minimum, contain information on a particular drug's name, forms, actions, and side effects

DRE 13-3

**Slide 3.**

When selecting an acceptable drug reference, DRE's should consult references that meet the below criteria:

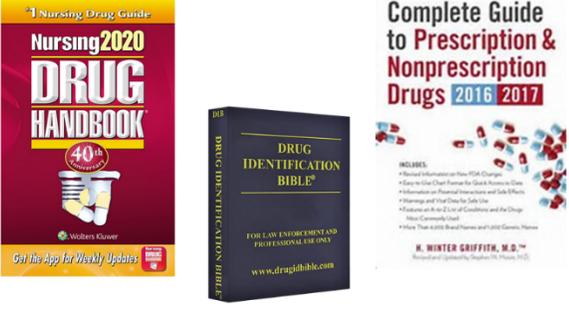
- Be less than five years old (by copyright date)
- Be readily available in print or online
- Be periodically updated
- Be utilized by practitioners in the scientific and healthcare fields
- At a minimum, contain information on a particular drug's:
  - Trade (brand), generic, and alternate common names
  - Available forms (liquid, pill, injectable, etc.)
  - Pharmacologic/therapeutic actions (as used clinically, both "on" and "off" label)
  - Adverse reactions and side effects

The reason for this is to keep from consulting outdated and inaccurate references.

---

Session 13: DRE Reference Sources

## Written Sources



**1 Nursing Drug Guide**  
**Nursing 2020**  
**DRUG HANDBOOK**  
40th Anniversary  
Wolters Kluwer  
Get the App for Weekly Updates

**DRUG IDENTIFICATION BIBLE®**  
FOR LAW ENFORCEMENT AND PROFESSIONAL USE ONLY  
www.drugidbible.com

**Complete Guide to Prescription & Nonprescription Drugs 2016 2017**

**INCLUDES:**

- Revised information on New FDA Changes
- Easy-to-Use Color Codes for Quick Access to Data
- Information on Potential Interactions and Side Effects
- Dosage and Drug Class for Each Drug
- Features an A to Z List of Conditions and the Drugs that Cause Them
- More Than 4,000 Brand Names and 1,000 Generic Names

**H. WINTER GRIFFITH, M.D.,™**  
Research and Updates by Douglas W. Moore, M.D.

DRE 13-4

**Slide 4.**

Acceptable resources may be in-print, electronic, or a combination. Acceptable written examples include:

- The Complete Guide to Prescription and Non-prescription Drugs
- The Pill Book
- Nursing Drug Handbook
- Nurse Pocket Drug Guide
- Drug Identification Bible (available at: <http://www.drugidbible.com>)
- Davis' Drug Guide for Nurses
- Tarascon Pocket Pharmacopoeia (for those with some pharmacology education)
- The Monthly Prescriber's Reference (MPR)
- Disposition of Toxic Drugs and Chemicals in Man
- DEA Intelligence Report – Drug Slang Code Words ([www.dea.gov](http://www.dea.gov))

Session 13: DRE Reference Sources

## Electronic Sources



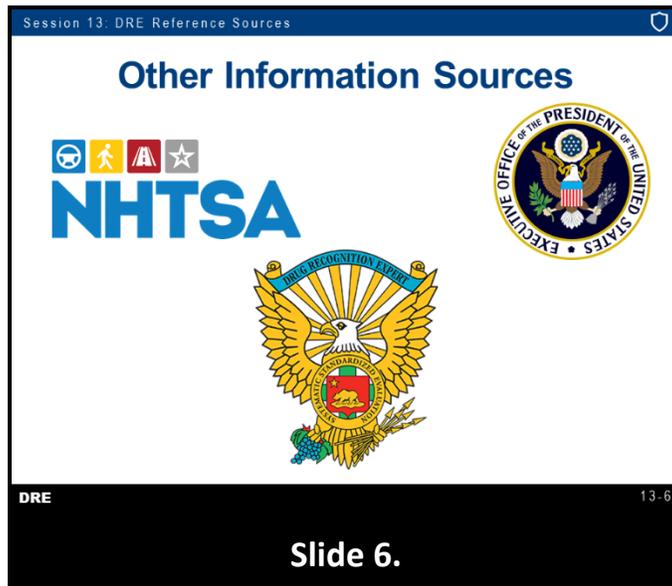
DRE 13-5

**Slide 5.**



Acceptable electronic examples include:

- [www.Drugs.com](http://www.Drugs.com)
  - [www.RxList.com](http://www.RxList.com)
  - [www.WebMD.com/Drugs/Index-drugs.aspx](http://www.WebMD.com/Drugs/Index-drugs.aspx)
  - [www.Eprocrates.com](http://www.Eprocrates.com)
  - iMeds – Medical Reference for Android
  - Monthly Prescriber’s Reference (MPR)
  - [www.PDR.net](http://www.PDR.net)
  - [www.streetdrugs.org](http://www.streetdrugs.org)
  - [info@streetdrugs.org](mailto:info@streetdrugs.org)
  - United States Drug Enforcement Administration (DEA) – Drug Fact Sheets –  
[https://www.dea.gov/factsheets?field\\_fact\\_sheet\\_category\\_target\\_id=All&page=0](https://www.dea.gov/factsheets?field_fact_sheet_category_target_id=All&page=0)
-



Examples of other information sources are:

- National Highway Traffic Safety Administration (NHTSA), Enforcement and Justice Services (EJS) Division, Washington, D.C.
- Office of National Drug Control Policy (ONDCP)
- State Drug Evaluation and Classification (DEC) Program Coordinator
- Governor's Office of Highway Safety (GOHS)
- The National Traffic Law Center (NTLC) – NTLC is part of the American Prosecutors Research Institute (APRI)
- Poison control center ([www.aapcc.org](http://www.aapcc.org))
- Medical dictionaries
- Drugs and Human Performance Fact Sheets, NHTSA



**Produced by:** U.S. DOT-NHTSA, Report No. DOT 809 725, April 2014

- Newspaper and magazine articles on drugs and drug-impaired driving, including counter-culture magazines such as “High Times”
- Software programs such as Pharmacists, Body Works, Mosby's Medical Dictionary and other programs are available on disks and CDs
- Various resources are available through online services and the Internet



The International Association of Chiefs of Police (IACP) DEC Program website is <http://www.decp.org>



**Discuss some other useful and reliable texts known to you.**

Session 13: DRE Reference Sources

Identify this pill



Alprazolam 2mg

DRE 13-7

**Slide 7.**



*Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.*

Session 13: DRE Reference Sources

Identify this pill



Clonazepam .5mg

DRE 13-8

**Slide 8.**



*Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.*

Session 13: DRE Reference Sources

Identify this pill



Methylphenidate HCL 20mg

DRE 13-9

**Slide 9.**



*Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.*

Session 13: DRE Reference Sources

Identify this pill



Venlafaxine HCL

DRE 13-10

**Slide 10.**



*Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.*

Session 13: DRE Reference Sources

Identify this pill



Oxycodone HCL 5mg/Acetaminophen 325mg  
(Roxicet)

DRE 13-11

**Slide 11.**



*Give directions to participants on how to identify the drugs displayed in the slide using either one of the sources identified in this session or another reliable source.*

Session 13: DRE Reference Sources

Questions?

DRE 13-12

**Slide 12.**



*Solicit participants' comments or questions concerning sources.*

**COMPARISON OF DRE SYMPTOMATOLOGY  
WITH CROSS SECTION OF DRUG SYMPTOMATOLOGY SOURCES**

**CNS DEPRESSANTS**

DRE Symptomatology:

Nystagmus	Decreased pulse
Decreased blood pressure	Uncoordinated
Disoriented	Sluggish
Thick slurred speech	Drunk-like appearance

The Pharmacological Basis of Therapeutics, 13<sup>th</sup> Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co.:

Nystagmus	Strabismus
Difficulty in visual	Accommodation
Vertigo	Gait ataxia
Positive Romberg sign	Hypotonia
Dysmetria	Diplopia
Sluggishness	Difficulty in thinking
Slowness, slurring of speech	Poor comprehension
Poor memory	Faulty judgement
Emotional lability	

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 14<sup>th</sup> Ed.

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (6<sup>th</sup> Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989.

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), page 36: barbiturates effects like alcohol (staggering, poor motor control).

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 11: sedative hypnotics same as alcohol and other depressants.

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989), page 72: Benzodiazepines same as barbiturate effects; pages 247; 292):

Barbiturates:

Nystagmus	Depressed pulse
Depressed blood pressure	Diminished concentration
Incoordination	Decreased reaction time

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D.D Plenum Medical Book Company, New York (1988), p. 135.

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 159:

Maladaptive behavioral changes, e.g., disinhibition of sexual or aggressive impulses, mood lability, impaired judgment, impaired social or occupational functioning.

Slurred speech	Incoordination
Unsteady gait	Impairment in attention or memory

## CNS STIMULANTS:

### DRE Symptomatology:

Dilated pupils	Increased pulse rate
Increased temperature	Increased blood pressure
Body tremors	Restlessness
Excited	Euphoric
Talkative	Exaggerated reflexes
Anxiety	Grinding teeth
Redness to nasal area	Runny nose
Loss of appetite	Insomnia
Increased alertness	

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Cocaine 551-554

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, Amphetamines, Page 634:

### Mild influence:

Mydriasis	Hyperreflexia
Restlessness	Talkativeness
Irritability	Insomnia
Tremor	Flushing
Diaphoresis	Combativeness
Nausea	Vomiting
Pallor	Dry mucous membranes

### Moderate:

Hyperactivity	Confusion
Hypertension	Tachypnea
Tachycardia	Premature ventricular contraction
Chest discomfort	Vomiting
Abdominal pain	Profuse diaphoresis
Mild temperature	Elevation
Repetitive behavior	Impulsivity
Panic reactions	Hallucinations

### Serious:

Delirium	Marked Hypertension/Tachycardia
Hyperreflexia	Convulsions
Hypotension	Coma
Cocaine, page 650-659	

### Early Stimulation:

Euphoria	Garrulity
Excitement	Apprehension
Irritable behavior	Mydriasis
Sudden headache	Nausea
Vomiting	Dizziness
Twitching of small muscles	Tics
Tremor	Jerks
Cocaine psychosis	Hallucinations
Elevation of pulse	Increased respiration

Advanced:

Convulsions	Hyperreflexia
Decreased consciousness	Increased pulse and blood pressure

Later Stages:

Hypotension	Hypothermia
Dyspnea et al	

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1992, pages 120-123:

Amphetamines and cocaine (CNSS):

Dilation of pupils	Increased blood pressure
Slight tremor	Restlessness
Agitation	Possibly hallucinations

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3<sup>rd</sup> Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989, page 99:

CNSS cause:

Dilation of pupils	Rapid heart rate
Elevation of blood pressure	Tremor in hands
Increased body temperature	Restlessness

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), pages 25, 121:

Amphetamine:

Dilation of pupils	Increase heart rate
Blood pressure	Flushing
Teeth grinding	Dry mouth
Tremors	Lack of coordination

Pages 64, 100, 121:

Dilation of pupils	Increased heartbeat
Increased temperature	Similar to amphetamine

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), pages 8 and 10:

Cocaine and Amphetamine:

Dilated pupils	Increased pulse
Increased blood pressure	Vasoconstriction
Agitation tremors	Increased temperature

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), page 29:

Amphetamines:

Pupil dilation (Mydriasis)	Increased pulse rate
Elevated blood pressure	Hyperactive
Talkative	Irritable
Restless	Anorexia
Tremors	Urinary retention
Teeth grinding (Bruxism)	Fidgety, jerky, random motions
Illogical, loose thoughts	

Page 295: Cocaine:

Dilated pupils	Tachycardia
Increased blood pressure	Vasoconstriction
Hyperpyrexia	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D.D Plenum Medical Book Company, New York (1988) page 142:

Amphetamine:

Increased pulse	Increased blood pressure
Possibly increased temperature	Increased wakefulness
General increase in psychomotor activity	

Page 145: Cocaine

Mydriasis (dilated pupils)	May cause psychosis
Euphoria	Agitation

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 142:

Cocaine:

Maladaptive behavioral changes, e.g., euphoria, fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

Pupillary dilation	Tachycardia
Elevated blood pressure	Perspiration or chills
Nausea or vomiting	Visual or tactile hallucinations

Amphetamine:

Maladaptive behavioral changes, e.g., fighting, grandiosity, hyper-vigilance, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

Pupillary dilation	Tachycardia
Elevated blood pressure	Perspiration or chills
Nausea or vomiting	

## HALLUCINOGENS:

### DRE Symptomatology:

Dilated pupils	Increased pulse rate
Increased blood pressure	Increased temperature
Dazed appearance	Body tremors
Synesthesia	Hallucinations
Paranoia	Uncoordinated
Nausea	Disoriented
Difficulty in speech	Perspiring
Impaired perception of time/distance	

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, LSD and Related Drugs, page 564:

Pupillary dilation	Increased blood pressure
Tachycardia	Hyperreflexia
Tremor	Nausea
Piloerection	Muscular weakness
Increased body temperature	Hallucinations
Hyper vigilance	Synesthesia
Loss of boundaries	

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, LSD, pages 667-669:

Pupillary dilation	Increased heart rate
Increased body temperature	Piloerection
Weakness	Tremor
Hyperreflexia	Ataxia
Hallucinations	Depersonalization
Poor judgment	Mood swings

A Primer of Drug Action, Julien, Robert M.; W. H. Freeman and Company, New York, 1992

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3<sup>rd</sup> Ed.), Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989 page 160:

Dilated pupils	Increased blood pressure
Increased awareness	Faltered body images
Sensory input	Fine tremor
Flushed face	Increased body temperature

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, Inc New York (1984), pages 100; 115 120, 153):

### Hallucinogens:

Dilated pupils	Increased heart rate
Increased blood pressure	Increased temperature
Profuse perspiration	Loss of appetite
Hallucinations	

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990)

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989), page 218:

LSD:

Ataxia	High blood pressure
Hyperreflexia	Incoordination
Tachycardia	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Plenum Medical Book Company, New York (1988)

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 145:

Maladaptive behavioral changes, e.g., marked anxiety or depression, ideas of reference, fear of losing one's mind, paranoid ideation, impaired judgment, impaired social or occupational functioning.

Perceptual changes occurring in a state of full wakefulness and alertness, e.g., subjective intensification of perceptions, depersonalization, derealization, illusions, hallucinations, Synesthesia

Pupillary dilation	Tachycardia
Sweating	Palpitations
Blurring of vision	Tremors
Incoordination	

#### **DISSOCIATIVE ANESTHETICS (PHENCYCLIDINE)**

DRE Symptomatology:

Nystagmus	Increased pulse
Increased blood pressure	Increased temperature
Perspiring	Warm to the touch
Blank stare	Early onset of nystagmus
"Moon walking"	Difficulty in speech
Incomplete responses	Repetitive response
Repetitive speech	Increased pain threshold
Cyclic behavior	Confused, agitated
Hallucinations	Possibly violent and combative

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, PCP, page 565-567:

Nystagmus	Elevated heart rate
Elevated blood pressure	Feeling of intoxication
Staggering gait	Slurred speech
Numbness of extremities	Sweaty
Muscular rigidity	Blank stare
Drowsiness	Hostile behavior
Repetitive movements	

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988, PCP 768-777:

Nystagmus	Miosis
Depressed light reflexes	Blurred vision
Diminished pain	Ataxia
Tremors	Muscle weakness

Slurred speech	Drowsiness
Increased pulse rate	Increased blood pressure
Amnesia	Anxiety/agitation
Body image distortion	Euphoria
Depersonalization	Disordered thought processes
Hallucinations	

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997, page 262:

PCP:

Increased blood pressure	Blank stare
Disinhibition	Mood swings
Muscle rigidity	Agitation
Delirium excitement	Disorientation
Hallucinations	Analgesia
Speech difficulty	Pain tolerance
Elevated blood pressure	

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3<sup>rd</sup> Ed.), Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989 p. 178:

Sweating	Muscle rigidity
Fever convulsions	Increased blood pressure

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), page 100, 208:

PCP:

Nystagmus	Increased blood pressure
Increased pulse rate	Flushing
Mood swings	Hallucinations
Changes in body awareness	Speech difficulties
Violent behavior	Decreased responsiveness

Drug Abuse and Dependence, Grinspoon, Lester, M.D.; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 25:

PCP:

Body image distortions	Increased blood pressure
Nystagmus	Muscle rigidity
Loss of muscle control	Incoherent speech
Memory loss drooling	Blank stare

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989) page 296:

PCP:

Nystagmus	Disorientation
Hallucination	Extreme agitation
Loss of motor control	Disassociation from
Automated speech	Environment
Nystagmus at rest	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D. Ph.D.D Plenum Medical Book Company, New York (1988), page 156:

PCP:

Ataxia	Tremors
Muscular hypertonicity	Hyperreflexia
Ptosis	Tachycardia
HGN, VGN, and Rotary Nystagmus	Elevated blood pressure
Mood swings	

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 155:

Maladaptive behavioral changes, e.g., belligerence, assaultiveness, impulsiveness, unpredictability, psychomotor agitation, impaired judgment, impaired social or occupational functioning.

VGN or HGN	Increased blood pressure or heart rate
Numbness or diminished responsiveness to pain	Ataxia
Dysarthria (slurred speech)	Muscle rigidity
Seizures	Hyperacusis

#### **NARCOTICS:**

DRE symptomatology:

Constricted pupils	Decreased pulse rate
Decreased blood pressure	Decreased temperature
Ptosis (droopy eyelids)	“on the nod”
Drowsiness	Depressed reflexes
Low, raspy speech	Dry mouth
Facial itching	Euphoria
Fresh puncture marks	

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Opioids page 541-545

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988; Heroin, pages 702-703. See also Methadone, Demerol, etc.

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997:

Morphine:

Constricted pupils	Decreased blood pressure
Drowsiness	Dysphoria
Mental clouding	Sedation
Depressed respiration	Analgesia
Euphoria	

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3<sup>rd</sup> Ed., Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989:

Decrease pain (p.6)

Encyclopedia of Drug Abuse, O'Brien, Robert, Cohen, Sydney. M.D. Facts on File, INC New York (1984) page 100, 120, 123, 124:

Narcotics:

Constricted pupils	Reduced heart rate
Analgesia	Depressed appetite
Euphoria	Going "on the nod"

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990), page 14:

Narcotics:

Constricted pupils	"nodding off"
Dreamy state	Pain suppression
Euphoria	

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989) page 293 – 294:

Miosis (constricted pupils)	Bradycardia (decreased heart beat)
Hypothermia (decreased temperature)	Euphoria/dysphoria
Drowsiness lethargy	Confusion
Flaccid muscle tone	Depressed respiration
Analgesia	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D.D Plenum Medical Book Company, New York (1988), page 132:

Miosis (constricted pupils)	Low blood pressure
Itching	Flushing sweating

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 152:

Maladaptive behavioral changes, e.g., initial euphoria followed by apathy, dysphoria, psychomotor retardation, impaired judgment, impaired social or occupational functioning.

Pupillary constriction	Drowsiness
Slurred speech	Impairment in attention or memory

#### **INHALANTS:** (Toluene)

##### DRE symptomatology:

Nystagmus	Increased pulse rate
Increased blood pressure	Residue around nose
Odor on mouth	Nausea disorientation
Slurred speech	Confusion

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Inhalants, page 567

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3<sup>rd</sup> Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989. P. 185:

Decreased inhibitions	Floating sensation
Drowsiness	Light sensitivity
Sneezing runny nose	

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984):

Lowered inhibitions	Restlessness
Incoordination confusion	Disorientation
Nausea	Impaired judgment

Drug Abuse and Dependence, Grinspoon, Lester, MD; Bakalar, James B., Harvard Medical School Mental Health Review No. 1 (1990)

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey (1989), pages 265, 272, 297:

Toluene:

Nystagmus	Ataxia
Tremors cerebellar	Irritability
Rambling speech	Light headedness
Tremors	CNS depression that mimics ataxia
Narcotic analgesics	Blank stare
Euphoric mood	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988):

Brief euphoria	Giddy intoxication, similar to alcohol
CNS depression (volatile solvents/toluene)	Vertigo
Dizziness	

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 149:

Maladaptive behavioral changes, e.g., belligerence, assaultiveness, apathy, impaired judgment, impaired social or occupational functioning.

Nystagmus	Dizziness
Incoordination	Slurred speech
Unsteady gait	Lethargy
Depressed reflexes	Psychomotor retardation
Tremor generalized muscle	Blurred vision or diplopia
Stupor or coma	Weakness
Euphoria	

## **CANNABIS**

DRE Symptomatology:

Dilated pupils	Paranoia
Odor of Marijuana	Debris in mouth
Body tremors	Eyelid tremors
Relaxed inhibitions	Increased appetite
Impaired perception of time and distance	Disorientation

The Pharmacological Basis of Therapeutics, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Cannabis, pages 559-561:

Euphoria	Short term memory impairment
Temporal disintegration	Balance and stance impairment
Information processing impairment	Increased hunger
Dry mouth	Additive to alcohol

Lower doses affects perception, impairing well beyond when subject subjectively feels effects; alters all information processing; relatively simple motor skills unaffected

High doses:

Anxiety	Increased heart rate
Increased systolic blood	Pressure
Hallucinations	Simple motor skills affected

Medical Toxicology-Diagnosis and Treatment of Human Poisoning, Ellenhorn, Matthew J., Barceloux, Donald G. Elsevier Science Pub. Co. 1988; Cannabis, page 678-681:

Euphoria	Motor coordination impairment
Temporal distortion (time slows)	Relaxation
Loss of short term memory	Systematic thinking impaired
Stimulated appetite	Dry mouth

Impairment of motor tasks and reaction times requires higher dosages

A Primer of Drug Action, Julien, Robert M. W.H. Freeman and Company, New York, 1997, Marijuana

Increased blood pressure	Altered sensory perception
Dry mouth	

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3<sup>rd</sup> Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989, page 145:

Cannabis:

Red Eye	Euphoria
Relaxation	Dry mouth
Increased heart rate	Possibly nystagmus
Time distortion	Short term memory
Impairment in ability to do multi-step tasks	Tremors
Decrease level of motor coordination	

Encyclopedia of Drug Abuse, O'Brien, Robert; Cohen, Sydney. M.D. Facts on File, INC New York (1984), pages 100, 120:

Marijuana:

Red eye	Increased heart beat
Time and space distortions	Dryness of mouth and throat
Increased heart rate	Increased pulse rate
Increased appetite	

Drug Abuse and Dependence, Grinspoon, Lester,MD; Bakalar,James B., Harvard Medical School Mental Health Review No. 1 (1990).page 19:

Marijuana:

Increased appetite	Faster heartbeat
Bloodshot eyes	Confusion
Agitation	Incoordination
Hallucinations	

Drugs of Abuse, Giannini, A. James, M.D.; Slaby, Andrew E. M.D., Ph.D. Medical Economics Books, Oradell, New Jersey(1989), page 296:

Cannabis:

Red Eye	Increased appetite
Pleasant relaxation	Intensification of sensations
Slowed time	Passivity
Apathy	Tachycardia (increased heart rate)
Problems with motor coordination	

Manual of Drug and Alcohol Abuse, Guidelines for Teaching in Medical and Health Institutions, ed Arif, Awni. M.D., Westermeyer, Joseph, M.D.. Ph.D..D Plenum Medical Book Company, New York (1988), page 147:

Cannabis:

Red Eye	Increased hunger
Changes in time sense	Short-term memory loss
Memory	Dry mouth
Coordination	Tachycardia (rapid heartbeat)
Balance and stance	Elevated systolic pressure affected

Diagnostic and Statistical Manual of Mental Disorders (Third Ed, Revised), American Psychiatric Association (1987), p. 140:

Maladaptive behavioral changes, e.g., euphoria anxiety, suspiciousness, or paranoid ideation, sensation of slowed time, impaired judgment, social withdrawal.

Red Eye	Increased appetite
Tachycardia (rapid heart)	Dry mouth

#### **LACK OF CONVERGENCE:**

Clinical Procedures for Ocular Examination, Kurtz and Carlson; McGraw-Hill Medical, 3<sup>rd</sup> Edition, September 26, 2003.

A Recognized Clinical Trial of Treatment for Convergence Insufficiency in Children, Scheiman, Cotter, Cooper, et al, Arch Ophthalmology, Jan 2005.

# 14 **DRE**

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## HALLUCINOGENS

### LEARNING OBJECTIVES

- Describe a brief overview of the Hallucinogen category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs and other effects associated with this category
- Describe typical time parameters, i.e., onset and duration of effects, associated with this category
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs

### CONTENTS

A. Overview of the Category.....	3
B. Possible Effects.....	11
C. Onset and Duration of Effects .....	13
D. Overdose Signs and Symptoms .....	14
E. Expected Results of the Evaluation .....	15
F. Review of the DEC Program Exemplars .....	17

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Review of the DEC Program Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations



## Learning Objectives

- Describe a brief overview of the Hallucinogen category of drugs
- Identify common drug names and terms
- Identify common methods of administration
- Describe symptoms, observable signs and other effects
- Describe typical time parameters
- List indicators likely to emerge during the drug influence evaluation

DRE

14-2

**Slide 2.**

Instructor  
Note

***Briefly review the objectives, content, and activities of this session.***

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## A. Overview of the Category

Session 14: Hallucinogens

### Overview of Hallucinogens

Drugs that affect a person's perceptions, sensations, thinking, self-awareness and emotions



DRE 14-3

**Slide 3.**

Hallucinogens are drugs that affect a person's perceptions, sensations, thinking, self-awareness, and emotions. The word "Hallucinogen" means something that causes hallucinations. Definition from The Random House College Dictionary (Revised Edition, 1980).

A hallucination is a sensory experience of something that does not exist outside the mind.

Seeing, hearing, smelling, tasting, or feeling something that isn't really there.

Having distorted sensory perceptions so things look, sound, smell, etc. differently than they really are.

Hallucinogenic drugs many times produce what are called pseudo-hallucinations: i.e., the user typically is aware what he or she is seeing, hearing, smelling, etc. isn't real, but is a product of the drug. This is not always the case. However, some users may believe their experience is real.



***Emphasize the fact that although the user knows the hallucinations aren't real doesn't make those hallucinations any less dangerous if they occur while driving.***

Because they often make the user appear to be psychotic, Hallucinogens are sometimes called psychotomimetic drugs. "Psychotomimetic" means "something that mimics psychosis." Psychosis is a major mental disorder. It implies a loss of touch with reality.



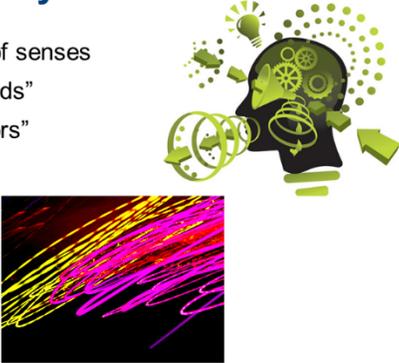
***Point out some Hallucinogens may create a psychotomimetic response in the user, meaning they literally appear to have psychosis.***

Session 14: Hallucinogens

## Synesthesia

A transposition of senses

- “Seeing sounds”
- “Hearing colors”



DRE 14-4

**Slide 4.**

One common type of hallucination produced by these drugs is called Synesthesia, which is a sensory perception disorder, in which an input via one sense is perceived by the brain as an input via another sense. In its simplest terms, it is a transposition of senses.

**Synesthesia can occur naturally in a small percentage of the population and can differ from drug-induced synesthesia.** Examples: The user may “see a flash of color, or some other sight, when the telephone rings.” Sounds, for example, may be transposed into sights. Sights may be transposed into odors. The user may “smell” a particular fragrance when he or she looks at something painted yellow. The illusions and distorted perceptions produced by hallucinogenic drugs may be very alarming, even terrifying. They may produce panic and uncontrolled excitement.



***Bad Trips: Point out the expression “bad trip” refers principally to these panic-filled reactions to Hallucinogens.***

The user may be unable to cope with the terror and may attempt to flee wildly. A user who is emotionally or mentally unstable may become psychotic in response to this frightening experience.

Session 14. Hallucinogens

## Sensory Perceptions




**Delusion**

- A false belief

**Illusion**

- A false perception

DRE 14-5

**Slide 5.**

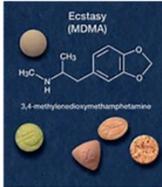
Remember Hallucinogens produce delusions, illusions, or both. A delusion is a false belief, i.e., “I am an elephant.” An illusion is a false perception, a misrepresentation of what the senses are receiving, i.e., “I see an elephant.”

Session 14. Hallucinogens

## Hallucinogens Sub-Categories



Natural



Synthetic

DRE 14-6

**Slide 6.**

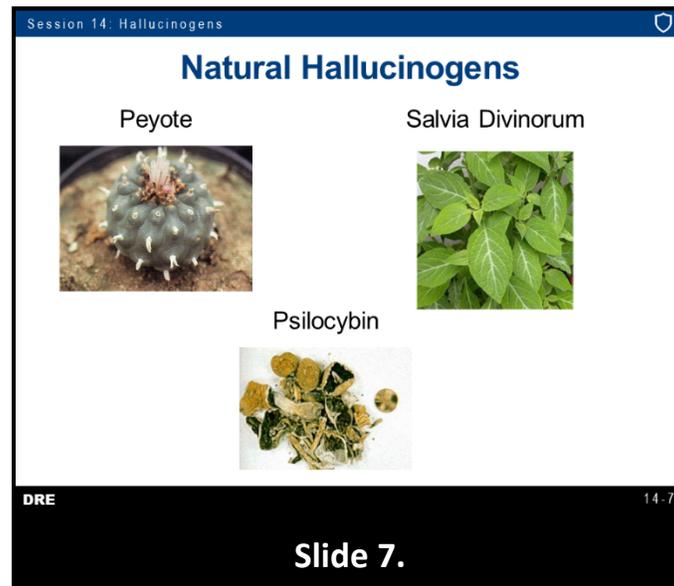
Some Hallucinogens come from natural sources, while others are synthetically manufactured. Natural – those occurring in nature, such as various plants.

Peyote, Psilocybin, and Salvia Divinorum are examples of naturally-occurring Hallucinogens. Other naturally-occurring Hallucinogens include Nutmeg, Jimson Weed, Morning Glory seeds, and Bufotenine, a substance found in the glands of certain toads.



*Some regional or local Hallucinogens may be discussed in more detail.*

Synthetic – those made solely in a laboratory. MDMA, LSD, DOM and 2CB are examples of synthetic Hallucinogens.



Peyote is a small, spineless cactus. The active, hallucinogenic ingredient in peyote is Mescaline. Mescaline is a chemical relative of adrenaline. Effects may be similar to those that would result from a massive rush of adrenaline. Mescaline was first isolated from Peyote in 1856. It was named after the Mescalero Apaches. Peyote is used legally in religious ceremonies of the Native American Church.

Psilocybin is a drug found in a number of different species of mushrooms of the genus Psilocybe. There are over 185 known species of mushrooms that contain Psilocybin and Psilocin.



**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

These mushrooms have been used in Native American religious ceremonies for thousands of years. An unstable derivative of Psilocybin, called Psilocin, is also found in these mushrooms, and has hallucinogenic properties. Psilocybin is chemically very similar to Serotonin, a neurotransmitter found in the brain. The effects of Psilocybin may be similar to what would happen if the brain were suddenly flooded with Serotonin.



***If available, show slides of Psilocybin Mushrooms.***

Salvia Divinorum, also known as S. Divinorum or Salvia, is a naturally occurring Hallucinogen. Salvia Divinorum is a perennial herb in the mint family native to certain areas of Mexico. The plant, which can grow to over three feet in height, has large green leaves, hollow square stems, and white flowers with purple calyces (tiny spikes) can also be grown successfully outside of this region. Salvia Divinorum has been used by the Mazatec Indians for its ritual divination and healing. The active constituent of Salvia Divinorum has been identified as Salvinorin A. Some common street names for Salvia Divinorum include:

- Salvia
- Sally D
- Magic Mint
- Maria Pastora
- Diviner's Sage

Salvia is not listed under the Controlled Substance Act (CSA), but it has been banned in many States. It has not been approved for medical use.

There are several methods of administering Salvia with varying durations of hallucinogenic effects. Dried leaves of Salvia can be smoked like marijuana, in a bong, pipe, or as a joint, with the effects lasting up to 15-30 minutes. Fresh leaves can be chewed as a quid. The leaves of Salvia produce extractions of Salvinorin A before the leaves are removed from the mouth. Effects from chewing Salvia can last up to one hour.

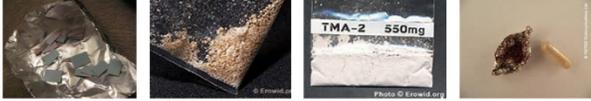
Other naturally-occurring Hallucinogens include *Nutmeg*. Nutmeg contains Myristicin, a natural compound that has mind-altering effects if administered in large doses. The buzz can last a long time and can be hallucinogenic, much like LSD. Jimson weed is a member of the Belladonna alkaloid family and grows naturally in many parts of the United States. It can be brewed as a tea or chewed and seed pods contain myristicin, a natural compound that has mind-altering effects if administered in large doses. The buzz can last one to two days and can be hallucinogenic, much like LSD. The seeds of several varieties of *Morning Glory* (*Ipomoea violacea*) contain a naturally-occurring Tryptamine called Lysergic Acid Amide (LSA), which is closely related to LSD. Seeds are normally administered orally and can be eaten whole or the active alkaloids can be extracted. Like LSD, LSA is a Hallucinogen, which can have strong mental effects. *Bufo tenine* is a Hallucinogen found in frog or toad skins, most notably in the Colorado River Toad (*Bufo alvarius*).

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Session 14: Hallucinogens

## Synthetically-Manufactured Hallucinogens

- Lysergic Acid Diethylamide (LSD)
- 25I-NBOMe and analogs
- Trimethoxyamphetamine (TMA)
- Dimethyltryptamine (DMT)



DRE 14-8

**Slide 8.**

Lysergic Acid Diethylamide (LSD), Trimethoxyamphetamine (TMA), Dimethyltryptamine (DMT), MDMA, MDA, and 2CB are examples of synthetically-manufactured Hallucinogens.

LSD is perhaps the most famous of the synthetically-manufactured Hallucinogens.



***If available, show slides of various forms of LSD.***

First produced in 1938, although its hallucinogenic properties were not discovered until 1943. LSD was used in psychotherapy during the 1940's and early 1950's. Example: it was occasionally used in the treatment of alcoholism. Although LSD is a synthetic drug, it was first derived from Ergot, a fungus that grows on rye and other grains. Pharmaceutical companies market a combination of Caffeine and Ergot used medically to treat migraine headaches. Another synthetically manufactured hallucinogen is 25I-NBOMe: 2-(4-iodo-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl) ethanamine, a synthetic drug with effects similar to LSD. It is often referred to as "N-Bomb" or "Smiles".



***25I-NBOMe and analogs have been banned by DEA.***

Session 14: Hallucinogens

## Psychedelic Amphetamines

- 3,4-Methylenedioxyamphetamine (MDA)
- 3,4-Methylenedioxyamphetamine (MDA)
- 2CB
- DOM (STP)



DRE 14-9

**Slide 9.**

MDA, MDMA, DOM, and TMA are synthetically-manufactured hallucinogens sometimes called “Psychedelic Amphetamines.” Chemically related to Amphetamines and produce many effects similar to those of CNS Stimulants. Chemically related to Mescaline. Among users, MDA sometimes is referred to as the “Mellow Drug of America.”



***Point out there are many more Hallucinogens beyond those listed in this session.***

An important fact about Hallucinogens is they are not addictive, in the sense cessation of use does not produce withdrawal signs or symptoms; however, regular users do develop tolerance to these drugs.



***Point out many people repeatedly abuse these non-addictive drugs because they enjoy the hallucinogenic effects they produce.***

MDMA is an abbreviation for 3,4-Methylenedioxyamphetamine and is commonly referred to as “Ecstasy”. It is a hallucinogen that also acts as a stimulant. It produces an energizing effect as well as distortions in time and perception and enhances enjoyment from tactile experiences.

MDA is an abbreviation for 3,4-Methylenedioxyamphetamine. It is normally produced as a clear liquid or as a white powder in capsule or tablet form.

2CB (4-Bromo-2, 5-Dimethoxyphenethylamine) is a white powder usually found in pressed tablets or gel caps. It is considered a synthetic psychedelic amphetamine.



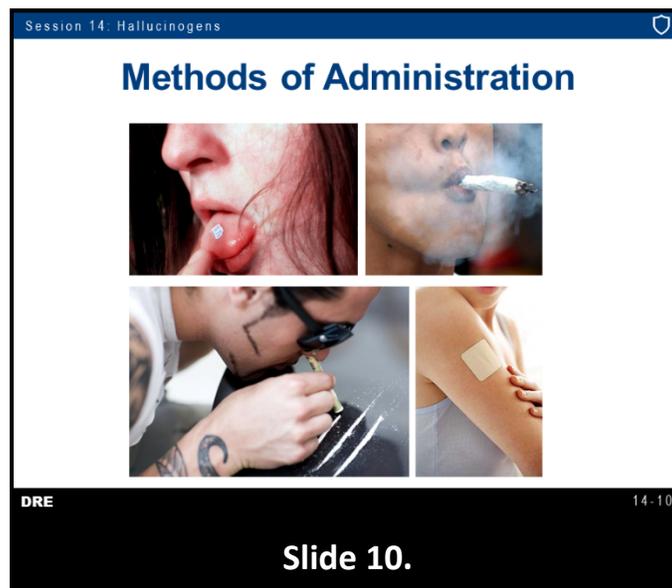
***(DEA, Feb. 2011)***

A popular drug first synthesized in 1974. White powder usually found in pressed tablets or gel caps. Sometimes referred to as “Venus,” “Nexus,” and “Bromo-Mescaline” 2CB’s effects are dose related. Lower doses (5-15mg) produce enhanced sensual sensations and feelings of being “in one’s body”. At higher doses (15-30mg), it produces intense visual effects that includes moving objects with “trails” behind them and colors appearing from nowhere.

DOM (2, 5-dimethoxy-4-methylamphetamine) is also known as STP. STP is an abbreviation for “Serenity, Tranquility, and Peace.”



***Solicit participants’ comments or questions on this overview of Hallucinogens.***



The most common method of administering Hallucinogens is orally. Peyote, Psilocybin, and Jimson Weed are often brewed in a tea. Salvinorin A can be ingested by chewing the leaves.

Some Hallucinogens can also be smoked, such as Peyote, Salvinorin A, and DMT. However, LSD cannot be administered by smoking. LSD is usually administered orally, or it can also be absorbed by placing drops in the eye.

MDMA and many other Psychedelic Amphetamines can also be insufflated, or “snorted.”

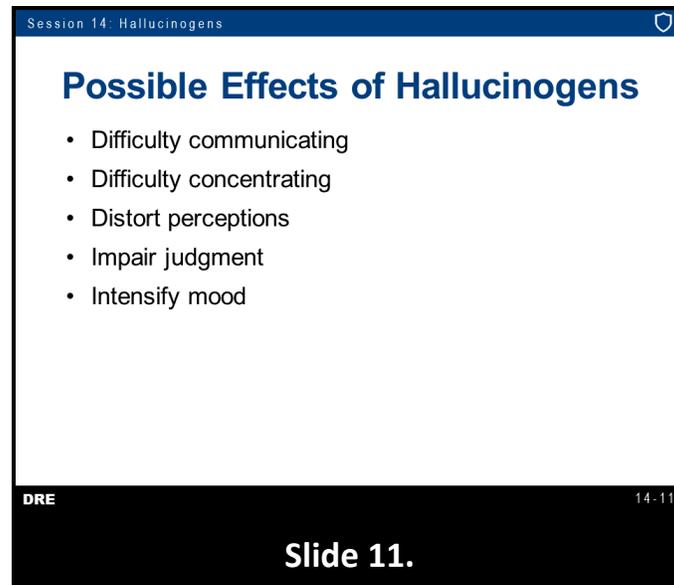
Some Hallucinogens, such as LSD, can be administered and absorbed through the skin.

**Officers should make it a practice to wear protective gloves when handling any suspected drugs.**



***Stress that participants should be familiar with all of the drug names in this category.***

## B. Possible Effects



Session 14: Hallucinogens

### Possible Effects of Hallucinogens

- Difficulty communicating
- Difficulty concentrating
- Distort perceptions
- Impair judgment
- Intensify mood

DRE 14-11

**Slide 11.**

The effects of Hallucinogens vary widely and are affected by the user's personality, mood, expectations, and by the surroundings in which the drug is taken.

The most common effect of the Hallucinogen is hallucination: the distorted perception of reality, often with a mixing of senses that makes it virtually impossible for the drug-influenced user to function in the real world.

Generally, Hallucinogens intensify whatever mood the user is in at the time the drug is taken. If the user is depressed, the drug will usually deepen the depression. If the user is feeling pleasant, the drug will usually heighten that feeling.

If the user expects the drug will help him or her achieve new insights or an expanded consciousness, the "trip" will seem to have that effect.

However, Hallucinogens also often uncover mental or emotional flaws the user was unaware of possessing. Therefore, many users who expect a positive experience with the drug will encounter instead the panic of a "bad trip."

Hallucinogens may cause difficulty concentrating, communicating clearly, or distinguishing between reality and illusion. They may also distort perceptions, impair judgment, and induce body-wide dissociative or stimulating sensations, which may cause panic reactions or violent defensive behaviors.



## Salvia Divinorum Effects

- Chills
- Confused sentence patterns
- Dizziness
- Feelings of floating through space or flying
- Intense hallucinations
- Lack of coordination
- Nausea
- Slurred speech
- Twisting and spinning

DRE

14-12

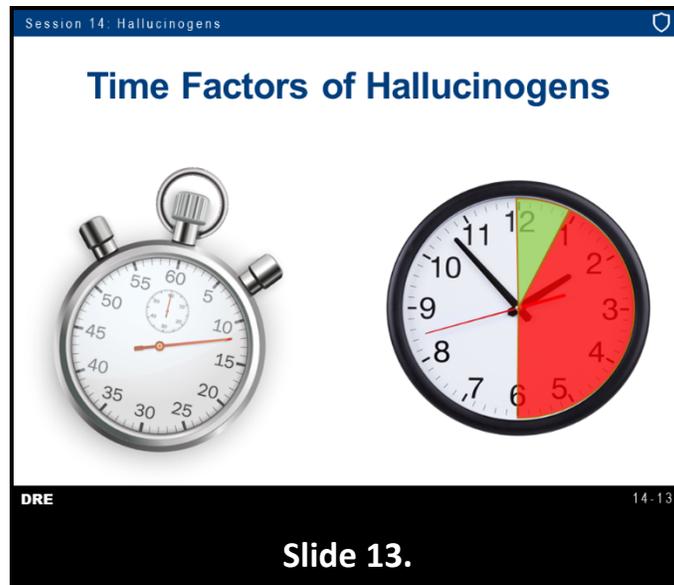
**Slide 12.**

Effects of Salvia Divinorum include: intense hallucinations; feelings of floating through space or flying; twisting and spinning; dizziness; nausea; lack of coordination; slurred speech; confused sentence patterns; and chills.

**Source:**

*Salvia Divinorum*. (2020, April). Retrieved May 16, 2022, from United States Drug Enforcement Administration: <https://www.dea.gov/factsheets/salvia-divinorum>

## C. Onset and Duration of Effects



The time parameters associated with Hallucinogens vary from drug to drug.

The effects of Peyote (Mescaline) begin to be felt within approximately one-half hour after eating the cactus “buttons.” Effects generally last up to 12 hours.

Psilocybin also begins to exert its effects within one-half hour. The effects generally last up to 5 hours.



**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

LSD’s effects begin to be felt within 30 – 45 minutes. The effects gradually diminish 6 – 8 hours after administration.



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

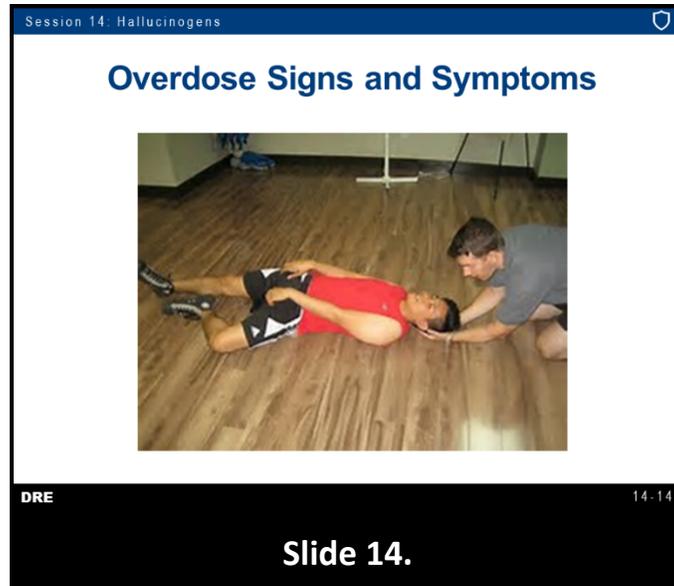
MDMA’s effects usually begin within several minutes to a half hour if taken orally. The duration of effects can last from 1 – 3 hours.

Onset and duration of effects of other Hallucinogens vary widely from about 2 hours to about 24 hours.



**Solicit participants' comments and questions concerning time factors.**

## D. Overdose Signs and Symptoms



The most common danger of an overdose of Hallucinogen is an intense “bad trip” which can result in severe and sometimes permanent damage. “Bad trips” may consist of severe, terrifying thoughts and feelings, fear of losing control, and despair.

Apart from Psychedelic Amphetamines, it is unlikely other Hallucinogens would directly result in death from overdoses. There have been occasions people have overdosed on Psychedelic Amphetamines, resulting in a condition similar to heat stroke, convulsions, and even death. However, an overdose on other hallucinogens can still be extremely dangerous and indirectly result in death.

The extreme panic and agitation of a “bad trip” have been known to result in suicide or in accidental death as the user attempts to flee the hallucinations.

Sometimes Hallucinogens induce a perception of invulnerability in the user, leading to bizarre and very dangerous behavior and death. For example, at least one LSD user was killed when he attempted to stop a train. Others have died from jumping off buildings believing they can fly.

Some evidence suggests prolonged use of LSD may produce organic brain damage, leading to impaired memory, reduced attention span, mental confusion, and impaired ability to deal with abstract concepts.

## E. Expected Results of the Evaluation

Session 14: Hallucinogens

### Hallucinogen Symptomatology Chart

HGN	None
VGN	None
LOC	None
Pupil Size	Dilated
Reaction to Light	Normal <sup>(3)</sup>
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid

<sup>(3)</sup> Certain psychedelic amphetamines may cause slowing

DRE 14-15

**Slide 15.**



***Observable Evidence of Impairment: Point out some subjects under the influence of Hallucinogens may not be able to understand or complete the tests, especially if the subject is hallucinating.***

**Eye Exams:** Neither Horizontal Gaze Nystagmus (HGN) nor Vertical Gaze Nystagmus (VGN) will be present. Lack of Convergence (LOC) will not be evident.

**Psychophysical Tests:** Performance on the Modified Romberg Balance (MRB) test will generally be impaired, particularly in the subject's estimation of the passage of 30 seconds.



***Emphasize DRE officers conducting evaluations on subjects under the influence of Hallucinogens should be especially careful due to the bizarre and unpredictable behavior of these subjects.***

Performance on the Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) tests will generally be impaired due to the subject's severe visual distortion, impaired perception of distance, and decreased muscle coordination.

**Vital Signs:** Pulse will generally be elevated. Blood pressure generally will be elevated. Body temperature generally will be elevated.

**Dark Room:** Pupils generally will be dilated. Reaction to light will usually be normal. Certain Psychedelic Amphetamines may cause slowing of the pupil's Reaction to Light.

Muscle tone generally will be rigid.

Session 14: Hallucinogens

## Evaluation of Subjects Under the Influence of Hallucinogens

**General Indicators:**

- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Hallucinations
- Impaired perception of time and distance
- Memory loss
- Nausea
- Paranoia
- Perspiring
- Piloerection
- Synesthesia
- Uncoordinated

DRE 14-16

**Slide 16.**

General Indicators:

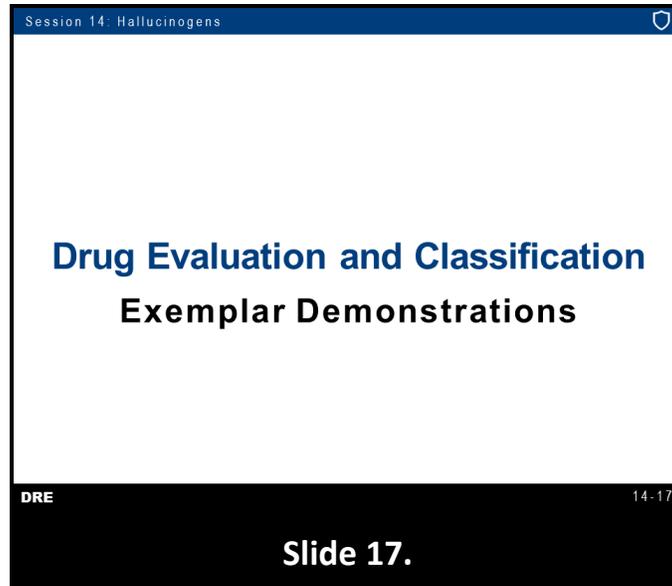
- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Hallucinations
- Impaired perception of time and distance
- Memory loss
- Nausea
- Paranoia
- Perspiring
- Piloerection (hair standing on end, i.e. goosebumps)
- Synesthesia
- Uncoordinated



***For more information and details regarding possible effects refer to***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## F. Review of the DEC Program Exemplars



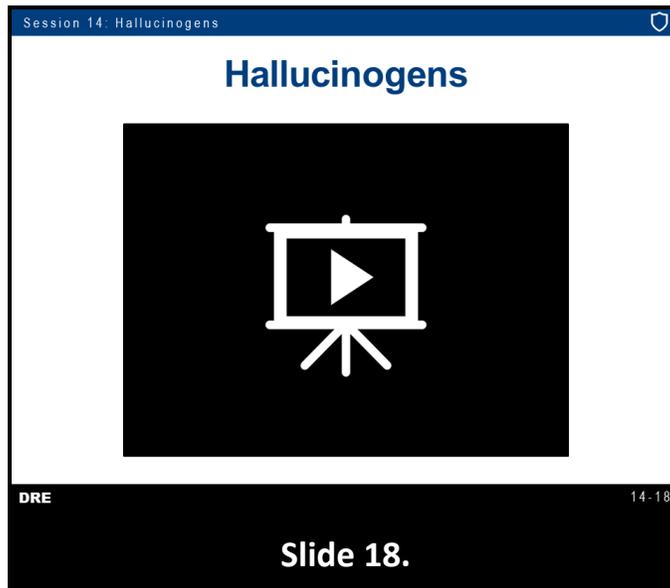
***Refer participants to the exemplars found at the end of Session 14 of their participant guide.***

***Point out the exemplars are examples and serve as a guide.***

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.



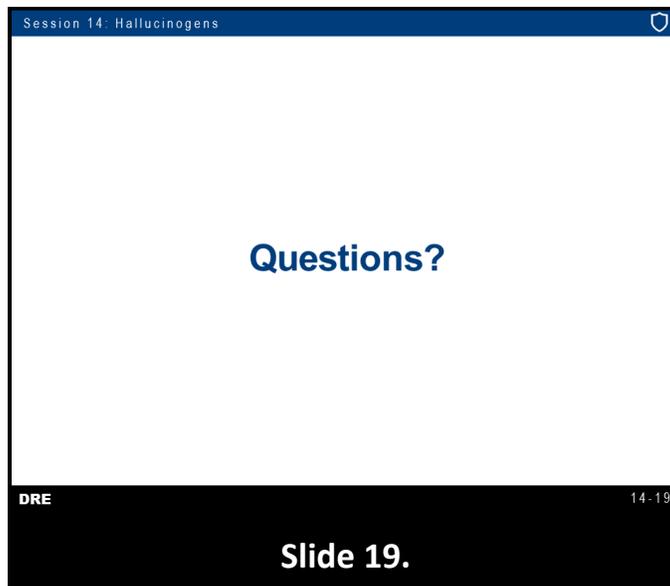
***Relate the items on the exemplars to the Hallucinogen Symptomatology Chart.***



**VIDEO DEMONSTRATION.** Click video to begin.

*Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.*

*Show video example of subject under the influence of a Hallucinogen. (Approximately 19 minutes).*



*Solicit participants' questions or comments concerning expected results of the evaluation of subjects under the influence of Hallucinogens.*



## Test Your Knowledge

1. What does “synesthesia” mean?
2. Name two naturally-occurring Hallucinogens.
3. What is a “bad trip”?
4. What does “psychotomimetic” mean?

DRE

14-20

**Slide 20.**

### Test Your Knowledge

1. What does “synesthesia” mean?
2. Name two naturally occurring Hallucinogens.
3. What is a “bad trip”?
4. What does “psychotomimetic” mean?

**Instructor  
Note**

1. ***A sensory perception disorder, in which an input via one sense is perceived by the brain as another sense. “Hearing” a phone ring and “seeing” the sound as a flash of light. Synesthesia sometimes occurs with persons under the influence of hallucinogens.***
2. ***Peyote, Psilocybin, Nutmeg, Jimson Weed, Morning Glory seeds, and/ or Bufotenine***
3. ***An hallucination where the user becomes panic-stricken by what he/she is seeing or hearing, and may become uncontrollably excited, or even try to flee from the terror.***
4. ***Literally “mimicking psychosis,” or “impersonating insanity.” A drug is considered psychotomimetic if persons who are under the influence of the drug look and act insane while they are under the influence of that drug.***



## Test Your Knowledge

5. What is an “illusion”?
6. What is a “delusion”?
7. What is the difference between “hallucinations” and “pseudo-hallucinations”?
8. What is “piloerection”?

DRE

14-21

### Slide 21.

### Test Your Knowledge

5. What is an “illusion”?
6. What is a “delusion”?
7. What is the difference between “hallucinations” and “pseudo-hallucinations”?
8. What is “piloerection”?



Instructor  
Note

5. ***An “illusion” is a false perception, i.e., a misrepresentation of what the senses are receiving.***
6. ***A “delusion” is a false belief.***
7. ***The difference is the user typically knows what he/she is seeing, hearing, smelling, etc. is not real, but is a product of the drug with a “pseudo-hallucinations.”***
8. ***Literally, “hair standing up,” or goose bumps. This condition of the skin is often observed in persons who are under the influence of LSD.***



## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Flipping, Candi R.**

1. **Location:** The evaluation was conducted in the Interview Room at the Sioux Falls Police Department. The darkroom examinations were conducted in a storage room adjacent to the Interview Room. Both areas were well illuminated, and both had smooth concrete flooring.
2. **Witnesses:** The evaluation was witnessed and recorded by Lt. Isaac Kurtz of the South Dakota HP.
3. **Breath Alcohol Test:** The suspect's breath test was administered by Trooper Heurtz prior to my arrival with a 0.00% BAC result.
4. **Notification and Interview of the Arresting Officer:** I was working as part of a DUI Emphasis operation and was requested to conduct a drug evaluation for Trooper Heurtz of the SD HP. When contacted, Trooper Heurtz advised he had observed the suspect driving her vehicle 20 miles per hour under the posted speed limit and weaving within her lane on Highway 115. According to Trooper Heurtz, the suspect's vehicle tires nearly contacted the gravel shoulder numerous times. After Trooper Heurtz activated his emergency lights and siren, the suspect continued her poor driving until eventually stopping over a half mile later. When contacted, the suspect was extremely disoriented and had difficulty speaking. According to Trooper Heurtz, the suspect indicated she was in the area for the Sturgis Motorcycle Rally. She indicated she had just left an outdoor concert and was on her way to a friend's campsite near Deadwood. Trooper Heurtz suspected the driver might be impaired and attempted to administer SFST's at roadside. However, the suspect was unable to complete the SFST's due to her poor balance and lack of coordination. He attempted to administer the Horizontal Gaze Nystagmus (HGN) test but was unable to do so because the suspect could not focus on his penlight as requested. He also attempted to administer the Walk & Turn (W&T) test, but the suspect could not maintain her balance in the instructions stage. For this reason, he did not have the suspect attempt any other roadside tests. Trooper Heurtz arrested the suspect for DUI and transported her to the PD for processing. After obtaining a 0.00 BAC, he requested the assistance of a DRE.
5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the PD. She was seated on a bench and was perspiring heavily and had a flushed face. She appeared dazed and disoriented. I noted she was wearing cut-off jeans, a black tee-shirt, and was bare foot. She responded slowly to my greeting, and at times her attention was elsewhere. She was cooperative, and for the most part was responsive to my questions. However, some of her responses were not relevant to my questions. When I asked if she was feeling alright, she stated, "I am, but your shirt is really bright." At times she mumbled to herself and had rambling, slurred speech. She told me she believed it was about 5:00 pm, when it was actually 2:15 pm. She stated she ate breakfast earlier and had a muffin, eggs, and kale. He also indicated she had consumed 4 or 5 bottles of water during the day. She stated she slept the night before for about 3 or 4 hours. Her eyes appeared normal, but her pupils were noticeably dilated. When asked if she would submit to a drug evaluation, she replied, "Sure, okay, why not."
6. **Medical Problems and Treatment:** Several times the suspect reported feeling nauseous. When asked, she told me she did not require any medical attention and denied having any medical problems. She stated she was not epileptic or diabetic and does not take insulin. She indicated she is generally in good health, is not under the care of a doctor or dentist and has no physical defects.
7. **Psychophysical Indicators of Impairment:** For the following psychophysical tests, the suspect was given instructions and demonstrations for each one. She told me she understood the tests before each one was attempted. The following psychophysical tests were given:

**Modified Romberg Balance:** Three times the suspect asked me to repeat the instructions, and after the third time, she told me she understood them. During the test she swayed approximately 3” front to back and side to side. She had a slowed time estimation, estimating the passage of 30 seconds in 46 seconds. When asked how she estimated the 30 seconds, she stated, “I had a clock in my head and used that.” She exhibited arm and leg tremors while attempting the test.

**Walk & Turn:** For this test, a line on the concrete floor was used. However, she was unable to perform this test due to her extreme poor balance. Each time she attempted to get into the instruction position, she would lose her balance and nearly fall. The test was stopped for her safety. She appeared upset when she could not do the test and told me the test was not fair because the line was moving.

**One Leg Stand:** On the first attempt while raising her right foot, she swayed and used her arms for balance. She put her foot down immediately at count 1,001 to keep from falling. The test was then stopped for safety reasons. She attempted to stand on her right foot and raise her left foot off the floor and again immediately put her raised foot down at counts 1,002 and 1,003. While attempting the test, she used her arms for balance. For safety reasons, the test was stopped.

**Finger to Nose:** The suspect swayed noticeably, and she missed the tip of her nose on all six attempts. She used the pads of her fingers on attempts 2, 4 and 6. Several times during the test she laughed out loud. Several times she opened her eyes, looked at me, and then closed them again. Body tremors were present in her arms and legs.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. On the HGN test, she had to be reminded to focus on my penlight. I was able to complete the test, and no clues were observed. She did not exhibit VGN. She did not exhibit a lack of convergence, as her eyes were able to converge as instructed. Her pupils were dilated and above the DRE average ranges. In Room Light, her pupils were estimated at 7.5 millimeters (mm) in both eyes. In Near Total Darkness, her pupils were estimated at 9.0 mm in both eyes, and in Direct Light, they were estimated at 6.0 mm in both eyes. Her pupillary reaction to light was slow and she did not exhibit rebound dilation.

**Vital Signs:** The suspect’s pulse rates were elevated at 102, 104 and 102 beats per minute (bpm). All three were above the DRE average range. Her blood pressure was elevated at 166/98 millimeters of Mercury (mmHg). Her body temperature was elevated at 99.9° F. Both were above the DRE average ranges. Her muscle tone was rigid.

9. **Signs of Ingestion:** There were no signs of ingestion or injection. Her nasal and oral cavities were clear.
10. **Suspect’s Statements:** The suspect stated she was healthy and did not take medications. However, she admitted taking “a couple Molly’s” at a concert earlier in the day. She said they made her happy and helped her enjoy the music. When asked if “Molly” was Ecstasy, she replied, “Yea, I think so.”
11. **DRE’s Opinion:** It is my opinion as certified Drug Recognition Expert that Flipping was under the influence of a Hallucinogen and unable to operate a vehicle safely.
12. **Toxicological Sample:** A urine sample was collected from the suspect by Trooper Heurtz and was submitted as evidence pending analysis by the state crime laboratory.
13. **Miscellaneous:** Refer to Trooper Heurtz’s arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Lt. Allan Kolak</b>		DRE # <b>8191</b>	Rolling Log # <b>22-010-0102</b>	Evaluator's Agency <b>Cape Coral PD</b>	Case# <b>(Session XIV - #2)</b>
Recorder/Witness <b>Tim Cornelius, IPTM</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Cape Coral PD</b>	
Arrestee's Name (Last, First, Middle) <b>Tripp, Brad</b>		Date of Birth <b>07/18/1988</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sgt. Heather Causar #16882</b>
Date Examined / Time / Location <b>05/17/22 / 2210 / Collier Co. Jail</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>Drager 12355</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Sgt. Causar</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Couple of hotdogs</b>	When? <b>About 5 pm</b>	What have you been drinking? How much? <b>Water 3 or 4 bottles</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>About 7 pm / 2215</b>	When did you last sleep? <b>Yesterday</b>	How long? <b>About 6 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: <b>Indifferent, Paranoid at times</b>	Coordination: <b>Poor, Staggering</b>	
Speech: <b>Rambling, Incoherent at times</b>		Breath odor: <b>Normal</b>		Face: <b>Flushed, Sweaty</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>112</u> / <u>2221</u> 2. <u>110</u> / <u>2238</u> 3. <u>112</u> / <u>2244</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye    Left eye	
Modified Romberg Balance Approx. 2" 2"    Approx. 2" 2" 		Walk and Turn Test  S M M M M    M S S M M Leg tremors throughout		26/30 <b>One Leg Stand</b> 32/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Body tremors	
Time Estimation <u>22</u> estimated as 30 seconds		Describe turn <b>Lost balance. Had to regain footing</b>		Cannot do test (explain) <b>N/A</b>	
Type of footwear: <b>Leather sandals</b>		PUPIL SIZE		Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)
Finger to Nose (Draw lines to spots touched)  Tremors. Used pad of finger on attempts 3, 4, and 6. Slow jerky movements		Left Eye		6.0	9.0
Blood Pressure <b>160 / 96</b>		Right Eye		6.0	9.0
Temperature <b>99.8 °F</b>		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Direct (2.0 - 4.5) 5.5	
Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Reaction to Light: <b>Slow</b>		RIGHT ARM    LEFT ARM 	
Comments: Nothing observed		Type of footwear: <b>Leather sandals</b>		Nasal area: Clear	
What drugs or medications have you been using? <b>"Nothing" (Laughed outloud after answering)</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>
Date / Time of arrest: <b>05/17/22 2105</b>	Time DRE was notified: <b>2125</b>	Evaluation start time: <b>2210</b>	Evaluation completion time: <b>2305</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <i>Alan Kollak</i>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input checked="" type="checkbox"/> Hallucinogen		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Tripp, Brad**

1. **Location:** The evaluation was conducted on 05/17/22 in the Collier County Jail Interview Room. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting to conduct an evaluation and both have smooth tile flooring.
2. **Witnesses:** Timothy Cornelius from IPTM witnessed and recorded the evaluation. The darkroom examinations were witnessed by the arresting officer, Sgt. Heather Causer.
3. **Breath Alcohol Test:** The suspect's breath test was 0.00% and was administered by Sgt. Causer at the County Jail prior to my arrival.
4. **Notification and Interview of the Arresting Officer:** I was requested to conduct a drug evaluation for Sgt. Causer and contacted her at the Collier County Jail. She advised that she had arrested the suspect after observing him driving his vehicle along the gravel shoulder of Beach Road trying to pass slower moving vehicles. According to Sgt. Causer, the suspect was acting very strange and at times began talking to imaginary people. He also claimed that the overhead lights on Sgt. Causer's patrol vehicle were burning his eyes and skin. Sgt. Causer administered SFSTs and no clues of HGN were observed. However, the suspect did very poorly on the W&T and OLS tests, and due to his poor balance and coordination, some of the tests had to be stopped for safety reasons. According to Sgt. Causer, she could not detect an odor of alcoholic beverage on the suspect's breath. He was subsequently arrested for DWI and taken to the County Jail for processing. After obtaining a 0.00 BAC result, Sgt. Causer requested a DRE to assist with the investigation.
5. **Initial Observation of the Suspect:** I first observed the suspect sitting in the Interview Room of the CCSO Jail. He appeared to be extremely disoriented. At times, he was talking to himself, and once he pointed to the clock on the wall and began talking to it. He was indifferent, easily distracted, and at times paranoid acting, rambling about various things. He did tell me that he was not sick or injured. He had a flushed sweaty face. His breath odor was unremarkable. His coordination was poor, and at times he staggered as he walked. When asked what time it was, he thought it was about 7:00 pm, when it was actually 10:15 pm (2215 hours). He stated he had eaten a couple of hotdogs about 5:00 pm, and only had water to drink throughout the day. He denied consuming any alcohol. He stated he slept yesterday for about six hours. I noted that he was wearing soiled green pants, a red tee-shirt, and slip-on leather sandals.
6. **Medical Problems and Treatment:** The suspect indicated he was not sick and was not injured. No indicators of injury or illness were mentioned or observed during the evaluation. He stated he was not under the care of a doctor or dentist, was not epileptic or diabetic, and did not take insulin. He further stated he had no medical or mental health problems and was not taking any medication.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to each test. He stated he understood the instructions each time. The following tests were conducted:

**Modified Romberg Balance:** The suspect swayed approximately two inches front to back and side to side. His time estimation was fast, estimating 30 seconds in 22 seconds. When asked how he estimated the 30 seconds, he stated he could hear the clock ticking on the wall and used that. I asked what clock he was referring to as there were no clocks in the room. The suspect then pointed to an air vent behind me.

**Walk and Turn:** For this test, a line in the tile floor was used. The suspect lost his balance twice during the instructions stage and attempted to start the test too soon once. During the walking stage, he stopped while walking twice and missed touching heel to toe three times on the first nine steps. He also used his arms to balance once. He made an improper turn losing his balance and then having to regain his footing. After regaining his balance and starting the next nine steps, he missed touching heel to toe four times, stopped while walking once and used his arms for balance on all nine steps. Prior to attempting the test, he was asked if he preferred to remove his sandals. He looked at his feet for about 30 seconds, and said, "No, I have both feet." He then attempted the test with his sandals on.

**One Leg Stand:** The suspect swayed while balancing and used his arms for balance while standing on his left foot. He put his foot down once at 1,012 and counted to 1,026 in the 30 second period. While standing on his right foot and raising his left foot off the floor, he swayed while balancing and used his arms for balance once. He put his foot down twice, at his count of 1,017 and 1,020. He counted to 1,032 in the 30 second period. Lower body tremors were present throughout the test.

**Finger to Nose:** During this test, the suspect missed the tip of his nose with the tip of his index finger on each attempt. He used the pad of his finger on attempts 3, 4 and 6. He exhibited slow jerky movements with his arms on each attempt. His legs tremored constantly, and his arms exhibited tremors, particularly when each was at his side.

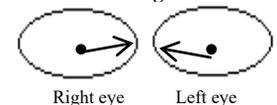
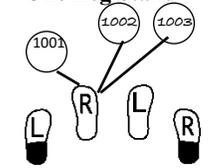
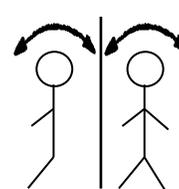
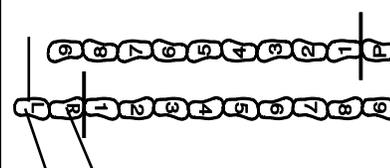
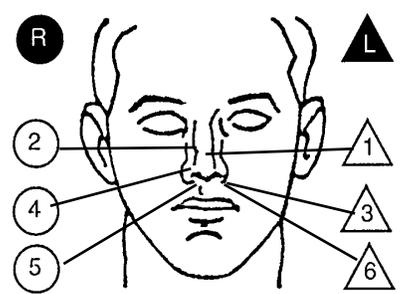
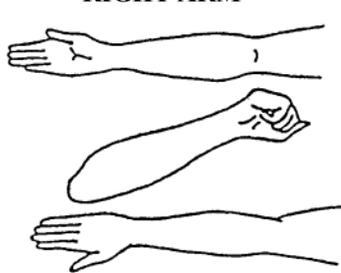
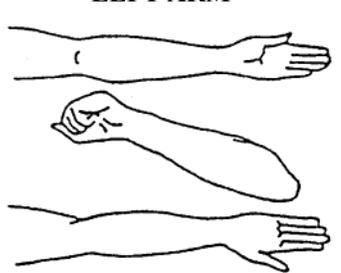
8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect's eyes tracked equally, his pupils were equal in size, and he did not have resting nystagmus. No clues of HGN were observed and he did not exhibit VGN. He did not exhibit a lack of convergence as his eyes were able to converge as instructed but only after repeated instructions to follow my penlight. His pupils were dilated in all three lighting levels and were estimated at 6.0 millimeters (mm) in both eyes in Room Light, 9.0 mm in both eyes in Near Total Darkness, and 5.5 mm in both eyes in Direct Light. All three estimates were above the DRE average ranges. His pupillary reaction to light was slow and he did not exhibit rebound dilation.

**Vital Signs:** The suspect's pulse rates were all above the DRE average range, at 112 beats per minute (bpm), 110 bpm and 112 bpm. His blood pressure was above the average ranges at 160/96 millimeters of mercury (mmHg). His body temperature was above the DRE average range at 99.8° F. His muscle tone was rigid.

9. **Signs of Ingestion:** No signs of ingestion were observed. His nasal and oral cavities were clear, and he had no injection marks on his arms or hands.
10. **Suspect's Statements:** The suspect denied drug use. He made numerous rambling statements that were at times incoherent. He at times appeared to be talking to someone or something that was not real. He seemed to see objects that were not actually present and was constantly looking around the room.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Hallucinogen and is unable to operate a vehicle safely.
12. **Toxicological Sample:** A urine sample was collected from the suspect and it was turned over to Sergeant Causer for submission to the crime lab for analysis.
13. **Miscellaneous:** Due to the suspect's periodic hallucinations and elevated vital signs, he was put on a medical watch alert by the jail staff and his condition was monitored. Refer to Sgt. Causer's report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Jay Penton</b>		DRE # <b>15465</b>	Rolling Log # <b>22-005-0032</b>	Evaluator's Agency <b>Alabama LEA</b>	Case# <b>(Session XIV - #3)</b>
Recorder/Witness <b>Dpty. Ricky Thompson, MCSD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Prattville PD</b>	
Arrestee's Name (Last, First, Middle) <b>Trumpet, Angel</b>		Date of Birth <b>01/12/1992</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sgt. Brian Gentry #25218</b>
Date Examined / Time / Location <b>07/29/22 / 1830 / Prattville PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>59882</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Sgt. Gentry</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>"Nothing, I'm fasting"</b>	When? <b>N/A</b>	What have you been drinking? How much? <b>Water 2 bottles</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>10 PM / 1833</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 4</b>	Are you sick or injured? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Upset stomach</b>	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I don't do drugs!"</b>			Attitude: <b>Argumentative, Excited</b>	Coordination: <b>Poor, Staggering at times</b>	
Speech: <b>Rapid, Incoherent at times</b>		Breath odor: <b>Rancid</b>		Face: <b>Flushed, Sweaty</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>108</u> / <u>183</u> 2. <u>106</u> / <u>1858</u> 3. <u>106</u> / <u>1912</u>	HGN Lack of Smooth Pursuit: <b>None</b> Maximum Deviation: <b>None</b> Angle of Onset: <b>None</b>	Left Eye <b>None</b>	Right Eye <b>None</b>	Convergence  Right eye: <b>None</b> Left eye: <b>None</b>	3/30 <b>One Leg Stand</b> NA/30 
<b>Modified Romberg Balance</b> Approx.      Approx.  Unable to stand. Test stopped for safety	<b>Walk and Turn Test</b>  Lost balance almost falling. Test stopped for safety reasons.		Cannot keep balance: <b>3</b> Starts too soon: _____ Stops walking: _____ Misses heel-toe: _____ Steps off line: _____ Uses arms: _____ Actual steps taken: _____	L R <input checked="" type="checkbox"/> <input type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input type="checkbox"/> Puts foot down <b>Nearly fell. Test stopped.</b>	
<b>Time Estimation</b> N/A estimated as 30 seconds	Describe turn N/A	Cannot do test (explain) N/A		Type of footwear: <b>Lace-up boots</b>	
<b>Finger to Nose</b> (Draw lines to spots touched)  Done seated for safety. Slow rigid movements		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>
		Left Eye	6.0	8.5	5.0
		Right Eye	6.0	8.5	5.0
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <b>Slow</b>
		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 	
		Nothing observed			
Blood Pressure <b>172 / 96</b>	Temperature <b>100.8 °F</b>	Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:	
What drugs or medications have you been using? <b>"Nothing. I told you, I don't do drugs!"</b>		How much? <b>N/A</b>	Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>	
Date / Time of arrest: <b>07/29/22 1725</b>	Time DRE was notified: <b>1810</b>	Evaluation start time: <b>1830</b>	Evaluation completion time: <b>1945</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>Jay Penton</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input checked="" type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Trumpet, Angel**

- 1. Location:** The drug evaluation was conducted in the interview room of the Prattville Police Department. The dark room examinations were conducted in the staff restroom at that location. Both areas have adequate lighting for conducting a drug evaluation and have a level and smooth concrete floor.
- 2. Witnesses:** Deputy Ricky Thompson of the Montgomery CO. S.O. Witnessed and recorded the evaluation.
- 3. Breath Alcohol Test:** The suspect's breath test was administered by Sgt. Brian Gentry with a 0.00 result.
- 4. Notification and Interview of the Arresting Officer:** On 07/29/22, at approximately 1810 hours, I was contacted by Sergeant Gentry from Prattville PD requesting my assistance with a DWI arrest. I responded to PPD and spoke with Sergeant Gentry and he reported finding the suspect's vehicle stopped, partially blocking East Main Street. Gentry contacted the suspect who was in the driver's seat and appeared dazed and disoriented. He stated the suspect repeatedly pointed into the sky and said she had stopped because the lights were so bright. According to Sergeant Gentry, there were no lights where the suspect was pointing. He further stated the suspect was at times incoherent and it took some time for her to understand who he was and to get her to exit her vehicle. Gentry determined she was not experiencing any emergency life threatening medical issues and suspected that she may be impaired. Gentry stated that the suspect's pupils were very large for the lighting condition. He was able to administer the HGN test, but the suspect as unable to complete the WAT and OLS and nearly fell several times during her attempts. The suspect told Gentry that there was a spaceship overhead causing her to nearly fall. Gentry placed the suspect under arrest for DWI and read her the Miranda warnings. While traveling to the PD she stated that the streetlights were too loud and hurt her ears. The suspect became a little more coherent once at the PD and was able to exit the patrol car, walk into the station on her own, and answer questions. She was given a breath test with a .00% result. Immediately after obtaining the .00 BAC, Gentry requested DRE assistance.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the interview room at the PPD. She was seated in a chair and was staring straight ahead. As I entered the room, she turned quickly and asked me, "Are you God?" I introduced myself and asked if she would submit to a drug evaluation. She replied, "They sent you. It must be okay." Her speech was rapid and incoherent at times. She was perspiring heavily, even though the room was cool from the air conditioning. She would have mood swings from cooperative to argumentative and calm to excited. When asked about her condition, she stated, "I'm okay, are you okay?" She stated she ate nothing and was "fasting" and drank two bottles of water. She estimated the time as about 10 pm when it was actually 6:30 pm (1830 hours). She stated she did not have any vision problems or blindness and that she did not wear corrective lenses. Her pupils were noticeably dilated for the lighting condition. There was a rancid odor on her breath as she spoke.
- 6. Medical Problems and Treatment:** The suspect indicated she had an upset stomach from something she ate the day before but did not require medical assistance. She was not epileptic, not diabetic and did not take insulin. She stated she was not under the care of a doctor or dentist and had no physical defects. She stated she did not take any medications and did not have any medical issues.
- 7. Psychophysical Indicators of Impairment:** The psychophysical tests were explained and demonstrated to the suspect. Even though several had to be explained multiple times and stated she understood them prior to attempting each test. The following tests were administered:

**Modified Romberg Balance:** Due to the suspect's poor balance, and nearly falling several times when she closed her eyes and put her head back, it was necessary to stop the test for safety reasons.

**Walk and Turn:** A line in the tile floor was used for this test. The suspect started in the instructional position but lost her balance three times and the test was stopped for safety reasons. After nearly falling for the third time and having to use the wall for balance, she stated, "It's not my fault. The room is moving."

**One Leg Stand:** This test was also stopped for her safety. On the first attempt, the suspect started to raise her right foot as directed, but quickly put her foot down three times and nearly fell. She then stated, "Everything is moving." The second part of the test was not attempted due to safety concerns.

**Finger to Nose:** For safety reasons, this test was conducted while the suspect was seated. She missed touching the tip of her nose on all six attempts and got visibly upset when she could not touch her nose. Her arm movements were slow and rigid-like.

## 8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect had equal tracking and had equal pupil size. She did not exhibit any clues of HGN. VGN was not present. She did not exhibit a lack of convergence, as her eyes were able to converge as instructed. Her pupillary reaction to light was slow and she did not exhibit rebound dilation. Her pupils were dilated in Room Light (6.0 mm) and Direct Light (5.0 mm). They were at the high end of the DRE average range in Near Total Darkness (8.5 mm).

**Vital Signs:** The suspect's pulse rates were checked three times and were above the DRE average range on all three checks (108, 106, 106 bpm). Her blood pressure was above the DRE average range at 172/96. Her body temperature was measured at 100.8, also above the DRE average range.

9. **Signs of Ingestion:** The suspect's nasal area was clear. Her breath was rancid smelling, and she had a brownish coating on her tongue. She also had small pieces of brown matter in her teeth. When asked about that and the coating on her tongue, she indicated that she likes to eat healthy foods and doesn't brush her teeth very often.
10. **Suspect's Statements:** The suspect first stated she was fasting for religious reasons and not allowed to use alcohol or drugs. However, she later stated that she got hungry and purchased some "organic mushrooms" from a man at a truck stop. She did not know who he was and had not seen him before. She made numerous comments regarding things she saw and heard that no one else saw or heard. She would occasionally talk about the overhead room lights making too much noise and hurting her ears. When asked about drug use, she responded loudly, "I don't do drugs!" She became visibly upset that I asked the question and stated she was "pure" and would never take drugs or do anything to harm her body.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Hallucinogen and is unable to operate a vehicle safely.
12. **Toxicological Sample:** After the evaluation, Sergeant Gentry transported the suspect to the Prattville Hospital where a blood sample was collected at 2055 hours. Sergeant Gentry collected the sample and submitted it as evidence pending testing by the Alabama Crime Lab.
13. **Miscellaneous:** Refer to Sergeant Gentry's arrest report for additional details.

# 15 DRE

## PRACTICE: TEST INTERPRETATION

### LEARNING OBJECTIVES

- Analyze the results of a complete drug influence evaluation and identify the category of drugs affecting the individual examined
- Articulate the basis for the drug category identification

### CONTENTS

A. Interpretation Demonstrations .....	3
B. Interpretation Practice .....	5

### LEARNING ACTIVITIES

- Instructor-Led Demonstrations
- Small-Group Practice
- Participant-Led Presentations



**Reference “Test Interpretation” wall chart.**

Session 15: Practice – Test Interpretation

## Learning Objectives

- Analyze results of a drug influence evaluation
- Articulate basis for opinion

DRE 15-2

**Slide 2.**



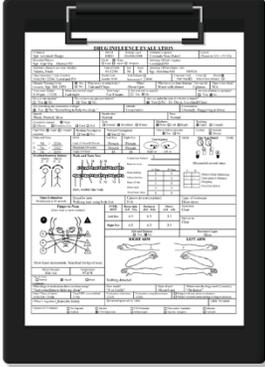
**Briefly review the objectives, content, and activities of this session.**

## A. Interpretation Demonstrations

Session 15 Practice – Test Interpretation

**Interpretation Demonstrations**

Case 1:  
Adams



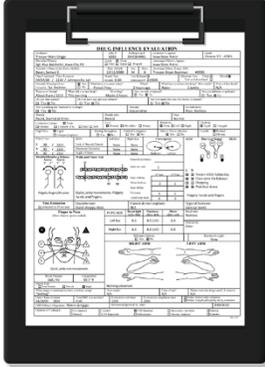
DRE 15-3

**Slide 3.**

Session 15 Practice – Test Interpretation

**Interpretation Demonstrations**

Case 2:  
Baker



DRE 15-4

**Slide 4.**



*The instructor will review exemplars Adams and Baker.*

*Direct participants to review “Case 1: Adams” exemplar at the end of Session 15 in their guides.*

*Preliminary Examination: Review the results of the preliminary examination of Case 1: Adams.*

- *Ask participants: “What category or categories of drugs would produce preliminary examination results consistent with this exemplar?”*
- *Probe to draw out the bases for participants’ responses.*

*Eye Examinations: Review the results of the Eye Examinations of Subject Adams.*

- *Ask participants to discuss the category or categories of drugs that would cause these eye examination results.*

*Psychophysical Tests: Review the results of the psychophysical tests of subject Adams.*

- *Ask participants to discuss the category or categories of drugs that would produce these psychophysical test results.*

*Vital Signs Examinations: Review the results of the vital signs examinations of subject Adams.*

- *Ask participants to discuss the category or categories of drugs that would produce these results.*

*Dark Room Examinations: Review the results of the dark room examinations of subject Adams.*



- ***Ask participants to discuss the category or categories of drugs that would produce these results. Other evidence and additional observations.***

***Review the results of the examinations for injection sites and muscle rigidity, and of the final interview of subject Adams.***

***Narrative report: Briefly review the narrative report on the reverse side of the "Adams" exemplar.***

- ***Point out the DRE's opinion is missing from this sample.***

***Opinion of Evaluator: Point out the evidence indicates that subject Adams is under the influence of a CNS Depressant.***

***Solicit participants' questions concerning this demonstration.***

***Repeat this process with Baker.***

## B. B. Interpretation Practice

Session 15: Practice – Test Interpretation

### Interpretation Demonstrations

Case 3:  
Charles



DRE 15-5

### Slide 5.

Session 15: Practice – Test Interpretation

### Interpretation Demonstrations

Case 4:  
Dodge



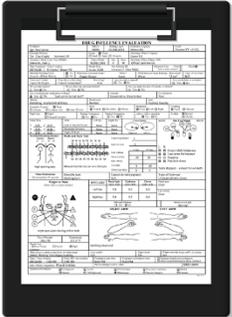
DRE 15-6

### Slide 6.

Session 15: Practice – Test Interpretation

### Interpretation Demonstrations

Case 5:  
Edwards



DRE 15-7

### Slide 7.



### Instructions

- **Assign participants to work in teams of three or four members.**
- **Each participant will review all three exemplars (Cases 3-5 Charles, Dodge, and Edwards) in team workgroups.**
- **The teams are to discuss the evidence among themselves and reach a conclusion concerning the category of drugs, if any.**
- **Allow teams approximately 15 minutes to review the three exemplars and reach their conclusions.**

### Discussion and Feedback of Results

- **Use slides 5, 6, and 7 to review and discuss the three exemplars**
- **Poll teams to determine their conclusions concerning the category of drugs present in each subject.**
- **Offer appropriate comments concerning the teams' performance.**

Session 15: Practice – Test Interpretation

Questions?

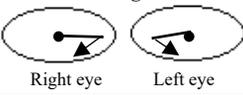
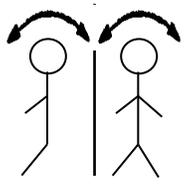
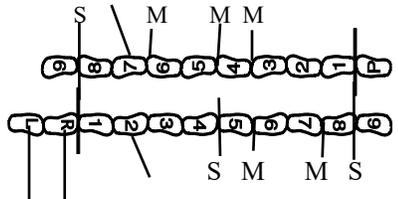
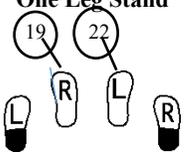
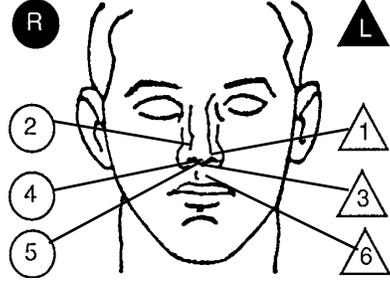
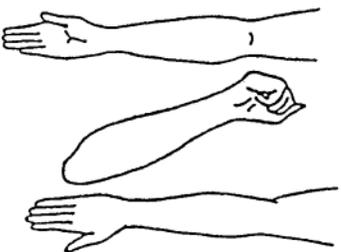
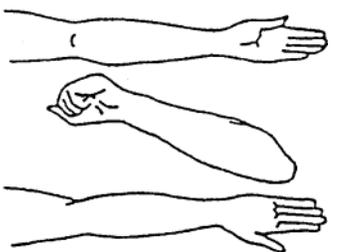
DRE 15-8

Slide 8.



*Solicit participants' comments and questions concerning this practice session.*

# DRUG INFLUENCE EVALUATION

Evaluator <b>Deputy Jennifer Plutt</b>		DRE # 13857	Rolling Log # 22-006-0088	Evaluator's Agency Park County S.O.	Case # (Session XV - #1 IG)										
Recorder/Witness <b>Sgt. Alan Ma, Denver PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Loveland PD											
Arrestee's Name (Last, First, Middle) <b>Adams, Frank</b>		Date of Birth 01/12/86	Sex M	Race W	Arresting Officer (Name, ID#) <b>Sgt. Antolina Hill #19624</b>										
Date Examined / Time / Location 10/6/22 / 2218 / Loveland PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 23006	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>											
Miranda Warning Given Given by: <b>Sgt. Hill, LPD</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Fish and Chips</b>	When? <b>About 6 pm</b>	What have you been drinking? How much? <b>Water with dinner 2 glasses</b>	Time of last drink? <b>N/A</b>										
Time now/ Actual <b>9:30 pm / 2220</b>	When did you last sleep? <b>Last night</b>	How long? <b>7 or 8 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Dr. Davis, Loveland Clinic</b>												
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Something to help me sleep."</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Unsteady, Staggering at times</b>											
Speech: <b>Thick, Slurred, Slow</b>		Breath odor: <b>Normal</b>		Face: <b>Normal</b>											
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right											
Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal		Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											
Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy											
Pulse and Time 1. <u>56</u> / <u>2230</u> 2. <u>56</u> / <u>2242</u> 3. <u>54</u> / <u>2255</u>		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye <b>Present</b> <b>Present</b> <b>35</b>	Right Eye <b>Present</b> <b>Present</b> <b>35</b>	Convergence  Right eye      Left eye										
<b>Modified Romberg Balance</b> Approx. 2" 2"      Approx. 3" 3" 		<b>Walk and Turn Test</b>  S M M M S M M S Slow, wobbly-like walk		Cannot keep balance <u>2</u> Starts too soon Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken	26/30 <b>One Leg Stand</b> 24/30  Miscounted several times <table border="1" style="display: inline-table;"><tr><td>L</td><td>R</td></tr><tr><td>1</td><td>1</td></tr><tr><td>1</td><td>1</td></tr><tr><td> </td><td> </td></tr><tr><td>1</td><td>1</td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down	L	R	1	1	1	1			1	1
L	R														
1	1														
1	1														
1	1														
<b>Time Estimation</b> <u>38</u> estimated as 30 seconds		Describe turn Walking turn using both feet		Cannot do test (explain) N/A											
<b>Finger to Nose</b> (Draw lines to spots touched) 		PUPIL SIZE		Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)										
Slow hand movements. Searched for tip of nose		Left Eye		4.5	6.5										
		Right Eye		4.5	6.5										
Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Slow</b>		<b>RIGHT ARM</b> 											
<b>LEFT ARM</b> 		Nothing detected													
Blood Pressure 104 / 64	Temperature 97.4 °F	Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid													
Comments:		What drugs or medications have you been using? <b>"Just something to help me sleep"</b>													
Date / Time of arrest: 10/6/22 / 2108		Time DRE was notified: 2150		How much? <b>"1 or 2 pills"</b>	Time of use? <b>About 6 pm</b>										
Officer's Signature: <i>Jennifer Plutt</i>		Reviewed/approved by / date:			Where were the drugs used? (Location) <b>"At dinner"</b>										
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis											

# DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Adams, Frank**

- 1. Location:** The drug influence evaluation was conducted at the Loveland PD DUI processing room. The darkroom examinations were conducted inside a restroom at that location. The area is well illuminated, and the floor was level and free of obstructions.
- 2. Witnesses:** Sergeant Alan Ma of the Denver PD witnessed the evaluation and the arresting officer, Sgt. Antolina Hill of the Loveland PD witnessed the psychophysical tests and darkroom examinations.
- 3. Breath Alcohol Test:** A breath test was administered to the suspect by Sgt. Hill prior to my arrival, at 2145 hours obtaining a 0.00 BAC result.
- 4. Notification and Interview of the Arresting Officer:** Upon my arrival to the Loveland PD and contacting Sergeant Hill, it was determined she had stopped the suspect after observing his vehicle drifting outside the travel lane on South Wilson Street and make a wide turn onto South 14<sup>th</sup> Street. Sergeant Hill activated her overhead lights to stop the suspect's vehicle, however, he continued for approximately two blocks before pulling to the side of the roadway. While stopping the vehicle the suspect hit the brakes several times, causing the vehicle to exhibit jerky motions. While speaking with the suspect at roadside, Sergeant Hill noticed that he had slurred speech and appeared to have difficulties with simple divided attention tasks. He could not obtain his license and registration at the same time, and had difficulty rolling down the window while trying to talk to Sergeant Hill. She did not detect any odor of an alcoholic beverage on the suspect's breath but administered SFSTs. She observed six clues of HGN and observed Vertical Gaze Nystagmus (VGN). During both tests, the suspect had difficulty holding his head still. According to Sergeant Hill, the suspect demonstrated significant impairment during the Walk and Turn (W&T) and the One Leg Stand (OLS) tests, observing four clues on the W&T and three clues on the OLS. Sergeant Hill arrested the suspect and transported him to the Loveland PD for processing. When the test breath result was not consistent with the observed degree impairment, Sergeant Hill requested a DRE for further investigation.
- 5. Initial Observation of the Subject:** I first observed the suspect at the LPD seated on the processing room bench. He was wearing a long sleeve shirt, slacks, and dress shoes. His head was tilted forward, his eyes were closed, and his breathing was deep and slow. He responded slowly to questions and when he did, his speech was slow, slurred, and thick. Several times when he stood, he staggered and used the wall to steady himself. His face appeared normal, and there was no discernable odor of an alcoholic beverage on his breath. His eyes appeared normal, his pupils appeared equal in size and his eyelids appeared to be droopy. I asked if he would participate in a drug evaluation which he agreed to do by stating, "I guess so. Hopefully, it won't take too long."
- 6. Medical Problems and Treatment:** The suspect stated he had no physical problems, and none were observed during my contact with him. He stated he was seeing a doctor (Dr. Davis) at the Loveland Clinic for a sleeping problem and had received a prescription to help him sleep. However, he could not remember the name of the prescription and described it as being a small round blue colored pill that makes him fall asleep really fast. He stated other than that, he takes no medication or other drugs. He further stated he has no other medical problems, and no physical defects.
- 7. Psychophysical Indicators of Impairment:** After determining that the suspect was not suffering from any conditions that would prevent him from doing the psychophysical tests, I explained and demonstrated each test to him prior to him attempting them. The suspect was given the opportunity to remove his shoes for the tests and he elected to keep them on. The following tests were administered:

**Modified Romberg Balance:** During this test, the suspect had a slow time estimation, estimating 30 seconds in 38 seconds. When asked how he estimated the 30 seconds, he stated, "I counted one Mississippi, two Mississippi until I got to 30." During the test, the suspect had a front-to-back sway of approximately 2 inches in each direction and a side-to-side sway of approximately 3 inches in each direction. To assist in estimating the amount of sway, a vertical line in the brick wall behind the suspect was used.

**Walk and Turn:** For this test, a painted line on the floor was used. When attempting the test, the suspect lost his balance twice during the instructions stage. During the walking stage, he stopped while walking two times during the first nine steps (#4, #8) and once during the second nine steps (#8). He missed touching heel-to-toe twice on the first nine steps (#6 and #8) and three times on the second nine steps (#4, #5, #7). He stepped off the line once in each direction (#2 on the first nine steps, #7 on the second nine steps). He also raised his arms three times walking in each direction. During the turn, he made a walking turn using both feet instead of turning as directed. He exhibited a slow wobbly-like walk throughout.

**One Leg Stand:** Per DRE protocol, this test was conducted once standing on the left foot and once standing on the right foot. While standing on his left foot and extending his right foot, he swayed while balancing once, used his arms to balance once, and put his right foot down at count 1,019. He counted slowly reaching 1,026 at the conclusion of 30 seconds. While standing on his right foot and extending his left foot, he swayed while balancing once, used his arms to balance once, and put his foot down at count 1,022. He again counted slowly reaching 1,024 at the conclusion of the 30 second time period. He miscounted several times during both attempts, missing several numbers in sequence.

**Finger to Nose:** During this test, the suspect displayed slow hand and arm movements and appeared to search for the tip of his nose on each attempt. He touched the tip of his nose as directed three times (3, 4, and 5) and missed the tip of his nose with the tip of his index finger on attempts 1, 2 and 6. On one attempt (6), he missed his nose entirely and touched his upper lip. He also had to be reminded each time to remove this finger and return his arm back to his side.

## **8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. Six clues of HGN with an early angle of onset of approximately 35 degrees was observed. VGN was also observed. He was not wearing glasses and stated he does not use any corrective lenses. During the Lack of Convergence (LOC) test, he was not able to converge his eyes as directed. This test was conducted twice and both times his eyes started inward and then moved downward. During the pupil size examinations, his pupils were estimated at 4.5 mm in Room Light (RL) in each eye, 6.5 mm in Near Total Darkness (NTD) in each eye and 3.5 mm in each eye in Direct Light (DL). All were within the DRE average range for pupil size. Rebound dilation was not present and his pupillary reaction to light was slow.

**Vital Signs:** The suspect's pulse was checked three times during the evaluation and were 56, 56, and 54 beats per minute (BPM). All three results were below the DRE average range of 60-90 BPM. His blood pressure was measured at 104/64 millimeters of mercury (mmHg), which was below the DRE average ranges for both the systolic and diastolic pressures. His body temperature was measured at 97.4° F, which was below the DRE average range. His muscle tone was flaccid.

- 9. Signs of Ingestion:** The suspect's nasal area and oral cavity were clear and there were no indicators of injection sites observed or located.

- 10. Subject's Statements:** Sgt. Hill had advised the suspect of his Miranda rights upon their arrival at LPD. According to Sgt. Hill, the suspect agreed to waive his rights and answer questions. During my evaluation, I confirmed that he understood his rights prior to my questioning. He stated he had taken 1 or 2 pills around 6 pm (1800 hours) while eating dinner to help him sleep. He could not recall the name of the pills. He indicated he was prescribed the pills by Dr. Davis about a month ago and is still getting used to them. When asked where the prescription bottle was, he indicated it was at his home. When asked about the potency of the pills, he was not sure. When asked about other drugs, he indicated that he used to use recreational marijuana when it was first legalized in Colorado but quit using it because it made him hyper.
- 11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Adams is under the influence of a **CNS Depressant** and is unable to operate a vehicle safely.
- 12. Toxicological Specimen:** After my evaluation, the suspect was transported to the Loveland Hospital where a blood sample was collected 2357 hours. The sample was submitted as evidence by Sergeant Hill and will be forwarded to the Crime Laboratory for analysis.
- 13. Miscellaneous:** Refer to Sgt. Hill's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluators <b>Sgt. Paul Batcheller</b>		DRE # <b>14760</b>	Rolling Log # <b>22-018-0081</b>	Evaluator's Agency <b>Iowa City Police Dept.</b>	Case# <b>(Session XV - #2 IG)</b>
Recorder/Witness <b>Captain Matt Bruner, Dept. Natural Res.</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Iowa State Patrol</b>	
Arrestee's Name (Last, First, Middle) <b>Baker, Samuel E.</b>		Date of Birth <b>10/15/1988</b>	Sex <b>M</b>	Race <b>B</b>	Arresting Officer (Name, ID#) <b>Trooper Cody Reicks #28959</b>
Date Examined / Time / Location <b>04/29/22 / 2210 / Iowa City PD</b>		Breath Test: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>219305</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>
Miranda Warning Given Given by: <b>Tpr. Reicks</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>French Fries</b>		When? <b>2 hours ago</b>	What have you been drinking? How much? <b>Water 1 bottle</b>
Time now/ Actual <b>About 8 pm / 2215</b>	When did you last sleep? <b>This morning</b>	How long? <b>Maybe 2 hours</b>		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: <b>Cooperative</b>	Coordination: <b>Poor, Restless</b>	
Speech: <b>Rapid, Slurred at times</b>		Breath odor: <b>Rancid</b>		Face: <b>Normal</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>90</u> / <u>2224</u> 2. <u>92</u> / <u>2235</u> 3. <u>92</u> / <u>2252</u>	HGN Lack of Smooth Pursuit None Maximum Deviation None Angle of Onset None	Left Eye None	Right Eye None	Convergence  Right eye      Left eye	
Modified Romberg Balance Approx. 3" 3"      Approx. 3" 3"  Fidgety fingers/Bruxism		Walk and Turn Test  Quick, jerky movements. Fidgety hands and fingers.		40/30 <b>One Leg Stand</b> 38/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Fidgety hands and fingers	
Time Estimation <u>21</u> estimated as 30 seconds		Describe turn Quick choppy steps		Cannot do test (explain) N/A	
Type of footwear: Lace-up boots					
Finger to Nose (Draw lines to spots touched)  Quick, jerky arm movements		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	6.5	8.0 (UV)	6.0
		Right Eye	6.5	8.0 (UV)	6.0
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Slow	
		RIGHT ARM 		LEFT ARM 	
Blood Pressure <b>168 / 92</b>		Temperature <b>99.7 °F</b>		Nothing observed	
Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid					
What drugs or medications have you been using? "Nothing"		How much? N/A		Time of use? N/A	Where were the drugs used? (Location) N/A
Date / Time of arrest: <b>04/29/22 2110</b>	Time DRE was notified: <b>2140</b>	Evaluation start time: <b>2210</b>	Evaluation completion time: <b>2315</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <i>Paul Batcheller</i>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Baker, Samuel E.**

1. **Location:** The drug influence evaluation was conducted at the Iowa City Police Department. The darkroom examinations were conducted inside a restroom at that location. The floor surface was tiled and was level and free of obstructions. Both areas had adequate lighting for conducting the evaluation.
2. **Witnesses:** Captain Matt Bruner of the Iowa Department of Natural Resources witnessed and recorded the evaluation. The arresting officer, Trooper Cody Reicks of the Iowa State Patrol witnessed the dark room examinations.
3. **Breath Alcohol Test:** The suspect submitted to a breath test and the test was administered by Trooper Reicks prior to my arrival. A result of 0.00 BAC was obtained.
4. **Notification and Interview of the Arresting Officer:** I was on-duty and notified at approximately 2140 hours that Trooper Reicks was requesting DRE assistance with a suspected DUI-drugs arrest. I contacted Trooper Reicks at the Iowa City Police Department and it was determined he had stopped the driver after observing his vehicle cross over the center line on SR 6 almost striking an oncoming vehicle. When he activated his overhead lights to stop the vehicle, it again crossed over the center line and eventually stopped on a side road. Upon contacting the driver, Trooper Reicks noticed that his speech was quick and difficult to understand at times. He was also very animated and appeared restless. Trooper Reicks did not detect an odor of an alcoholic beverage on the driver's breath but suspecting possible impairment, administered SFSTs at roadside. He stated the driver had difficulty completing the SFSTs and was not able to perform them as directed. According to Trooper Reicks, the driver had difficulty maintaining his balance during the Walk and Turn test, and four clues were observed. The driver was also not able to maintain his balance on the One Leg Stand test and repeatedly put his foot down to maintain his balance. Trooper Reicks also administered the HGN test, but no clues of nystagmus were observed. However, the driver had large, dilated pupils. According to Trooper Reicks, the driver was fidgety and very animated during the contact at roadside. Trooper Reicks arrested the driver for DUI and transported him to the PD for a breath test. When his breath test result was not consistent with the impairment observed, Trooper Reicks requested another DRE to assist with the investigation.
5. **Initial Observation of the Suspect:** I first observed the suspect at approximately 2200 hours in the breath testing room at the Iowa City Police Department. I confirmed that the Miranda Warnings had been given to him by Trooper Reicks and he acknowledged understanding them. I asked if he would participate in a drug evaluation and he agreed. He was asked some initial questions and preliminary observations were made. He thought the present time was "about 8 pm" when the time was actually 2215 hours (10:15 pm). He stated he had last slept for "maybe 2 hours" this morning. When asked if he had been drinking alcoholic beverages, he replied he had not and had only drank water. He stated he is not taking any medications or drugs. For the most part, he was cooperative even though he showed some resentment towards Trooper Reicks for arresting him. His coordination appeared to be poor and he was restless throughout my initial contact with him. His speech was both fast and slurred. I noted that his breath was rancid, and he appeared to be grinding his teeth at times. When standing, he repeatedly shifted his weight from foot to foot and was frequently moving his hands and arms and he had fidgety fingers. His pupils appeared dilated in normal room light. I noted that he was wearing dirty soiled jeans, a white tee shirt and brown lace-up boots. He was unshaven and appeared to have poor hygiene.
6. **Medical Problems and Treatment:** The suspect stated he had no physical problems, and none were observed prior to or during the evaluation. He stated he was not presently under the care of a physician or dentist. He stated he is not a diabetic, is not epileptic, and does not take insulin. There were no indications seen during the evaluation that the suspect needed any type of medical care.
7. **Psychophysical Indicators of Impairment:** As part of the evaluation, the suspect was asked to perform four psychophysical tests. Prior to administering the tests, I explained and demonstrated each one to him. He indicated he understood the instructions prior to attempting each test. The following tests were administered to the suspect:

**Modified Romberg Balance:** The suspect was able to remain in the instructional position while the instructions for the test were given. He did attempt the test and was able to complete it. He had a quick time estimation, estimating the passage of 30 seconds in 21 seconds. He swayed noticeably while standing with his eyes closed. He had a front to back sway of approximately three inches in each direction, as well as a side-to-side sway of approximately 3 inches in each direction. While performing the test, his hands and fingers were constantly moving and were fidgety. He also started grinding his teeth (bruxism) midway through the test.

**Walk and Turn:** The suspect did attempt this test and he was able to complete it. During the instruction stage of the test, he was able to maintain his balance, however, he attempted to start the test before instructed to do so. During the walking stage he missed touching heel to toe two times on the first nine steps (steps #6 and #8) and once during the second nine steps (step #9). He used his arms for balance three times on the first nine steps and twice on the second nine steps. He did perform the turn correctly but did so by taking quick, choppy steps. He walked with quick, jerky steps throughout the test. He was wearing lace-up boots and was asked about removing his boots for the test to which he indicated he preferred to keep them on.

**One Leg Stand:** The suspect was able to stand in the instructional position while the instructions were given for this test. This test was conducted in two parts – once standing on the left foot and once standing on the right foot. While standing on his left foot the suspect swayed noticeably while balancing once and used his arms for balance once. He put his foot down at count 1,009. He counted quickly and reached 1,040 at the conclusion of the 30 seconds. While standing on his right foot, he swayed noticeably while balancing three times, used his arms to balance twice, and put his foot down at counts 1,007 and 1,012. He counted quickly, reaching 1,038 at the conclusion of the 30 seconds. While completing the test he had fidgety hands and fingers.

**Finger to Nose:** The suspect was able to stand in the instructional position while the instructions were given for this test. He did attempt the test and was able to complete it. During this test, he displayed quick and jerky hand and arm movements. He did use the tip of the finger as directed and touched the tip of his nose correctly three times (#3, #4, #5) and missed touching the tip of his nose with the tip of his index finger as directed three times (#1, #2 and #6). On attempt #1 he touched high on his nose, on attempt #2 he touched high on his nose, and on attempt #6 he touched under his nose on his upper lip. During the test he at times was grinding his teeth (Bruxism). He was fidgety acting and had quick and jerky arm movements.

## 8. Clinical Indicators of Impairment:

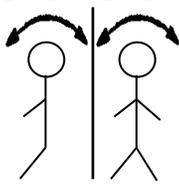
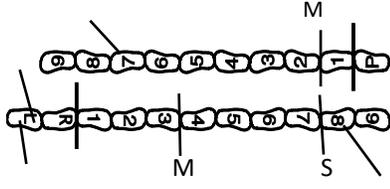
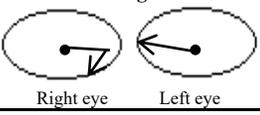
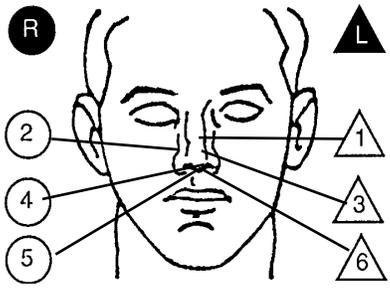
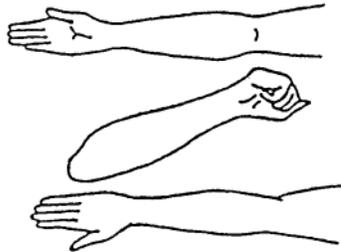
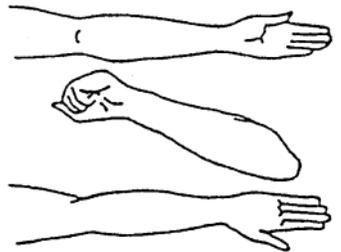
**Eye Signs:** The suspect's eyes were examined, and no clues of Horizontal Gaze Nystagmus were detected. Vertical Gaze Nystagmus was also not observed. A Lack of Convergence was not present. His pupils were examined under three lighting conditions and his pupil sizes were estimated using a DRE pupillometer. In Room Light (RL) his pupils were estimated at 6.5 mm in both eyes. In Near Total Darkness (NTD) his pupils were estimated at 8.0 mm in each eye, and in Direct Light (DL) his pupils were estimated at 6.0 mm in each eye. Due to the dark coloring of the suspect's pupils, an Ultraviolet (UV) Light was used after attempting the estimation first with a regular penlight. The estimations showed his pupils to be dilated and outside the DRE average ranges for RL and DL and at the high end of the NTD DRE average range. Rebound dilation was not present. His pupils had a slow reaction to light.

**Vital Signs:** The suspect's pulse rates were measured three times during the evaluation and were 90 beats per minute (BPM) at 2224 hours, 92 BPM at 2235 hours, and 92 BPM at 2252. All three were above the DRE average range of 60-90 BPM. His blood pressure was measured and indicated a systolic pressure of 168 mm/Hg and a diastolic pressure of 92 mm/Hg. Both pressures are above the DRE average ranges. His body temperature was measured at 99.7° Fahrenheit, which is above the DRE average range. His muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's left nasal area was red and appeared inflamed. His right nasal area appeared to be normal. When asked about the redness in his nasal area, he stated that he had been experiencing a bloody nose due to a cold. His oral cavity was clear and there were no indicators of injection sites on his hands and arms.

10. **Suspect's Statements:** When I questioned the suspect about drug use, he denied consuming any drugs by stating "nothing" and became irritated by the questions about drug use. He was very animated with his responses and frequently used his arms and hands when talking.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a ***Central Nervous System Stimulant*** and unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was requested from the suspect by Trooper Reicks at the conclusion of my evaluation. The suspect agreed to provide the sample after being advised on his implied consent rights. He was transported to the Mercy Iowa City hospital by Trooper Reicks where the blood sample was obtained.
13. **Miscellaneous:** Refer to arrest report by Trooper Reicks for additional details.

# DRUG INFLUENCE EVALUATION

Evaluators <b>Deputy Rob Corn</b>		DRE # <b>12373</b>	Rolling Log # <b>22-013-0138</b>	Evaluator's Agency <b>Kitsap County S.O.</b>	Case# <b>(Session XV - #3 IG)</b>
Recorder/Witness <b>Officer Jon Huber, Seattle PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Washington State Patrol</b>	
Arrestee's Name (Last, First, Middle) <b>Charles, Mary Jane</b>		Date of Birth <b>06/13/1982</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Trooper Kyle Dahl #24874</b>
Date Examined / Time / Location <b>09/17/22 / 0130 / Kitsap Co. Jail</b>		Breath Test: Results: <b>0.05</b>	Test Refused <input type="checkbox"/> Instrument #: <b>82460</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: Tpr. Dahl	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Pizza</b>	When? <b>About 6 pm</b>	What have you been drinking? How much? <b>Couple glasses of wine</b>	Time of last drink? <b>About 11 pm</b>
Time now/ Actual <b>Midnight / 0135</b>	When did you last sleep? <b>Last night</b>	How long? <b>8 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: <b>Cooperative / Upset at times</b>	Coordination: <b>Slow unsteady movements</b>	
Speech: <b>Slow / Thick / Slurred</b>		Breath odor: <b>Alcohol (ETOH)</b>		Face: <b>Flushed</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy		Pulse/Time 1. <u>66</u> / <u>0145</u> 2. <u>64</u> / <u>0214</u> 3. <u>64</u> / <u>0228</u>		HGN Lack of Smooth Pursuit <b>Present</b> Maximum Deviation <b>Present</b> Angle of Onset <b>None</b>	
Modified Romberg Balance Approx. <b>2" 2" 2" 2"</b>  Circular sway & Eyelid tremors		Walk and Turn Test  Cannot keep balance <b>2</b> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken		Convergence  Right eye Left eye	
Time Estimation <b>32</b> estimated as 30 seconds		Describe turn <b>Slow and deliberate</b>		Cannot do test (explain) <b>N/A</b>	
Finger to Nose (Draw lines to spots touched)  Slow deliberate hand and arm movements		PUPIL SIZE		Type of footwear: <b>Slip-on shoes</b>	
Blood Pressure <b>120 / 72</b>		Temperature <b>98.6 °F</b>		Nasal area: <b>Clear</b>	
Muscle Tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Oral cavity: <b>Clear</b>	
Comments: What drugs or medications have you been using? <b>"I smoked some MJ 2 or 3 days ago."</b>		How much? <b>About a half joint</b>		Reaction to Light: <b>Normal</b>	
Date / Time of arrest: <b>09/17/22 0005</b>		Time DRE was notified: <b>0045</b>		RIGHT ARM 	
Evaluation start time: <b>0130</b>		Evaluation completion time: <b>0235</b>		LEFT ARM 	
DRE/Officer's Signature: <b>Rob Corn</b>		Reviewed/approved by / date:		Nothing observed	
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input checked="" type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis		Where were the drugs used? (Location) <b>At home</b>		Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation <input type="checkbox"/>	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Charles, Mary**

- 1. Location:** The drug influence evaluation was conducted in the DUI processing room at the Kitsap County Jail. The darkroom examinations were conducted inside a storage room at that location. The floor surface where the drug evaluation was conducted was a level tile floor free of obstructions.
- 2. Witnesses:** The entire drug evaluation was witnessed and scribed by Officer Jon Huber of the Seattle Police Department.
- 3. Breath Alcohol Test:** A breath test was administered to the suspect prior to my arrival. The result of the breath test was a 0.05 BAC.
- 4. Notification and Interview of the Arresting Officer:** I contacted Trooper Dahl at the Kitsap County Jail and it was determined that the suspect had been reported as a possible DUI while traveling north on SR 303 near Sheridan Street. When Trooper Dahl located her vehicle, it was unable to maintain a single lane of travel. When attempting to stop the vehicle, the driver was slow to respond to his emergency lights and once the vehicle pulled over, the right front tire stuck a curb. During the personal contact with the driver, Trooper Dahl observed slow, sluggish movements and her speech was thick and slurred. She admitted drinking a couple glasses of wine earlier in the evening and consented to SFSTs. According to Trooper Dahl, who is a certified DRE, she performed poorly on the Walk and Turn (W&T) and One Leg Stand (OLS) tests. Trooper Dahl observed four clues on the W&T and three clues on the OLS. He also administered the HGN test observing four clues of HGN. He also detected an odor of marijuana coming from her vehicle. When questioned about marijuana use, the driver admitted being a recreational marijuana user, but indicated she had not used marijuana for a couple of days. Trooper Dahl arrested the driver for DUI and transported her to the county jail for processing where she provided a 0.05 BAC. Because of a high volume of calls for service, Trooper Dahl requested another DRE to assist with the investigation. I was on duty and responded to his location to conduct the evaluation.
- 5. Initial Observation of the Suspect:** I first observed Charles in the DUI processing room at the Kitsap County Jail. She was swaying when she stood, and several times used the interview chair to steady herself. Her speech was slow, thick, and slurred. She was emotional at times and several times almost began crying. She was cooperative and was answering questions from Trooper Dahl. Her face appeared flushed, and her breath had an odor of an alcoholic beverage. Her eyes were bloodshot and watery, and her pupils appeared equal in size. I noted that she was wearing blue jeans, a green Seattle Seahawks jersey and black canvas slip-on shoes. I asked if she remembered being advised of her Miranda rights and she stated that she did and agreed to answer my questions. I explained the drug evaluation process and she agreed to participate in the evaluation.
- 6. Medical Problems and Treatment:** Charles indicated that she had no medical or physical problems, and none were observed during the evaluation.
- 7. Psychophysical Indicators of Impairment:** Prior administering the psychophysical tests, I demonstrated and explained each test to her. She indicated she understood each one prior to attempting it. The following tests were administered:

**Modified Romberg Balance:** During this test, Charles estimated the passage of 30 seconds in 32 seconds. She had a front to back and side to side sway of approximately two inches. Eyelid tremors were observed during the test.

**Walk and Turn:** For this test, a line of the tile floor was used. During this test, Charles lost her balance twice during the instruction stage. During the walking stage on the first nine steps, she missed touching heel to toe at step 4 and stopped while walking at step 7. She then stepped off the line to the right with her next step (Step 8.) Her turn was slow and deliberate but as instructed. On the second nine steps she missed touching heel to toe at step 2 and stepped off the line at step 7. She used her arms to balance two times on the first nine steps and three times on the second nine steps. Prior to her starting the test, I asked if her shoes would cause her any problems completing the test and gave her the option to do the test without her shoes. She indicated she did not and preferred to leave her shoes on for the test.

**One Leg Stand:** Per DRE protocol, this test was conducted twice, once while standing on the left foot and once while standing on the right foot. While standing on her left foot and extending her right foot off the floor, she swayed while balancing twice, used her arms for balance once, and put her right foot down at count 1,008. While standing on her right foot and extending her left foot off the floor, she swayed while balancing once, used her arms for balance once, and put her foot down at counts 1,009, and 1,026.

**Finger to Nose:** During this test, Charles touched the tip of her nose as instructed three times (4, 5, and 6) and missed touching the tip of her nose with the tip of her index finger three times (1, 2, and 3). Her arm and hand movements were slow and deliberate, and she appeared to be searching for her nose on each attempt.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** During the HGN test, Charles had a lack of smooth pursuit and a distinct and sustained nystagmus at maximum deviation in both eyes. An angle of onset of nystagmus was not present. Vertical Gaze Nystagmus was also not present. A lack of convergence (LOC) was observed in her right eye but was not present in her left eye. The test was conducted twice with the same results. During the pupil size examinations, her pupils were estimated at 4.5 mm in Room Light in each eye, 6.5 mm in Near Total Darkness in each eye and 3.5 mm in Direct Light in each eye. All three were within the DRE average ranges. Rebound dilation was not present and she had a normal reaction to light.

**Vital Signs:** Her pulse rate was measured three times during the evaluation. The results were 66 beats per minute (BPM) at 0145 hours, 64 BPM at 0214 hours, and 64 BPM at 0228 hours. All were within the DRE average range of 60-90 BPM. Her blood pressure was measured at 120/72, which was within the DRE average ranges for both systolic and diastolic pressure. Her body temperature was measured at 98.6°, which was within the DRE average range. Her muscle tone was normal.

**9. Signs of Ingestion:** Charles' nasal area and oral cavity were clear. There were no indicators of injection sites on her arms or hands.

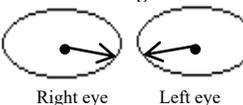
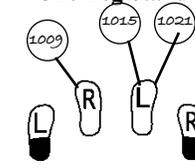
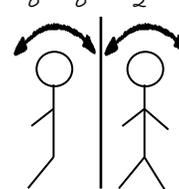
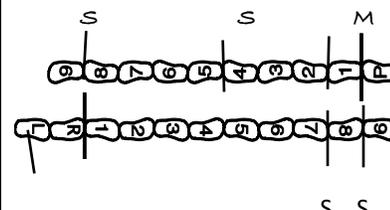
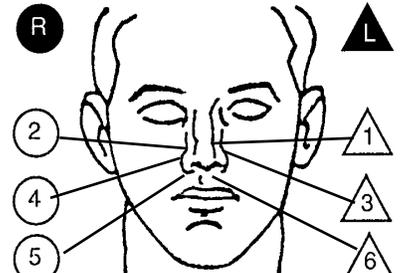
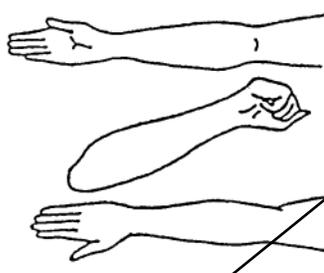
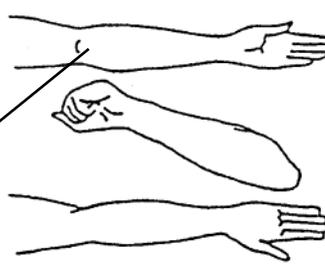
**10. Suspect's Statements:** Trooper Dahl had advised Charles of her Miranda rights and she agreed to waive her rights and answer questions. She admitted drinking two glasses of wine earlier in the evening at a friend's house. She admitted being a marijuana user and had smoked marijuana 2 or 3 days ago while at home and had smoked "about half of a joint" because of all the stress she had been experiencing. She denied using any other drugs or medications.

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Charles is under the influence of Alcohol (ETOH) and is unable to operate a vehicle safely.

**12. Toxicological Specimen:** A blood sample was collected from Charles at 0315 hours by a licensed phlebotomist. The sample was submitted into evidence for laboratory testing by the Washington State Crime Laboratory.

**13. Miscellaneous:** Refer to Trooper Dahl's arrest report for additional information.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Joseph Milos</b>		DRE # <b>4477</b>	Rolling Log # <b>22-004-0068</b>	Evaluator's Agency <b>Bellevue PD</b>	Case# <b>(Session XV - #4 IG)</b>								
Recorder/Witness <b>Sgt. Martin Denton Nebraska SP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Grand Island PD</b>									
Arrestee's Name (Last, First, Middle) <b>Dodge, Fred A.</b>		Date of Birth <b>10/13/1975</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sgt. Dale Hilderbrand #6047</b>								
Date Examined / Time / Location <b>02/22/22 / 2:10 AM / Grand Island</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>Intox #37755</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>									
Miranda Warning Given Given by: <b>Sgt. Hilderbrand</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>"Nothing today"</b>	When? <b>N/A</b>	What have you been drinking? How much? <b>Coffee 2 or 3 cups</b>	Time of last drink? <b>N/A</b>								
Time now/ Actual <b>1 am? / 2:15 AM</b>	When did you last sleep? <b>Last night</b>	How long? <b>5 or 6</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Lengthy explanation about past drug use)			Attitude: <b>Antagonistic</b>	Coordination: <b>Poor, Quick</b>									
Speech: <b>Rapid, Slurred</b>		Breath odor: <b>Rancid</b>		Face: <b>Flushed, Sweaty</b>									
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right									
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy													
Pulse/Time 1. <u>102</u> / <u>2:20</u> 2. <u>100</u> / <u>2:32</u> 3. <u>102</u> / <u>2:50</u>	HGN Lack of Smooth Pursuit <b>None</b>	Left Eye <b>None</b>	Right Eye <b>None</b>	Convergence  Right eye    Left eye									
	Maximum Deviation <b>None</b>			38/30 <b>One Leg Stand</b> 36/30 									
	Angle of Onset <b>None</b>												
<b>Modified Romberg Balance</b> Approx.    Approx. 0"    0"    2"    2"  Body tremors (Legs)	<b>Walk and Turn Test</b>  Quick steps. Stiff-like movements		Cannot keep balance <b>1</b> Starts too soon <b>2</b> Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken										
				1st Nine    2nd Nine <table border="1" style="display: inline-table;"><tr><td>2</td><td>2</td></tr><tr><td></td><td>1</td></tr><tr><td>2</td><td>3</td></tr><tr><td>9</td><td>9</td></tr></table>		2	2		1	2	3	9	9
2	2												
	1												
2	3												
9	9												
				L    R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down <b>Quick count. Slurred numbers. Finger twitching.</b>									
<b>Time Estimation</b> <u>22</u> estimated as 30 seconds	Describe turn <b>As instructed. Quick, rigid</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Lace-up black boots</b>								
<b>Finger to Nose</b> (Draw lines to spots touched)  Quick movements. Used pads of fingers		<b>PUPIL SIZE</b>	<b>Room light</b> (2.5 - 5.0)	<b>Darkness</b> (5.0 - 8.5)	<b>Direct</b> (2.0 - 4.5)								
		Left Eye	6.0	8.5	5.0								
		Right Eye	6.0	8.5	5.0								
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <b>Slow</b>								
		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 									
		Two red puncture marks											
Blood Pressure <b>162 / 96</b>	Temperature <b>99.8 °F</b>												
Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid													
What drugs or medications have you been using? <b>"I'm not answering that."</b>		How much? <b>No response</b>	Time of use? <b>No response</b>	Where were the drugs used? (Location) <b>No response</b>									
Date / Time of arrest: <b>02/22/22 1:08 AM</b>	Time DRE was notified: <b>1:30 AM</b>	Evaluation start time: <b>2:10 AM</b>	Evaluation completion time: <b>3:05 AM</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation									
DRE/Officer's Signature: <b>Joseph Milos</b>		Reviewed/approved by / date:			DRE#								
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input checked="" type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic								
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic								
					<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis								

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Dodge, Fred A.**

1. **Location**: The drug influence evaluation was conducted in the DUI processing room at the Grand Island Police Department. The darkroom examinations were conducted inside a restroom at that location. The floor surface was level and free of obstructions, and the room had adequate lighting.
2. **Witnesses**: Sergeant Martin Denton of the NE State Patrol witnessed and recorded the entire evaluation.
3. **Breath Alcohol Test**: A breath test was administered to the suspect by Sergeant Hilderbrand prior to the start of my evaluation. He obtained a .00 BAC result at 1:22 am.
4. **Notification and Interview of the Arresting Officer**: Sergeant Dale Hilderbrand was the arresting officer and requested a DRE to assist with the investigation. I contacted Sergeant Hilderbrand at the Grand Island PD, and it was learned the suspect had attempted to elude police on East Bismarck Road but was apprehended after a short pursuit. According to Sergeant Hilderbrand, when the suspect was stopped, he was very restless, animated, and unable to stand still. He was very talkative, and his speech was rapid and slurred. He appeared to have difficulty with divided attention tasks. It was determined that the suspect was driving with a suspended operator's license and was suspected of being impaired. Sergeant Hilderbrand administered SFSTs at roadside and the suspect had difficulty performing them as directed. According to Sergeant Hilderbrand, the suspect was unable to complete the Walk and Turn (W&T) and the One Leg Stand (OLS) tests as instructed and had difficulty performing other field sobriety tests. The suspect was arrested for DWS, DUI and other offenses and transported to Grand Island PD for processing. A breath test confirmed the suspect was not impaired by alcohol and a DRE was requested to assist with the investigation. I was on duty and responded to his location and conducted the DRE evaluation.
5. **Initial Observation of the Suspect**: I first observed the suspect in the interview room at the Grand Island PD. His speech was rapid, loud, and slurred. He had quick jerky movements. He was constantly moving in his chair when he was seated. He appeared to be sweating, though the inside temperature was cool. His face was flushed, and his pupils appeared to be dilated. He was wearing dark colored jeans, black lace-up boots, and a dark-colored, soiled sweatshirt. I explained why I had been called to assist and asked if he would participate in a drug evaluation. He replied, "Oh what the hell. Sure, why not." I confirmed that he had been advised of his Miranda rights and he agreed to answer my questions. I asked some preliminary questions and made some observations while conversing with him. He indicated he had not had anything to eat during the day and only admitted drinking coffee. He was not under a doctor's care and claimed to be healthy. When asked about any medication or drug use, he went into a long explanation about how he used to use drugs and had been in out of drug rehab and was trying to stay clean from drugs. He was very animated in his explanation using his arms and hands.
6. **Medical Problems and Treatment**: The suspect stated he had no medical issues or physical problems, and none were mentioned or observed during the evaluation.
7. **Psychophysical Indicators of Impairment**: Prior to administering the psychophysical tests each one was explained to the suspect and a verbal confirmation that he understood the test was obtained. He was given the option of removing his boots for the tests, and he wanted to keep them on. The following tests were administered to the suspect:

**Modified Romberg Balance**: During this test, the suspect had a quick time estimation and estimated the passage of 30 seconds in 22 seconds. When asked how he estimated the 30 seconds, he replied "I just counted in my head. How'd I do?" He displayed a side-to-side sway of approximately 2 inches in each direction. He was constantly moving his fingers on both hands during the test. Body tremors were also observed in his legs.

**Walk and Turn:** For this this test, a taped line on the floor was used. During the instruction stage, the suspect lost his balance to the right once and twice attempted to start walking before being told to begin. During the walking stage he stopped while walking twice during the first nine steps (Steps 7 and 8) and twice during the second nine steps (Steps 4 and 8). He missed touching heel to toe once on the second nine steps (Step 2). He raised his arms for balance twice on the first nine steps and three times on the second nine steps. The suspect turned as instructed, but his steps were quick and rigid. Throughout the test the suspect took quick and stiff-like steps.

**One Leg Stand:** When standing on his left foot and extending his right foot off the floor, the suspect swayed while balancing numerous times. He used his arms for balance three times and put his right foot down at 1,009. He counted quickly reaching a count of 1,038 in the 30 second period. When standing on his right foot and extending his left foot off the floor, he again swayed while balancing, used his arms for balance twice and put his left foot down at his counts of 1,015 and 1,021. He again counted quickly, reaching a count of 1,036 at the conclusion of the 30 second period.

**Finger to Nose:** During this test, the suspect displayed quick hand and arm movements. He missed the tip his nose with the tip of his index finger as directed and used the pad of his index fingers on each attempt.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect did not display any clues of Horizontal Gaze Nystagmus (HGN), and Vertical Gaze Nystagmus (VGN) was not observed. He was able to converge his eyes as directed. During the pupil size examinations, his pupils were estimated at 6.0 mm in both eyes in Room Light, 8.5 mm in both eyes in Near Total Darkness, and 5.0 mm in both eyes in Direct Light. The Room Light and Direct Light measurements were outside the DRE average ranges and the Near Total Darkness result was at the high end of the DRE average range. Rebound dilation was not present and he had a slow reaction to light.

**Vital Signs:** The suspect's pulse was measured three times during the drug evaluation. The results were 102 beats per minute (bpm), 100 bpm, and 102 bpm. All three were above the DRE average range. His blood pressure was measured at 162/96 mmHg. Both the systolic and diastolic measurements were above the DRE average ranges. His body temperature was measured at 99.8°, which is above the DRE average range. The suspect's muscle tone was rigid. He was asked about his high pulse and B/P and he stated, "I don't know man. You tell me."

**9. Signs of Ingestion:** The suspect's nasal area showed some redness. His oral cavity was clear. There were two red puncture marks on his left inner arm. When questioned about the marks, he first indicated they were from plasma donations. He later changed his explanation to them being caused by an IV injection he had about a week ago. He became very evasive when I continued to ask about the marks.

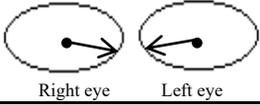
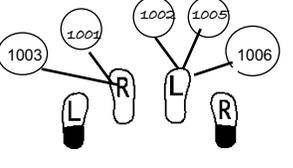
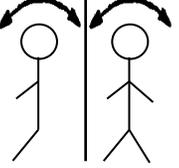
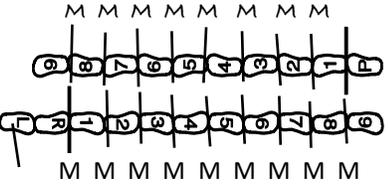
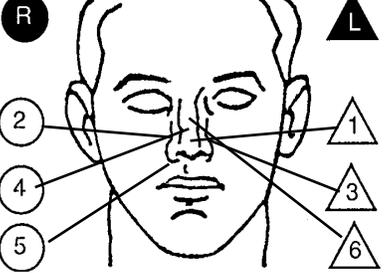
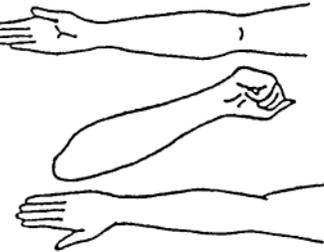
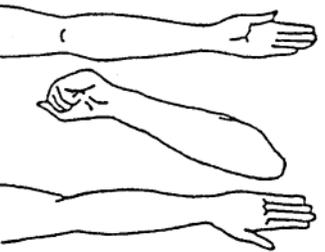
**10. Suspect's Statements:** Sergeant Hilderbrand advised the suspect of his Miranda rights immediately after his arrest. I again advised him of his rights to ensure he understood them. When asked what drugs or medications he had used, he looked away and stated, "I'm not answering that."

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of a CNS Stimulant and was unable to operate a vehicle safely.

**12. Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist after the completion of my evaluation. The blood draw was witnessed by Sergeant Hilderbrand and was submitted into evidence for laboratory testing.

**13. Miscellaneous:** In addition to the charges for DWS and Attempting to Elude, the suspect had an active warrant for his arrest for Failure to Appear on a drug possession charge. Refer to Sergeant Hilderbrand's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Jay Riggen</b>		DRE # <b>15563</b>	Rolling Log # <b>22-006-0072</b>	Evaluator's Agency <b>Vermont State Police</b>		Case# <b>(Session XV - #5 IG)</b>
Recorder/Witness <b>Tpr. Clay Knight Vermont SP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Dover PD</b>		
Arrestee's Name (Last, First, Middle) <b>Edwards, Joan L.</b>		Date of Birth <b>01/06/1992</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Sam Morris</b>	
Date Examined / Time / Location <b>08/15/22 / 8:10 pm / Dover PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>Intox 45301</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by: <b>Officer Morris</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Veggie Burger</b>	When? <b>6 pm</b>	What have you been drinking? How much? <b>Water "A lot"</b>	Time of last drink? <b>N/A</b>	
Time now/ Actual <b>7 pm / 8:15 pm</b>	When did you last sleep? <b>"I don't remember"</b>	How long? <b>UNK</b>	Are you sick or injured? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"A little nauseous"</b>		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Just some herbal stuff"</b>			Attitude: <b>Cooperative, Disoriented</b>		Coordination: <b>Poor</b>	
Speech: <b>Rambling, Incoherent at times</b>		Breath odor: <b>Normal</b>		Face: <b>Flushed, Sweaty</b>		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse/Time	HGN	Left Eye	Right Eye	Convergence		NA/30
1. <u>106</u> / <u>8:25</u>	Lack of Smooth Pursuit	<i>None</i>	<i>None</i>			
2. <u>102</u> / <u>8:38</u>	Maximum Deviation	<i>None</i>	<i>None</i>	Right eye      Left eye		
3. <u>104</u> / <u>8:55</u>	Angle of Onset	<i>None</i>	<i>None</i>			
<b>Modified Romberg Balance</b> Approx. 2" 2" 3" 3"  Kept eyes opened.	<b>Walk and Turn Test</b>  Missed heel to toe on all attempts		Cannot keep balance <u>1</u>		NA/30	
				Starts too soon <u>2</u>	L R	
				Stops walking	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing	
				Misses heel-toe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance	
				Steps off line	<input type="checkbox"/> <input type="checkbox"/> Hopping	
				Uses arms	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down	
				Actual steps taken	Tests stopped - almost fell on both	
<b>Time Estimation</b> <u>62</u> estimated as 30 seconds	Describe turn <b>walking turn</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>unlaced athletic shoes</b>	
<b>Finger to Nose</b> (Draw lines to spots touched)  Kept eyes open. Slow rigid movements.		<b>PUPIL SIZE</b>	<b>Room light</b> (2.5 - 5.0)	<b>Darkness</b> (5.0 - 8.5)	<b>Direct</b> (2.0 - 4.5)	Nasal area: <b>Clear</b>
		<b>Left Eye</b>	<b>7.0</b>	<b>9.5</b>	<b>6.0</b>	Oral cavity: <b>Clear</b>
		<b>Right Eye</b>	<b>7.0</b>	<b>9.5</b>	<b>6.0</b>	
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <b>Normal</b>	
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>		
						
		Nothing observed				
Blood Pressure <b>166/98</b>	Temperature <b>101.0 °F</b>		Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:	
What drugs or medications have you been using? <b>Stated "Nothing" then began laughing</b>		How much? <b>N/A</b>	Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>		
Date / Time of arrest: <b>08/15/22 7:05 PM</b>	Time DRE was notified: <b>7:40 PM</b>	Evaluation start time: <b>8:10 PM</b>	Evaluation completion time: <b>9:20 PM</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation		
DRE/Officer's Signature: <b>Jay Riggen</b>		Reviewed/approved by / date:			DRE#	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input checked="" type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Edwards, Joan L.**

1. **Location:** The drug influence evaluation was conducted in the interview room at the Dover Police Department. The darkroom examinations were conducted inside the staff bathroom adjacent to the interview room. The flooring in the interview room was a tile surface, free of obstructions, and the room had suitable lighting for conducting a drug evaluation.
2. **Witnesses:** Trooper Clay Knight of the Vermont SP witnessed and recorded the drug entire evaluation.
3. **Breath Alcohol Test:** A breath test was administered to the suspect by Officer Morris with a .000 BAC result.
4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to respond to the Dover PD for a drug evaluation. Once arriving, I contacted Officer Morris who advised he had observed the suspect suddenly stop her vehicle for no reason on Handle Road. After making an abrupt stop, she exited her vehicle and climbed onto the hood and began waving her arms and screaming at vehicles as they passed by. Officer Morris contacted her because of her bizarre behavior. According to Officer Morris, she had difficulty answering his questions and gave rambling responses. He was able to learn that she had driven to her location after attending an Uncle Acid and the Toad Lickers concert near the Canadian border. She appeared very uncoordinated and Officer Morris suspected she was impaired or suffering from a mental disorder. After calming her down, Officer Morris was able to administer SFSTs. However, she had difficulty performing them as described. According to Officer Morris, she nearly fell twice while trying to complete the Walk and Turn (W&T) test and had difficulty trying to balance on one foot during the One Leg Stand (OLS) test. HGN and VGN were not observed. Officer Morris placed her under arrest for DUI and transported her to the Dover PD for further investigation. Her breath test result was negative for alcohol and he requested DRE assistance.
5. **Initial Observation of the Suspect:** I first observed Edwards in the DPD interview room. Her speech was incoherent at times and she was rambling as she spoke. She appeared dazed, disoriented, and had difficulty walking. Her face appeared flushed and she was sweating even though she had been in a cool environment for nearly an hour. She also seemed unconcerned about her arrest and circumstances. I noted that she was wearing cut-off jeans, a faded blue tee-shirt, unlaced high-top athletic type shoes and she had a blue bandana in her hair. I explained why I had been called and asked if she would consent to a drug evaluation. She responded by stating, "Okay..., I'm cool with that." She was reminded of her Miranda rights and she agreed to answer my questions. She admitted eating a veggie burger earlier in the evening and had only drank water. Several times during our conversation, Edwards would look at the clock on the wall and start talking to it and laughed out loud. At times, she was unconcerned and disinterested about her circumstances.
6. **Medical Problems and Treatment:** Edwards did indicate that she felt nauseous. She stated she had no physical problems, and none were observed or reported. She indicated that she was not under the care of a doctor or dentist. She was asked if she required medical assistance and she laughed out loud and said, "Nope."
7. **Psychophysical Indicators of Impairment:** Prior to requesting Edwards to perform the psychophysical tests, each one was explained and demonstrated to her. Each time she indicated she understood the instructions. However, I had to repeat the instructions for the W&T and Finger-to-Nose tests multiple times. The psychophysical tests administered to Edwards included:

**Modified Romberg Balance:** For this test, her time estimation was slow as she estimated the passage of 30 seconds in 62 seconds. When asked how she estimated the 30 seconds, she laughed and said, "I was singing a song in my head." She had a front-to-back sway of approximately two inches in each direction, and a side-to-side sway of approximately three inches in each direction. He also kept her eyes open during the test even though she was reminded several times to close them.

**Walk and Turn:** A line in the tile flooring was used for this test. Edwards was given the opportunity to remove her shoes for the test. However, she wanted to keep them on and stated, “No..... they’re really comfortable.” Edwards lost her balance once while listening to instructions and twice attempted to start the test before being instructed to do so. During the walking stage she missed heel to toe on every step and raised her arms for balance four times during the first nine steps and throughout the second nine steps. She did not make the turn as directed, making a walking turn using both feet. After completing her turn, she appeared confused and had to be reminded to continue the test. She again missed touching heel to toe on every step on the second nine steps.

**One Leg Stand:** For this test, while standing on her left foot and extending her right foot off the floor, she immediately swayed while balancing, used her arms for balance, and put her foot down at counts 1,001 and 1,003. She was in danger of falling and the test was stopped. While attempting to stand on her right foot, she once again immediately swayed while balancing, used her arms for balance, and put her foot down at 1,002, 1,005, and 1,006. This part of the test was also stopped for safety reasons. After nearly falling the second time, she stated, “Wow, the floor was really moving.”

**Finger to Nose:** During this test, Edwards kept her eyes open during the entire test despite instructions for her to keep her eyes closed. With her eyes open, she missed touching the tip her nose with the tip of her index finger as directed on all six attempts. Her arm movements were slow and rigid-like.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** Both Horizontal Gaze Nystagmus (HGN) and Vertical Gaze Nystagmus (VGN) were not observed. Edwards was able to converge her eyes as directed and laughed as she performed the test. The test was conducted twice with the same results. During the pupil size examinations, her pupils were estimated at 7.0 mm in each eye in Room Light, 9.5 mm in each eye in Near Total Darkness, and 6.0 mm in each eye in Direct Light. All three were dilated and outside the DRE average ranges for the three lighting conditions. Rebound dilation was not present and her pupil reaction to light was normal.

**Vital Signs:** Her pulse was checked three times during the evaluation and were 106, 102 and 104 beats per minute. Each result was above the DRE average range for pulse rate. Her blood pressure was measured at 166/98, which was above the DRE average ranges. Her body temperature was measured at 101°, which is above the DRE average range for body temperature. Her muscle tone was rigid.

**9. Signs of Ingestion:** Her nasal area and her oral cavity were both clear and there were no indicators of injection sites on either arm or her hands.

**10. Suspect’s Statements:** Officer Morris had advised Edwards of her Miranda rights and she agreed to answer questions. When asked about drugs she may have used, she replied “Nothing,” laughed and then said, “Do you think I’m a druggie?” When asked about drug use at the concert she indicated that some of her friends may have been doing some drugs, but she didn’t use anything that she could remember.

**11. DRE’s Opinion:** It is my opinion as a certified Drug Recognition Expert that Edwards is under the influence of a Hallucinogen and is unable to operate a vehicle safely.

**12. Toxicological Specimen:** A blood sample was collected from Edwards by a licensed phlebotomist and witnessed by Officer Morris. The sample was submitted into evidence for laboratory testing.

**13. Miscellaneous:** Due to her elevated vital signs and behavior, Edwards was later released to a friend instead of being detained on the DUI charge. Refer to Officer Morris’ arrest report for additional details.

# 16 DRE

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## DISSOCIATIVE ANESTHETICS

### LEARNING OBJECTIVES

- Describe a brief overview of Dissociative Anesthetics and specifically Phencyclidine (PCP) and its analogs
- Identify common drug names and terms associated with this drug category
- Identify common methods of administration for this drug category
- Describe the symptoms, observable signs, and other effects associated with this drug category
- Describe the typical time parameters associated with this drug category
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category

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D. Overdose Signs and Symptoms .....	11
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F. Review of the DEC Program Exemplars .....	14

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Review of the DEC Program Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations

## Learning Objectives

- Describe a brief overview of Dissociative Anesthetics, specifically PCP and its analogs
- Identify common drug names and terms
- Identify common methods of administration
- Describe symptoms, observable signs, and other effects
- Describe typical time parameters
- List indicators likely to emerge during the drug influence evaluation

DRE

16-2

**Slide 2.****Instructor  
Note**

*Briefly review the objectives, content, and activities of this session.*

### A. Overview of the Category

## Overview of Dissociative Anesthetics

- Drugs that inhibit pain by cutting off or dissociating the brain's perception of pain
- Induce a state of sedation, immobility, amnesia, and analgesia



DRE

16-3

**Slide 3.**

Dissociative Anesthetics include drugs that inhibit pain by cutting off or disassociating the brain's perception of pain. The drugs within this category normally will induce a state of sedation, immobility, amnesia, and marked analgesia. The term "Dissociative Anesthesia" is derived from the strong feeling of dissociation from the environment expected by the user. PCP was the first drug used for this purpose.

Session 16: Dissociative Anesthetics

## Brief History of PCP

1950's: Developed by Parke-Davis

1963: Patented as "Sernyl"

1965: Discontinued use for humans

1968: Re-patented for animals as "Sernylan"

1978: Banned

DRE 16-4

**Slide 4.**

PCP is a drug that, along with its analogs, are examples of this distinct drug category. The chemical for PCP is Phenyl Cyclohexyl Piperidine.



**Write the chemical name on the dry erase board or easel/easel pad, underlining the first "P", the first "C" and the last "P".**

PCP shares some characteristics with each of the three categories of drugs. It produces some effects similar to the effects of Central Nervous System (CNS) Depressants. Examples of effects PCP shares with CNS Depressants: nystagmus, slurred speech, slowed responses. It produces some effects similar to those of CNS Stimulants. Examples of effects PCP shares with CNS Stimulants: elevated vital signs and restlessness. In some respects, it acts like a Hallucinogen.

PCP and its analogs have often been referred to as "psychedelic anesthetics" because of the bizarre and varying effects they can cause. "Phencyclidine" is a contracted or a shortened form of the chemical name. An "Analog" is a chemical very similar to the drug in terms of molecular structure or in psychoactive effects. In many medical texts and other reference documents, PCP may be classified as a Hallucinogen. However, for purposes of the DEC Program, it is treated as a separate category.

PCP sometimes goes by the "street" names "Angel Dust", "Animal Tranquilizer", "Wet", "Embalming Fluid", "Sherm" etc.



**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

PCP was first developed in the late 1950's. It was developed by Parke-Davis and Company, a leading pharmaceutical firm. The developers were searching for a drug that would serve as an efficient intravenous anesthetic. PCP proved to be a very effective anesthetic. An anesthetic is an agent that reduces or abolishes pain sensitivity. It was patented and marketed in 1963 under the trade name Sernyl. It was used in the treatment of mental and psychological disorders, including schizophrenia. Many adverse side effects were experienced by persons who had been treated with PCP.



***Point out some of these side effects will be discussed later.***

In 1965, use of PCP as an anesthetic for humans was discontinued. In 1968, Parke-Davis re-patented PCP under the trade name Sernylan, which was restricted to use as a veterinary anesthetic. Sernyl for animals is Sernylan. However, Sernylan was often illicitly diverted to "street" use, so most legitimate manufacturing of PCP was stopped in 1978.

PCP is relatively easy to manufacture. The chemicals required to produce it are readily available commercially. The formula for producing PCP has been widely publicized. The hardware needed to combine the chemicals is very basic.

Session 16: Dissociative Anesthetics

## Ketamine

- Analog of PCP
- Brand names of Ketamine: Ketalar, Ketaject, Ketaset, and Vetalar
- Methoxetamine – Analog of Ketamine

DRE 16-5

**Slide 5.**



***If available, display slides of the various drugs.***

***Write Ketamine on the dry erase or easel/easel pad.***

Another drug in this category is called Ketamine, which is an analog of PCP. Unlike PCP, Ketamine continues to be manufactured and sold legitimately. Ketamine is a white, crystalline powder or clear liquid. Ketamine is used as a rapid surgical anesthetic, both for animals and humans, especially children.

Some brand names of Ketamine: Ketalar (human use), Ketaject, Ketaset, and Vetalar. Some street names include: "Special K", "Vitamin K", "Jet", "Kit Kat", "Kitty", "Super K".

Ketamine is being studied as a possible treatment of depression.

Methoxetamine (MXE) is a research chemical not currently approved for human or veterinary use. Methoxetamine has a similar abuse profile to Ketamine and can cause pain suppression, tachycardia, hypertension, and altered perception and memory.

Signs and symptoms include dissociated and catatonic state, nausea, vomiting, and visual hallucinations.



**Source:**

(2012). *Society of Forensic Toxicologists Newsletter*, 36(4).

Session 16: Dissociative Anesthetics

## Dextromethorphan (DXM)

- Synthetically produced
- Found in numerous OTC cough and cold products



DRE 16-6

**Slide 6.**

Another drug in this category is Dextromethorphan. It is sometimes referred to as "DXM" and is an ingredient found in numerous over-the-counter (OTC) cough and cold remedies.



**Point out DREs frequently encounter persons abusing DXM due to its availability in so many OTC products.**

**Point out in some respects, DXM's effects can be similar to a CNS Depressant, CNS Stimulant, and Hallucinogen. It has been classified as a CNS Depressant in some medical texts and scientific/research reports.**

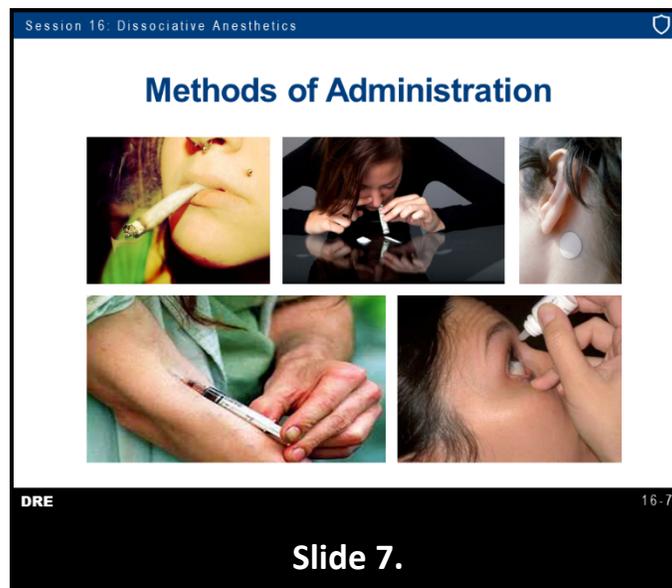
**Point out DXM is often in other OTC substances containing Acetaminophen, Chlorpheniramine, and Guaifenesin.**

DXM is a synthetically-produced substance that is chemically related to Codeine although it is not an Opiate.

Street names for Dextromethorphan include: "Triple C", "Robo", "Robo-Tripping", "Skittles", "DM".

When administered in recommended dosage levels, DXM generally is a safe and highly-effective cough suppressant; however, when administered in large amounts, it produces negative physiological effects. DXM abusers normally administer the drug orally, although some crush the pills and snort them.

Some abusers administer 250 to 1,500 milligrams in a single dosage.



**If available, display slides of the various PCP administration paraphernalia.**

**Common Methods of Administration for PCP:** Many users administer PCP by smoking. PCP can be applied in either powder or liquid form to a variety of vegetable or leafy substances, which can then be smoked in a pipe or homemade cigarette. Popular substances include mint leaves, parsley, oregano, tobacco, or marijuana.



***Common Methods of Administration for PCP: Many users administer PCP by smoking. PCP can be applied in either powder or liquid form to a variety of vegetable or leafy substances, which can then be smoked in a pipe or homemade cigarette. Popular substances include mint leaves, parsley, oregano, tobacco, or marijuana.***

Commercially-prepared cigarettes can also be dipped in liquid PCP, allowed to dry, and then smoked. **PCP-adulterated cigarettes usually will be wrapped in metal foil to be preserved.**

Some users prefer to dip a string in liquid PCP and then insert the string into a tobacco cigarette.



***Point out menthol brand cigarettes are popular for this because they are mentholated. PCP-adulterated cigarettes are sometimes called “Super Kools” or “Sherms” because of the cigarette brand used.***

**White cigarette paper will be stained brown if adulterated with PCP. Brown cigarette paper will show white crystals when adulterated.**

PCP can also be insufflated or “snorted.” It can also be taken orally, in capsule or tablet form. Some users inject liquid PCP either directly into a vein, under the skin, or into a muscle. Some users have administered PCP to themselves by dripping liquid PCP onto their eyes using an eyedropper. Transdermal absorption of PCP has also been reported (i.e., when applied to the skin, especially as a liquid, PCP can penetrate directly into the body and bloodstream).

**Liquid PCP is especially dangerous because it can be absorbed through the skin. Hence, it could be used as a weapon.**



***Re-emphasize the danger to officers handling suspected drugs without proper protective gloves.***

***Solicit participants’ questions and comments about the overview of PCP.***

*Common Methods of Administration for Ketamine:* Ketamine can be applied in either powder or liquid form to a variety of vegetable or leafy substances which can then be smoked in a pipe or homemade cigarettes. Popular substances include mint leaves, parsley, oregano, tobacco, or Marijuana. Commercially-prepared cigarettes can also be dipped in liquid Ketamine, allowed to dry, and then smoked. Some users prefer to dip a string in liquid Ketamine and then insert the string into a tobacco cigarette.

*Common Methods of Administration for DXM:* Orally; Injection; Insufflation (snorting).



***Stress that participants should be familiar with all of the drug names in this category.***

## B. Possible Effects of Dissociative Anesthetics

Session 16: Dissociative Anesthetics

### Possible Effects

- Agitation, anxiety
- Convulsions
- Delirium
- Difficulty with speech
- Elevated blood pressure
- Hallucinations
- Rigid muscle tone
- Violent reactions

DRE 16-8

**Slide 8.**

Possible effects of Dissociative Anesthetics may include the following adverse side effects.



**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

- Delirium: confusion, incoherent speech, excitement, illusions, hallucinations, and disorientation
- Agitation, anxiety
- Rigid muscle tone
- Elevated blood pressure
- Convulsions: involuntary contortion of the muscles, producing contortion of the body and limbs
- Difficulty with speech
- Hallucinations
- Violent reactions

PCP has sometimes been called a psychotomimetic drug; i.e., it produces effects that mimic psychosis, or “craziness.” When the psychosis remains long after the drug has dissipated, we say its effects were psychotogenic, i.e., it didn’t simply mimic craziness, it caused craziness.

PCP is classified as a Dissociative Anesthetic because it cuts off the brain’s perceptions of the senses. PCP users often feel their heads are physically separated from their bodies. They sometimes report feeling they are dead and their heads are floating away. Cases of terribly bizarre, self-destructive behavior have been reported with persons under the influence of PCP.



***Feel free to replace or supplement these examples with others known personally to them.***

One young man methodically pulled his own teeth out using a pair of pliers.



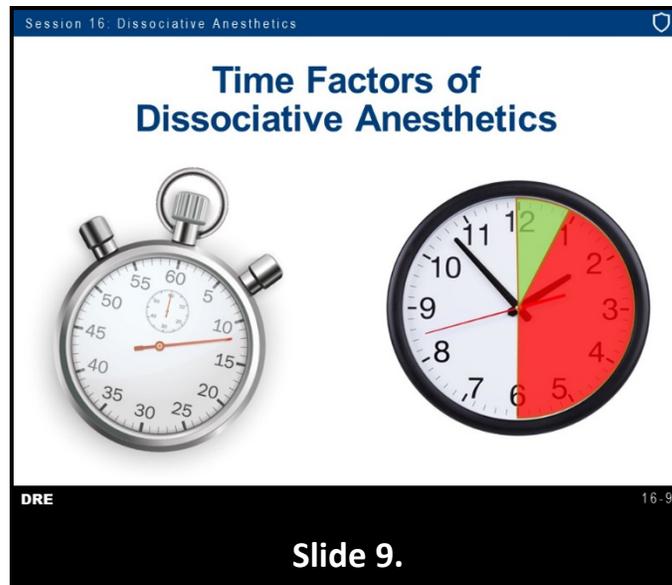
***Point out PCP can render the user impervious to pain. It anesthetizes the central nervous system to the extent surgery could be performed on the user while he or she is wide awake.***

Another individual suffered hallucinations of unbelievably grotesque monsters and gouged out his own eyes to avoid seeing the monsters. Another young man drank rat poison, attempting to kill rats he imagined were inhabiting his body. A nude woman plunged a butcher knife into her own eye, chest, groin, and abdomen. She then threatened a police officer with the knife and was shot to death.



***Source:***  
***(1988, March 7). Washington Post.***

## C. Onset and Duration of Effects



*PCP*: When PCP is smoked or injected, onset occurs within 1 – 5 minutes. When inhaled (“snorted”), onset occurs in 30 minutes. Onset is considerably slower when PCP is taken orally: 30 – 60 minutes. The effects reach their peak in about 15 – 30 minutes, assuming the PCP was smoked, injected, or snorted. The effects generally last 4 – 6 hours, but they can go somewhat longer. The user usually, but not always, returns to normal within 24 – 48 hours.

*Ketamine*: Within seconds if smoked; duration varies. 1 – 5 minutes if injected; lasting 30 – 45 minutes. 5 – 10 minutes if snorted; lasting 45 – 60 minutes. 15 – 20 minutes if orally; lasting 1 – 2 hours. Ketamine abusers will often “re-administer” the drug due to its relatively short duration of action.

*DXM*: Rapidly absorbed from the gastrointestinal tract and peak plasma concentrations are reached in approximately 2.5 hours. DXM is widely distributed and is rapidly and extensively metabolized by the liver. DXM exerts its antitussive effects within 15 – 30 minutes of oral administration. The duration of action is approximately 3 – 6 hours with conventional dosage forms.



### Source:

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

*DXM Plateau (or effect):* Abusers will also administer various amounts of DXM depending on their body weight and the effect or “plateau” they are attempting to achieve. Plateaus include the normal recommended therapeutic dosages of DXM are 10 to 20 milligrams for every four hours or 30 milligrams every 6 to 8 hours and acute dose between 250 – 1500 mg. The 1st Plateau is mild inebriation. The 2nd Plateau is an effect similar to alcohol intoxication with mild hallucinations. Speech at the 2nd plateau can become slurred and short-term memory may be temporarily impaired. The 3rd Plateau is an altered state of consciousness where the abuser’s senses, particularly vision, can become impaired. The 4th Plateau is where the mind and body dissociate or an “out of body” experience. Abusers at the 4th plateau can lose some or all contact with his or her senses. The effects at this level are comparable to PCP. Other effects include blurred vision, body itching, rash, sweating, fever, hypertension, shallow respiration, diarrhea, toxic psychosis, and an increased heart rate, blood pressure, and body temperature.



***Solicit participants’ questions and comments concerning onset and duration factors.***

## D. Overdose Signs and Symptoms

Session 16: Dissociative Anesthetics

### Overdose Signs and Symptoms

- Coma
- Possible psychosis
- Seizures and convulsions

DRE 16-10

**Slide 10.**

In addition to the bizarre, violent, and self-destructive behavior discussed previously, persons overdosing on Dissociative Anesthetics may exhibit extreme symptoms signifying a medically dangerous condition. These include a coma and seizures. Prolonged use of Dissociative Anesthetics can lead to psychosis, which can be permanent.



***Solicit participants’ questions and comments concerning signs and symptoms of Dissociative Anesthetic overdose.***

## E. Expected Results of the Evaluation

Session 16: Dissociative Anesthetics

### Dissociative Anesthetic Symptomatology Chart

HGN	Present
VGN	Present
LOC	Present
Pupil Size	Normal
Reaction to Light	Normal
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid

DRE 16-11

**Slide 11.**

Horizontal Gaze Nystagmus (HGN) generally will be present with a very early angle of onset.



***Mention so-called "Resting Nystagmus" may be evident, especially with high doses, and is more often associated with a neurological issue. Remind participants Resting Nystagmus is a distinct jerking of the eyeballs even as the subject stares straight ahead.***

Vertical Gaze Nystagmus (VGN) usually will be present.

Lack of Convergence (LOC) will generally be present.

Performance on Modified Romberg Balance (MRB) will be impaired: time estimation may be slowed.

Performance on Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) will be impaired.

Muscle tone will usually be rigid.

With PCP, the subject may exhibit an unsteady, uncoordinated walk, taking abnormally high and slow steps as though he or she were trying to step over obstacles in his or her path.

**Vital Signs:** Pulse rate will generally be up. Blood pressure will generally be elevated. Body temperature will generally be up.

**Dark Room:** Pupil size will be within the DRE average ranges. Reaction to Light will be normal.

Muscle tone will be rigid.



## General Indicators

- Blank stare
- Disoriented
- Hallucinations
- Incomplete verbal responses
- Increased pain threshold
- Non-Communicative
- Perspiring
- Possibly violent
- Sensory distortions
- Slow, slurred speech

DRE

16-12

### Slide 12.

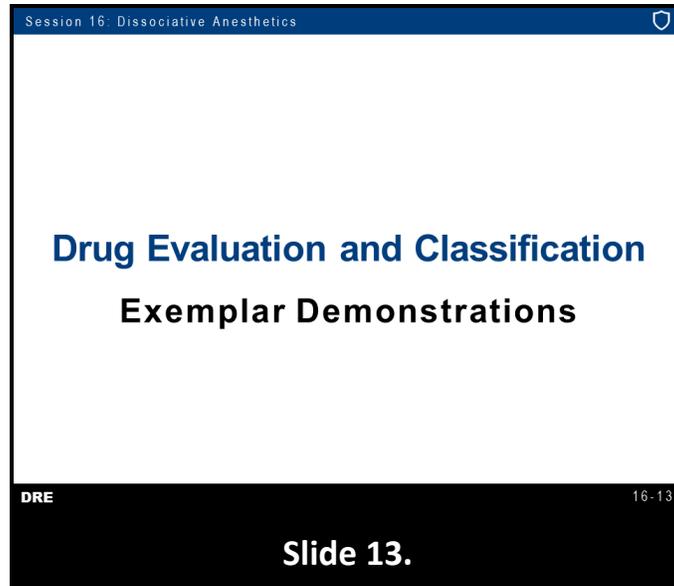
- Blank stare
- Confusion
- Chemical odor (PCP)
- Cyclic behavior (PCP) varying between passive/calm, irritated/agitated, and aggressive/combatative, that tend to increase and decrease cyclically
- Disoriented
- Hallucinations
- Incomplete verbal responses
- Increased pain threshold
- Non-communicative
- Perspiring
- Possibly violent
- Sensory distortions
- Slow, slurred speech



***For more information and details regarding possible effects refer to***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## F. Review of the DEC Program Exemplars



*Refer participants to the exemplars found at the end of Session 16 of their participant guide.*

*Point out the exemplars are examples and serve as a guide.*

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.



*Relate the items on the exemplars to the Dissociative Anesthetics Symptomatology Chart.*



Session 16: Dissociative Anesthetics

## Dissociative Anesthetic



DRE 16-14

**Slide 14.**



**VIDEO DEMONSTRATION:** *Click video to begin.*

*Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.*

*Show video example of subject under the influence of a Dissociative Anesthetics. (Approximately 20 minutes).*

Session 16: Dissociative Anesthetics

## Questions?

DRE 16-15

**Slide 15.**



*Solicit questions or comments concerning expected results of the drug evaluation of Dissociative Anesthetic subjects.*



## Test Your Knowledge

1. What chemical is found in many cough medicines that produces effects similar to PCP?
2. Why do many PCP smokers prefer to adulterate mentholated cigarettes with PCP?
3. What is Ketamine?
4. What does the term “dissociative anesthetic” mean?

DRE

16-16

### Slide 16.

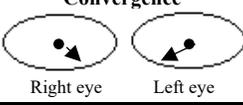
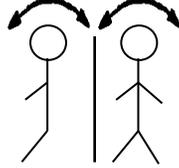
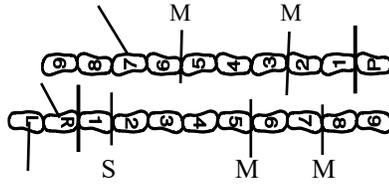
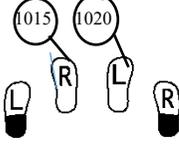
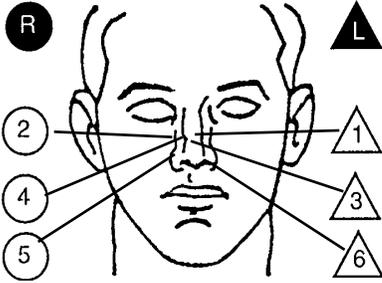
### Test Your Knowledge

1. What chemical is found in many cough medicines that produces effects similar to PCP?
2. Why do many PCP smokers prefer to adulterate mentholated cigarettes with PCP?
3. What is Ketamine?
4. What does the term “dissociative anesthetic” mean?



1. ***Dextromethorphan (DXM)***
2. ***PCP smoke is very hot, so users will cool it through the use of mentholated cigarettes.***
3. ***An analog of PCP used as a surgical anesthetic, both for animals and humans, especially children.***
4. ***A dissociative anesthetic inhibits pain by cutting off (or dissociating) the brain's perception of the pain. PCP and its analogs are considered dissociative anesthetics.***

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Dean Olivier</b>		DRE # <b>12610</b>	Rolling Log # <b>22-014-0048</b>	Evaluator's Agency <b>Beaumont PD</b>	Case # <b>(Session XVI - #1)</b>
Recorder/Witness <b>Sgt. Scott Foulke, San Antonio PD</b>		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency <b>Texas DPS</b>	
Arrestee's Name (Last, First, Middle) <b>Dexing, Delbert R.</b>		Date of Birth <b>03/09/89</b>	Sex <b>M</b>	Race <b>B</b>	Arresting Officer (Name, ID#) <b>Trooper Stephen Gresham #14432</b>
Date Examined / Time / Location <b>12/31/22 / 2020 / Jefferson CO Intake Center</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>90914</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Tpr. Gresham</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Fried Chicken</b>	When? <b>About noon</b>	What have you been drinking? How much? <b>Water "Lots"</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>2 pm / 2025</b>	When did you last sleep? <b>(Long pause) Last night</b>	How long? <b>2 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>(No response)</b>		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>(No response)</b>
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>(No response)</b>		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I'm not sick"</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I don't think so"</b>	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>(No response)</b>			Attitude: <b>Cooperative, Passive</b>		Coordination: <b>Slow, Rigid</b>
Speech: <b>Slow, Confused, Incomplete sentences</b>		Breath odor: <b>Chemical-like</b>		Face: <b>Flushed, Sweaty, Blank stare at times</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse and Time 1. <u>110</u> / <u>2035</u> 2. <u>112</u> / <u>2058</u> 3. <u>110</u> / <u>2118</u>		HGNC Lack of Smooth Pursuit <b>Present</b> Maximum Deviation <b>Present</b> Angle of Onset <b>Immed</b>		Convergence  Right eye      Left eye	
Modified Romberg Balance Approx. 4" 4"      Approx. 3" 3"  <b>Rigid stance</b>		Walk and Turn Test  <b>Rigid, slow steps. Reminded to count steps out loud.</b>		NA/30 <b>One Leg Stand</b> NA/30  <b>Rigid, stiff movements</b>	
Time Estimation <u>48</u> estimated as 30 seconds		Describe turn <b>Rigid steps using both feet</b>		Cannot do test (explain) <b>N/A</b>	
Type of footwear: <b>Slip-on boots</b>		Nasal area: <b>Clear</b>		Oral cavity: <b>Clear</b>	
Finger to Nose (Draw lines to spots touched)  <b>Slow, rigid movements. Kept finger in place</b>		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	5.0	7.0	4.0
		Right Eye	5.0	7.0	4.0
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <b>Normal</b>
Blood Pressure <b>180 / 98</b>		Temperature <b>99.8 °F</b>		RIGHT ARM	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Nothing detected		LEFT ARM	
What drugs or medications have you been using? <b>No response, laughed out loud</b>		How much? <b>No response</b>		Time of use? <b>N/A</b>	
Date / Time of arrest: <b>12/31/22 / 1915</b>		Time DRE was notified: <b>1955</b>		Where were the drugs used? (Location) <b>N/A</b>	
Evaluation start time: <b>2020</b>		Evaluation completion time: <b>2130</b>		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: <b>Deane Olivier</b>		Reviewed/approved by / date:			DRE #
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
		<input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Dexing, Delbert R.**

- 1. Location:** The drug evaluation was conducted at the Jefferson County Intake Center. The room where the evaluation was conducted was well illuminated and had a smooth, level concrete floor with no obstructions. The darkroom exams were conducted in the restroom adjacent to the processing area.
- 2. Witnesses:** The evaluation was witnessed and recorded by Sgt. Scott Foulke of the San Antonio PD. The arresting officer, Trooper Stephen Gresham of the Texas DPS witnessed the darkroom examinations.
- 3. Breath Alcohol Test:** The suspect's breath test was administered by Trooper Gresham prior to my arrival to the Intake Center. The suspect's breath test result was a 0.00%.
- 4. Notification and Interview of the Arresting Officer:** On 12/31/22, I was working a New Year's Eve DUI Emphasis patrol and at approximately 1955 hours, I was dispatched to the Jefferson County Intake Center regarding a DRE drug evaluation. After arriving I met with Trooper Stephen Gresham of the Texas DPS who was requesting DRE assistance with a DUID arrest. According to Trooper Gresham, he had investigated a one vehicle, non-injury crash on Highway 105 where the suspect's vehicle left the roadway striking several road signs and ended up in a ditch. When contacted, the suspect appeared to be confused and was in a dazed-like condition. The suspect told Trooper Gresham that he thought he was near Houston (Approximately 80 miles away). According to Trooper Gresham, the suspect's speech was slurred, and at times, did not complete his sentences. Trooper Gresham also observed that the suspect's balance was poor with unsteady with rigid-like movements. After determining that the suspect was not injured, Trooper Gresham administered SFSTs at roadside. Trooper Gresham observed six clues of HGN with an immediate angle of onset of nystagmus. According to Trooper Gresham, VGN was also present. The suspect had difficulty completing the WAT and OLS tests due to his poor balance and lack of coordination. Trooper Gresham arrested the suspect for DUI and during an inventory search of his vehicle, he located several stained partially used cigarettes inside some tinfoil. When asked about the cigarette's, the suspect stated they were not his. The suspect was transported to the Jefferson County Intake Center for processing and after obtaining a 0.00% breath test, Trooper Gresham requested DRE assistance.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the Intake Center booking area. He appeared dazed and disoriented. He was slow to respond to Trooper Gresham's questions and, at times, did not respond at all. His face was flushed, and he was sweating, which was not appropriate for the conditions. His movements were slow and rigid. When standing he several times used the wall and a chair to steady himself. I introduced myself and asked if we would submit to a drug evaluation. After a noticeable pause where it appeared he was trying to process the request, he agreed by stating, "What? Okay. I guess so." I asked if he remembered being advised of his Miranda rights by Trooper Gresham to which he replied, "Rights? Oh yea. I was." The suspect was cooperative, but at times, nonresponsive. He seemed unconcerned with his arrest and his circumstances. He stated that he did not have any injuries from his crash. Even though he was slow to respond to my questions, I was able to confirm that he had no physical defects. When first asked about medications or drugs, he did not respond and laughed out loud. During the preliminary examination, several times he would stop talking in mid-sentence and stared straight ahead with a blank-stare look. The suspect was wearing black slip-on boots, blue jeans, and a gray hoodie sweatshirt.
- 6. Medical Problems and Treatment:** The suspect was asked if he needed medical assistance due to his crash and he indicated he did not. No medical issues were observed or detected during the evaluation.
- 7. Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. Several times I had repeat my instructions to ensure he understood them. At times he had a blank stare and appeared to be having concentration issues.

After each demonstration, the suspect confirmed that he understood the instructions either verbally or by nodding his head. Per DRE protocol, the following psychophysical tests were administered to the suspect:

**Modified Romberg Balance:** While performing this test, the suspect had an approximate 4-inch front to back sway and an approximate 3-inch side to side sway. His time estimation was slow, estimating 30 seconds in 48 seconds. Throughout this test, the suspect stood very rigid with slow movements.

**Walk and Turn:** A painted line on the floor in the booking area was used for this test. The suspect's movements were slow and rigid throughout the test. He lost his balance twice during the instructions and twice attempted to start the test before instructed to do so. During the first nine steps, he stopped walking once, missed heel-to-toe twice, and raised his arms four times. He had to be reminded several times to count his steps out loud and to look at his feet. He turned improperly by taking multiple rigid-like steps. On the second nine steps, he missed heel-to-toe twice, stepped off the line once, and used his arms to balance three times. He again had to be reminded to count his steps out loud.

**One Leg Stand:** While standing on his left foot, the suspect immediately started swaying while balancing once he extended his right foot off the floor. He used his arms for balance the entire time his right foot was extended. He was reminded to count out loud and when he put his foot down at count 1,015, he stopped participating. While standing on his right foot, he again began swaying while balancing and used his arms to balance. He put his left foot down at count 1,020 and he again stopped participating. On both attempts, his leg and body movements were stiff and rigid-like.

**Finger to Nose:** While performing this test, the suspect had slow, rigid arm movements. He did not touch the tip of his nose with the tip of his index finger on any of the six attempts. He had to be reminded after each attempt to remove his hand and to replace his arm back at his side.

## **8. Clinical Indicators of Impairment:**

**Eye Signs:** Six clues of HGN were observed with an immediate angle of onset. VGN was also present. Lack of Convergence was present with his eyes not fully moving in towards his nose. As they started inward, both then moved outward and down. The test was conducted twice with the same results. His pupil sizes were checked in three lighting conditions. In RL his pupils were estimated at 5.0 mm. In NTD his pupils were estimated at 7.0 mm. In DL his pupils were estimated at 4.0 mm. All three were within the DRE average range. Rebound dilation was not present and his pupillary reaction to light was normal.

**Vital Signs:** The suspect's pulse was above the DRE average range on all three checks of 110, 112 and 110 bpm. His blood pressure was 180/98 mm Hg, which is above the DRE average range. His body temperature was above the DRE average range at 99.8 degrees.

9. **Signs of Ingestion:** The suspect's nasal and oral cavities were clear. There were no visible signs of injection marks on his arms or hands.
10. **Suspect's Statements:** When asked about drug use and specifically the stained cigarette's in tinfoil located in his vehicle, the suspect looked away, laughed, and did not respond.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Dissociative Anesthetic and is unable to operate a vehicle safely.
12. **Toxicological Sample:** The subject provided a blood sample. The sample was sealed in the lab provided kit and submitted as evidence pending lab testing.
13. **Miscellaneous:** Refer to Trooper Gresham's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Kamron Sardar</b>		DRE # <b>16369</b>	Rolling Log # <b>22-015-0142</b>	Evaluator's Agency <b>LAPD</b>	Case# <b>(Session XVI - #2)</b>	
Recorder/Witness <b>Officer Jayson Siller, LAPD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>LAPD</b>		
Arrestee's Name (Last, First, Middle) <b>Sherms, Shelly Dunsome</b>		Date of Birth <b>08/24/1988</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Timothy Arroyo #19840</b>	
Date Examined / Time / Location <b>05/02/22 / 11:10 pm / Metro Detention</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>Intox 45301</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by: <b>Officer Arroyo</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Chicken Sandwich</b>	When? <b>No response</b>	What have you been drinking? How much? <b>Water "A lot"</b>	Time of last drink? <b>N/A</b>	
Time now/ Actual <b>10 pm / 11:15 pm</b>	When did you last sleep? <b>No response</b>	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No response</b>	Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I'm not sick"</b>				
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"I smoke pot sometimes"</b>		Attitude: <b>Indifferent, Disoriented</b>		Coordination: <b>Poor, Slow, Rigid</b>		
Speech: <b>Slow, Thick, Delayed</b>		Breath odor: <b>Chemical</b>		Face: <b>Flushed, Sweaty</b>		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft	Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery	Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal			
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy		
Pulse/Time 1. <u>102</u> / <u>11:22</u> 2. <u>100</u> / <u>11:36</u> 3. <u>104</u> / <u>11:48</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye Present Present Immed	Right Eye Present Present Immed	Convergence  Right eye Left eye	NA/30 <b>One Leg Stand</b> NA/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Tests stopped after almost falling	
<b>Modified Romberg Balance</b> Approx. 3" 3" 3" 3"  Rigid	<b>Walk and Turn Test</b>  Rigid, slow movements. Reminded to count steps out loud.					
<b>Time Estimation</b> 42 estimated as 30 seconds	Describe turn Slow, rigid walking turn	Cannot do test (explain) N/A		Type of footwear: Slip-on Vans		
<b>Finger to Nose</b> (Draw lines to spots touched)  Slow, stiff movement. Eyes open		<b>PUPIL SIZE</b>	<b>Room light</b> (2.5 - 5.0)	<b>Darkness</b> (5.0 - 8.5)	<b>Direct</b> (2.0 - 4.5)	Nasal area: Clear
		Left Eye	4.0	6.0	3.0	Oral cavity: Clear
		Right Eye	4.0	6.0	3.0	
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Normal		
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>		
		Nothing observed				
Blood Pressure <b>188 / 92</b>	Temperature <b>100.0 °F</b>	Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:		
What drugs or medications have you been using? <b>No response</b>		How much? <b>No response</b>	Time of use? <b>No response</b>	Where were the drugs used? (Location) <b>No response</b>		
Date / Time of arrest: <b>05/02/22 10:00 PM</b>	Time DRE was notified: <b>10:40 PM</b>	Evaluation start time: <b>11:10 PM</b>	Evaluation completion time: <b>11:58 PM</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation		
DRE/Officer's Signature: <i>Kameron Sardar</i>		Reviewed/approved by / date:			DRE#	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input checked="" type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

### Suspect: Sherms, Shelly Dunsome

1. **Location:** The evaluation was conducted in the booking area of the LAPD Metro Detention Center. The darkroom examinations were conducted in the staff restroom. Both areas were well illuminated, had level smooth flooring and provided a suitable area for conducting the DRE evaluation.
2. **Witnesses:** The evaluation was witnessed and recorded by LAPD Officer Jayson Siller. The arresting officer, Timothy Arroyo of the LAPD witnessed the psychophysical tests.
3. **Breath Alcohol Test:** Sherm's breath test was administered by Officer Arroyo at 10:35 pm, prior to my arrival. He obtained a 0.00% BAC result using an Intox 9000, serial #45301.
4. **Notification and Interview of the Arresting Officer:** On 5/02/22 at approximately 10:40 pm, I was dispatched to conduct a drug evaluation at the Metro Detention Center. Upon my arrival, I met with the arresting officer, Officer Timothy Arroyo of the LAPD. Officer Arroyo advised that during an interagency DUI enforcement operation he had stopped Sherms' vehicle after observing it nearly hit several parked cars along West Olympic Blvd. According to Officer Arroyo, he activated his emergency lights to stop her vehicle, however, she continued without stopping for almost three blocks, nearly hitting other parked vehicles. When her vehicle did stop, the right front tire scraped the concrete curb. When Officer Arroyo approached the vehicle, he noticed that Sherms was staring straight ahead with a blank stare look. During the personal contact she appeared to be in a dazed-like condition and confused, appearing to not know where she was. According to Officer Arroyo, she had difficulty producing her operator's license and other paperwork. Her movements were slow and rigid. Her responses to questions were slow, and several times, she did not respond at all. When requested to exit her vehicle, Officer Arroyo had to remind her several times to turn off the vehicle's ignition. Once outside the vehicle, she had poor balance and had slow, rigid-like movements. Officer Arroyo did not detect an odor of an alcoholic beverage on her breath but did detect a chemical-like odor. When asked if she was alright, she stared at Officer Arroyo for several seconds, then stated "I'm okay." Officer Arroyo administered the HGN, Walk and Turn, and One Leg Stand tests to Sherms. He reported observing six clues of HGN and Vertical Gaze Nystagmus (VGN). She had difficulty completing the W&T and OLS tests due to her poor balance and both tests were stopped for safety reasons. Officer Arroyo arrested Sherms for DWI, advised her of her Miranda rights, and transported her to the Metro Detention Center for processing. After obtaining a 0.00 BAC breath test, he requested a DRE to assist with the investigation.
5. **Initial Observation of the Subject:** I first observed Sherms in the booking area at the Detention Center. She was seated in a chair at the table and appeared disoriented. She was wearing jeans, slip-on Vans, and a red pullover shirt. I noted she was slow to respond to questions and appeared to be having concentration problems. Her face appeared flushed and she had facial sweating. When she stood, her movements were slow and rigid-like. Several times she bumped into the interview table and twice used the chair to steady herself. I introduced myself and asked if she would participate in a drug evaluation. She appeared confused and after an approximate 20 to 30 second pause, asked, "Do you mean a drug test?" After explaining the procedure to her, she agreed to do the evaluation. I asked if she had any injuries or physical defects, to which she stared straight ahead and did not respond. She denied using drugs or medications. During the preliminary examination, she would occasionally stop talking, sometimes in the middle of a sentence. Her speech was slow and thick. When asked when she last slept, and for how long, she stared at me and did not answer the questions. She did state that she had eaten a chicken sandwich and drank "a lot" of water during the day. Although cooperative, she appeared indifferent to what was going on.

6. **Medical Problems and Treatment:** Sherms did not report any medical problems or conditions, and none were observed or detected during the drug evaluation. When asked if she was under the care of a doctor or dentist, she stated, "No, I'm not sick." She stated she was not diabetic or epileptic. When asked if she was taking any medications or drugs, she stated, "I smoke pot sometimes" then laughed.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to Sherms prior to her attempting them. For each of the tests, I had to repeat my instructions several times. After each demonstration, I confirmed that she understood the instructions. The following psychophysical tests were given:

**Modified Romberg Balance:** While performing this test, Sherms had an approximate three-inch side to side sway and front to back sway. She also had a slow time estimation, estimating 30 seconds in 42 seconds. While performing the test, she stood very rigid and stiff. When asked how she estimated the 30 seconds, she had a long pause of almost a minute and then stated she thought she tried to count in her head but was not sure.

**Walk and Turn:** For this test, a line on the floor was used. Sherms lost her balance to the right two times while in the instructions stage. During the walking stage, she had slow, rigid movements. During the first nine steps, she missed touching heel to toe on her fifth and seventh steps. She stopped walking after step eight and appeared confused, then continued with the test. She made an improper turn by taking slow rigid steps with both feet. On the second nine steps, she missed touching heel to toe on her fourth and sixth steps. She stopped walking at steps eight and nine. She raised both arms from her body three times on the first nine steps and four times on the second nine steps. She was reminded several times to count her steps out loud. However, she only counted out loud as instructed on the second nine steps.

**One Leg Stand:** During this test, when attempting to raise her right foot, Sherms swayed while balancing, used her arms for balance, and put her foot down two times immediately after attempting to raise her foot, on her counts of 1,001, and 1,002. The test was then stopped for safety reasons. When she attempted to balance on her right foot and raise her left foot, she again was very rigid, swayed while balancing, used her arms for balance, and put her foot down after three attempts, on her counts of 1,001, 1,002, and 1,003. This portion of the test was also stopped for safety reasons.

**Finger to Nose:** While performing this test, Sherms had very slow and rigid arm movements. She did not touch the tip of her nose with the tip of her index finger as instructed on any of the six attempts. She touched the middle of her nose attempt #1, the right side of her nose with attempt #2, her upper lip area on attempts #3, #4, and #5 and the left side of her nose with attempt #6. She also kept her eyes open throughout the test even after being reminded several times to keep her eyes closed.

8. **Clinical Indicators of Impairment:**

**Eye Signs:** Sherms exhibited equal tracking and had equal pupil size. All six clues of HGN with an immediate angle of onset was observed. VGN was also observed. Her eyes were not able to converge as instructed and her eyes looked straight ahead on both attempts. Her pupils were examined in three different lighting conditions. In Room Light, her pupils were estimated at 4.0 mm in both eyes. In Near Total Darkness, her pupils were estimated at 6.0 mm in both eyes, and in Direct Light, her pupils were estimated at 3.0 mm in both eyes. All three estimates were within the DRE average ranges for the three lighting conditions. Her pupillary reaction to light was normal.

**Vital Signs:** Sherms pulse rates were checked three times during the evaluation. All three were elevated at 102, 100, and 104 beats per minute (bpm) and were above the DRE average range. Her blood pressure of 188/92 millimeters of mercury (mmHg) was also above the DRE average range. Her body temperature was above the DRE average range, measured at 100.0 degrees F. Her muscle tone was rigid.

9. **Signs of Ingestion:** Her nasal and oral cavities were clear, and she had no visible signs of injection marks. No other visible signs of ingestion detected.
10. **Subject's Statements:** Sherms had been advised of her Miranda rights by Officer Arroyo and she agreed to answer questions. When asked about drug use, she gave no response and looked straight ahead. Numerous times when she was asked a question, she would simply stare straight ahead, and did not respond. Several times when she did answer a question, her responses were slow and were related to some previous questions asked of her.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Sherms was under the influence of a Dissociative Anesthetic and was unable to operate a vehicle safely.
12. **Toxicological Sample:** Sherms provided a blood sample after the evaluation. Officer Arroyo collected the sample and submitted it as evidence pending delivery to the crime laboratory for analysis.
13. **Miscellaneous:** Refer to Officer's Arroyo's DUI arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Det. Joseph MacLean</b>		DRE # <b>11522</b>	Rolling Log # <b>22-011-0042</b>	Evaluator's Agency <b>Franklin PD</b>	Case# <b>(Session XVI - #3)</b>
Recorder/Witness <b>Don Decker, Nahant PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Middleborough PD</b>	
Arrestee's Name (Last, First, Middle) <b>Krystal, K.J.</b>		Date of Birth <b>09/06/2002</b>	Sex <b>M</b>	Race <b>B</b>	Arresting Officer (Name, ID#) <b>Sgt. Debra Bastista #10423</b>
Date Examined / Time / Location <b>09/28/22 / 2145/ Middleborough PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>14454</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Sgt. Bastista</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <b>"Eat? Pizza" (Long pause) "About 7"</b>		What have you been drinking? How much? <b>Juice &amp; water No response</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>Don't know / 2150</b>	When did you last sleep? <b>(Long pause) "Yes"</b>	How long? <b>No response</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Pause) <b>"None that I remember"</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Long pause) <b>"No doctor"</b>	
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Long pause) <b>"Weed sometimes" (Laughed)</b>			Attitude: <b>Cooperative, Passive</b>	Coordination: <b>Poor, Rigid</b>	
Speech: <b>Slow, Low, Delayed</b>		Breath odor: <b>Unremarkable</b>		Face: <b>Flushed, Sweaty</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>106</u> / <u>2155</u> 2. <u>102</u> / <u>2210</u> 3. <u>106</u> / <u>2228</u>		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye Present Present Immed	Right Eye Present Present Immed	Convergence  Right eye Left eye
Modified Romberg Balance Approx. 2" 2" 2" 2"  Rigid/Sweating		Walk and Turn Test  Cannot keep balance <b>1</b> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken			NA/30 <b>One Leg Stand</b> NA/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Tests stopped – almost fell on both
Time Estimation <b>40 estimated as 30 seconds</b>		Describe turn <b>Stopped. Needed directions</b>		Cannot do test (explain) <b>N/A</b>	
Type of footwear: <b>Red high top athletic shoes</b>		Nasal area: <b>Clear</b>		Oral cavity: <b>Clear</b>	
Finger to Nose (Draw lines to spots touched)  Slow, stiff arm movements. Reminded to remove hand and return arms to side.		PUPIL SIZE	Room light (2.5 – 5.0)	Darkness (5.0 – 8.5)	Direct (2.0 – 4.5)
		Left Eye	4.5	6.5	3.5
		Right Eye	4.5	6.5	3.5
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Normal</b>	
Blood Pressure <b>176 / 98</b>		Temperature <b>101.0 °F</b>		Nothing observed	
Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		RIGHT ARM 		LEFT ARM 	
What drugs or medications have you been using? <b>(Long pause) "Some K"</b>		How much? <b>No response</b>		Time of use? <b>No response</b>	
Where were the drugs used? (Location) <b>No response</b>		Date / Time of arrest: <b>09/28/22 2018</b>		Time DRE was notified: <b>2120</b>	
Evaluation start time: <b>2145</b>		Evaluation completion time: <b>2250</b>		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>Debra Bastista</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Krystal, K. J.**

- Location:** The evaluation was conducted at the Middleborough Police Department interview room with the darkroom examinations conducted in the staff restroom. The interview room had adequate lighting for conducting a drug evaluation. Both areas had smooth tile flooring with no obstructions.
- Witnesses:** The evaluation was witnessed and recorded by Don Decker, a DRE with the Nahant Police Department. The arresting officer, Sergeant Debra Bastista witnessed the darkroom eye examinations.
- Breath Alcohol Test:** The suspect provided a breath sample to Sgt. Bastista prior to my arrival. Using a Drager 9510, she obtained a 0.00 BAC result.
- Notification and Interview of the Arresting Officer:** I was notified on 09/28/22 at approximately 2120 hours by the Dispatch Center that a driver had been arrested and was suspected of being under the influence of drugs and the arresting officer was requesting assistance with a DRE evaluation. I responded to the Middleborough PD and contacted the arresting officer, Sgt. Debra Bastista. Sgt. Bastista advised that she had stopped the suspect's vehicle after observing it fail to stop while exiting a private drive from a business and nearly colliding with another vehicle. According to Sgt. Bastista, during the personal contact with the suspect, no odor of an alcoholic beverage was detected on his breath. However, Sgt. Bastista noted that he was confused and disoriented. He had difficulty finding his operator's license and vehicle registration. He also had difficulty with short term memory and several times had to be reminded to produce the documents. Sgt. Bastista also noted that his speech was slurred and thick sounding. Once he exited his vehicle, Sgt. Bastista noted that he had poor balance and needed to steady himself using his vehicle. Sgt. Bastista administered SFST's and reported observing six clues of Horizontal Gaze Nystagmus (HGN), with an immediate angle of onset. Vertical Gaze Nystagmus (VGN) was also observed. He also had difficulty completing the Walk and Turn (W&T) and the One Leg Stand (OLS) tests due to his poor balance and rigid coordination. Both tests had to be stopped for safety reasons because he lost his balance and nearly fell several times. After completing the SFSTs, Sgt. Bastista arrested the suspect for DUI and transported him to the MPD for a breath test. After obtaining a 0.00 BAC breath test, a DRE was requested to assist with the investigation.
- Initial Observation of the Suspect:** I first observed the suspect in the interview room at Middleborough PD. He was slow to respond to questions and appeared to be confused and disoriented. When he stood, his movements were slow and rigid-like. When moving about, he several times used the wall to steady himself. I introduced myself and requested his participation in a drug influence evaluation, which he agreed to do after a pause where he appeared to be processing the request. I asked if he remembered being informed of his Miranda rights and he indicated that he did. He was asked a few initial questions and preliminary observations were made. When asked about the time, he indicated he did not know the time. When asked when he had last slept, after a pause of about one minute, he replied "Yes". When asked if he had been drinking any alcoholic beverages he stated "No" and indicated he had been drinking juice and water. When asked about any drug or medication use, after another pause of about 45 to 60 seconds, he replied, "Weed sometimes" and laughed. At times he would stop talking and appeared to be confused and trying to process information. His attitude was cooperative and passive. His breath was unremarkable. He indicated he was not blind in either eye and did not wear corrective lenses. He was able to follow a stimulus with his eyes and they appeared to track equally. His eyelids appeared normal. The suspect was wearing black baggy shorts, a Red Sox hoody sweatshirt, and red unlaced athletic shoes.

6. **Medical Problems and Treatment:** I asked the suspect if he had any injuries or physical defects and he once again seemed confused and after another noticeable pause replied, "None that I remember." He stated he was not under the care of a doctor or dentist. He acknowledged that he is not diabetic, is not epileptic, and does not take insulin. No medical problems were reported, and none were observed or detected during the evaluation to indicate the need for immediate medical care.
7. **Psychophysical Indicators of Impairment:** During the evaluation, the suspect was asked to perform four psychophysical tests. Each one was fully explained and demonstrated to him. He acknowledged understanding each test before attempting it. Several of the test instructions had to be repeated. The following psychophysical tests were administered to the suspect:

**Modified Romberg Balance:** He was able to stand in the instructional stance while this test was explained and was able to complete the test. While performing the test, he had an approximate two-inch side to side and front to back sway. He had a slow time estimation, estimating 30 seconds in 40 seconds of actual elapsed time. When asked how he estimated the 30 seconds, he looked away and stared at a clock on the wall and did not respond. While performing the test, he stood very rigid and was sweating profusely.

**Walk and Turn:** For this test, a line in the tile floor was used. The suspect lost his balance to the right one time during the instructions stage. During the walking stage, he had slow, rigid, stiff movements. On the first nine steps, he missed touching heel to toe on his second step. He also stopped walking four times. At the turn, he stopped, appeared to be confused on what to do and walked off the line as if he had completed the test. I explained that he needed to complete the test and provided instructions to him for completing the second nine steps. Once he started the second nine steps, he stopped while walking three times and missed touching heel to toe four times. On his final step, he stepped off the line to the right. He had his arms raised in a stiff-like manner during the first and second nine steps of the test.

**One Leg Stand:** This test was performed first while standing on his left foot and then on his right foot. While standing on his left foot and extending his right foot off the floor, he put his foot down at 1,008, 1,010, and 1,011 and then lost his balance nearly falling and the test was stopped. He swayed noticeably while attempting the test and raised his arms for balance as soon as he lifted his right foot off the floor.

When attempting the test standing on his right foot and extending his left foot off the floor, he put his foot down on counts 1,004 and 1,007. Again, he was in danger of falling and the test was stopped for safety reasons. He swayed noticeably while attempting the test and raised his arms for balance when he tried to lift his right foot off the floor. On each attempt, he appeared to be rigid and stiff-like.

**Finger to Nose:** The suspect was able to stand in the instructional stance while the test was explained. While performing this test, he had slow and rigid arm movements. He was unable to touch the tip of his nose with the tip of his index finger on four of the six attempts. On the first attempt he touched the left side of his nose, on the second attempt he touched on the right side of his nose, on the third attempt he touched on the left side of the tip of his nose, on the fourth attempt he touched on the right side of the tip of his nose, on the fifth and sixth attempt he touched the tip of his nose as directed. He had to be reminded to remove his hand and return his arm to his side on the first four attempts.

8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited equal tracking and had equal pupil size. During the check for Horizontal Gaze Nystagmus, he displayed a lack of smooth pursuit in both eyes, had distinct and sustained nystagmus at maximum deviation in each eye, and had an immediate angle of onset of nystagmus in each eye. Vertical Gaze Nystagmus was also present. His eyes were not able to converge as both eyes moved downward as they moved in towards the nose. This test was conducted twice with the same results. His pupils were examined and

estimated in size in three different lighting levels. In Room Light, his pupils were estimated at 4.5 mm in both eyes. In Near Total Darkness, his pupils were estimated at 6.5 mm in both eyes, and in Direct Light, they were estimated at 3.5 mm in both eyes. All three estimates were within the DRE average ranges for the three lighting levels. His pupillary reaction to light was normal.

Vital Signs: The suspect's pulse was taken three times during the evaluation. His pulse rates were elevated at 106, 102, and 106 beats per minute (bpm), and were above the DRE average ranges of 60-90 bpm. His blood pressure had a systolic pressure of 176 mm/Hg and diastolic pressure of 98 mm/Hg. Both results were above the DRE average range. His body temperature was measured at 101.0 degrees Fahrenheit which was also above the DRE average range. His muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal and oral cavity were checked and there were no remarkable observations. He was checked for injection sites and there were no visible signs of injection marks on his hands and arms.
10. **Suspect's Statements:** The suspect had been advised of his Miranda rights prior the evaluation and he agreed to answer questions and to participate in the evaluation. After explaining the results of my evaluation, he was once again asked about drug usage. After another noticeable pause, he responded "Some K". I then asked if he was referring to Ketamine and he did not respond, smiled, and looked away.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Krystal was under the influence a Dissociative Anesthetic and unable to operate a vehicle safely.
12. **Toxicological Sample:** A toxicological sample of urine was requested which he provided at the conclusion of the evaluation. The sample was turned over to Sgt. Bastista who submitted it as evidence pending analysis by the crime laboratory.
13. **Miscellaneous:** Due to the suspect's elevated vital signs, EMS was requested to evaluate his condition. He was subsequently released to EMS who transported him to the hospital for a follow-up medical evaluation. Refer to Sgt. Batista's arrest report for additional details.

# 17 DRE

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## NARCOTIC ANALGESICS

### LEARNING OBJECTIVES

- Describe a brief overview of the Narcotic Analgesic category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs, and other effects associated with this category
- Describe typical time parameters, i.e., onset and duration of effects, associated with this category
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs
- Describe the procedures for examining and evaluating injection sites

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### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Review of the DEC Program Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations

Session 17: Narcotic Analgesics

## Learning Objectives

- Describe a brief overview of the Narcotic Analgesic category of drugs
- Identify common drug names and terms
- Identify common methods of administration
- Describe symptoms, observable signs, and other effects

DRE 17-2

**Slide 2.**

Session 17: Narcotic Analgesics

## Learning Objectives

- Describe typical time parameters
- List indicators likely to emerge during the drug influence evaluation
- Describe procedures for examining and evaluating injection sites

DRE 17-3

**Slide 3.**



***Briefly review the objectives, content, and activities of this session.***

## A. Overview of the Category

Session 17: Narcotic Analgesics

## Overview of Narcotic Analgesics

- Narcotic – a drug derived from Opium, or produced synthetically, that relieves pain but also induces euphoria, alters mood, and produces sedation
- “Analgesic” – a medication or drug that relieves pain.

DRE 17-4

**Slide 4.**

Narcotic Analgesics, sometimes called “Opioids”, are drugs found in Opium, derived chemically from Opium, or are produced synthetically. The term “Opioid,” however, most correctly refers to the synthetic subcategory of Narcotic Analgesics. This is a medical term, not a legal or police term.

A Narcotic is a drug that relieves pain but also induces euphoria, alters mood, and produces sedation. An “Analgesic” is a medication or drug that relieves pain. It differs from an anesthetic, in that it lowers one’s perception or sensations of pain, rather than stopping nerve transmission.

Non-Narcotic Analgesics, such as Aspirin, Tylenol, and Motrin, relieve pain, but do NOT produce narcosis, which means numbness or sedation and do not alter mood. Therefore, non-narcotic analgesics in small amounts, are not psychoactive and are not abused for their mind- or mood-altering actions.

Session 17: Narcotic Analgesics

## Types of Narcotic Analgesics

- Opiates
  - Natural alkaloids
  - Opium derivatives
- Opioids
  - Synthetics



DRE 17-5

**Slide 5.**

There are two subcategories of Narcotic Analgesics: Opiates and Opioids.

Opiates are drugs that either contain or are derived from Opium, which is sap from the seed pods of a particular type of poppy. The Opium poppy is also called “Papaver Somniferum” (Somniferum in Latin means “carrier of sleep”). These drugs are available as a natural alkaloid or as opium derivative. A “natural alkaloid” is a substance found in another substance and can be isolated from it. Morphine and Codeine are examples of a natural alkaloid. (The term “main ingredient” can be used as a synonym for “alkaloid.”) Opium derivatives are obtained by chemically treating the Opium alkaloid. Opium derivatives are sometimes referred to as semi-synthetic narcotic analgesics.

Heroin is the most commonly-abused illicit Narcotic Analgesic. The generic, or technical, name for Heroin is “Diacetylmorphine.”



***An analogy to help participants understand the difference between an alkaloid and a derivative would be to compare Opium to wheat. The ‘alkaloid’ of the wheat would be whole wheat flour – a derivative of the wheat would be white flour (wheat flour which has been chemically treated).***

Opioids, which are not derived from Opium, produce similar or identical effects as Opium alkaloids and derivatives. Synthetic Narcotic Analgesics are synthetically produced from a variety of non-opiate substances. Examples include fentanyl and methadone.



**Write “Diacetylmorphine” on the dry erase board or easel/easel pad.**

Session 17: Narcotic Analgesics

### Three Characteristics Common to All Narcotic Analgesics

- Relieve pain
- Produce withdrawal signs and symptoms
- Suppress withdrawal signs and symptoms

DRE 17-6

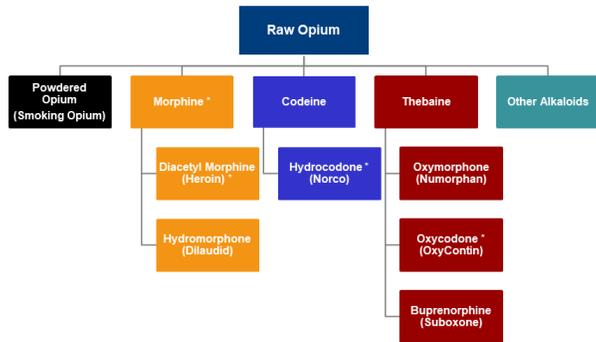
**Slide 6.**

Narcotic Analgesics all share three characteristics. They produce analgesia (pain relief). Physical dependence may occur from “chronic administration” when the drug has been taken at fairly regular intervals for a period of time. Withdrawal signs and symptoms will occur when the user is physically dependent and drug use is stopped. Drug users will commonly use other Narcotic Analgesics, substituting one drug for another, to suppress the withdrawal signs and symptoms of chronic Narcotic Analgesic administration. For example, Methadone is generally used for treating narcotic user’s addiction.



**Direct participants to appendix at the end of this session for additional resources about specific narcotic drugs.**

## Commonly-Abused Opiates and Derivatives



DRE

17-7

Slide 7.

Current opiates being abused in the United States include morphine, heroin, codeine, hydrocodone (Norco), and oxycodone (OxyContin).



***Point out the chart located in the participant guide. Instructor should briefly explain the chart, explaining the various ways the opiates are found or derived. Point out the details of specific drugs are in the appendix.***

## Opioids



DRE

17-8

### Slide 8.

Methadone is commonly used to treat withdrawal symptoms. Demerol is a short acting Opioid used to treat moderate to severe pain, to help put people to sleep before surgery, and provide pain relief. The fentanyls are highly potent, opioid pain medications with a rapid onset and short duration of action. They can be 80 to 100 times or more potent than Morphine. According to the *Drug Identification Bible*, "Fentanyl and its four analogs used in medicine (alfentanil, carfentanil, remifentanyl, and sufentanyl) are Schedule II drugs, while illicitly produced fentanyl analogs are Schedule I drugs." Many other fentanyl analogs are available illicitly.



***Solicit input from participants about commonly abused Narcotic Analgesics in their area.***

Session 17: Narcotic Analgesics

## Methods of Administration



- Orally
- Smoked
- Snorted
- Suppositories
- Injected
- Transdermal (Patches)



DRE 17-9

**Slide 9.**

Methods of administration of Narcotic Analgesics vary from one drug to another. Some are commonly taken orally. Some are smoked. Some are snorted (insufflated). Heroin and some others are usually taken by injection. Users have stated the fear of contracting diseases, such as AIDS, from shared needles, has prompted them to either snort or smoke Heroin.



***If available, show Heroin injection paraphernalia.***

Medically, some are administered in suppositories and some may be administered transdermally or through the skin. Fentanyl patches are often used for chronic pain.



***Stress that participants are encouraged to be familiar with all of the drug names in this category, including those found in the appendix.***

***Solicit participants' comments and questions concerning this overview of Narcotic Analgesics.***

## B. Possible Effects of Narcotic Analgesics

Session 17: Narcotic Analgesics

### Possible Effects

- Difficulty concentrating
- Itching of face, arms, or body
- Skin cool to the touch
- Slow, deliberate movements
- Slowed breathing

DRE 17-10

**Slide 10.**

A possible effect of Narcotic Analgesics is Sedation – “On the Nod.” The condition known as “on the nod” is a semiconscious state of deep relaxation. The user’s eyelids become very droopy.



***Remind participants the technical term for “droopy eyelids” is Ptosis.***

Their head will slump forward until the chin rests on the chest. In this condition, the user usually can be aroused easily and will be sufficiently alert to respond to questions.



***Point out this condition is different from someone under the influence of a CNS Depressant at the point of passing out or someone “crashing” after high doses of CNS Stimulants. Persons on the nod may still be aware of what is taking place around them.***

**These effects may be dose-related and most often occur with non-tolerant users.**

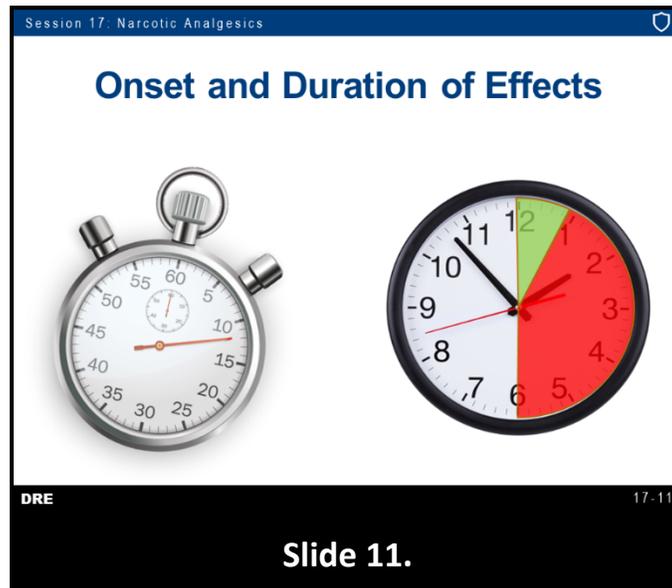
- Difficulty concentrating
- Itching of the face, arms, or body
- Skin cool to the touch
- Slow, deliberate movements
- Slowed breathing (Technical terms are Hypopnea or Bradypnea)

Impairment is more evident with new users and with tolerant users who exceed their “normal” doses.



***Solicit participants’ comments and questions concerning possible effects of Narcotic Analgesics.***

## C. Onset and Duration of Effects



The psychological effects of narcotic analgesics begin at various times dependent upon how the drug was administered. If injected, smoked, or snorted, the effects may be felt immediately or within a few minutes. Most drugs taken orally will produce effects within 10-60 minutes. These effects include a feeling of pleasure or euphoria, relief from the symptoms of withdrawal, and relief from pain.



Instructor  
Note

***Point out the intensity of the euphoria will depend on a number of factors, one of which is the user's tolerance. A heavily addicted user who is beginning withdrawal symptoms may experience only mild euphoria.***

**Observable Signs:** The observable signs will usually become evident within 5 – 30 minutes after the user has injected. User may nod head and move in and out of consciousness. User may display poor motor coordination, depressed reflexes, and slowed breathing. Onset of observable signs from oral administration is generally slower, being 10-60 minutes, but may last for several hours depending on the drug. Listed below is the onset and duration for some of the most commonly abused Narcotic Analgesics.



Instructor  
Note

***Remind participants the physical effects may not be observed at all if the user is tolerant and has injected a "normal" or "maintenance" dose.***

Morphine (MS-Contin): Onset of effects: 15-60 minutes; Duration: 4-6 hours.

Diacetylmorphine (Heroin): Onset of effects: 45 seconds to several minutes; Duration: peak effects last 1-2 hours, and the overall effects wear off in 3-5 hours.

Oxycodone (OxyContin, Percodan): Onset of effects: 10-15 minutes, 1 hour for controlled release; Duration: 3-6 hours, controlled release lasts 10-12 hours.

Hydrocodone (Norco, Lortab): Onset of effects: 10-30 minutes; Duration: effects peak at 30-60 minutes and last 4-8 hours, extended-release dosing lasts 14-16 hours.

Fentanyl (Duragesic, Sublimaze): Onset of Effects: extremely rapid, within minutes; Duration: Main effects last 2-3 hours.



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

Methadone: Onset of effects: Oral - 30-60 minutes; Duration: effects may last 6-8 hours, in cases of chronic administration increasing to 22-48 hours.



**Source:**

World Health Organization. (2009). Clinical Guidelines for Withdrawal Management and Treatment of Drug Dependence in Closed Settings. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK310658/>

Session 17: Narcotic Analgesics

## Withdrawal

**Early symptoms:**

- Aches
- Chills
- Insomnia
- Nausea

DRE 17-12

**Slide 12.**

As the effects of the drug diminish, withdrawal signs and symptoms start to develop until the addicted user administers again. Withdrawals may not be seen in persons using a Narcotic Analgesic for a short period such as using a therapeutic dose as prescribed by a doctor for acute treatment.



***Point out the development of withdrawal symptoms implies the Narcotic Analgesic has worn off.***

As the effects of the drug diminish, withdrawal symptoms begin. According to *the Drugs and Human Performance Fact Sheets*, “Early symptoms include watery eyes, runny nose, yawning, and sweating”.



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

As with nearly all drugs, the withdrawal signs and symptoms are essentially the opposite of the “high” or intoxicated state.

The *Drugs and Human Performance Fact Sheets* report later withdrawal symptoms “include drug craving, restlessness, irritability, dysphoria, loss of appetite, tremors, severe sneezing, diarrhea, nausea and vomiting, elevated heart rate and blood pressure, chills alternating with flushing and excessive sweating, piloerection, abdominal cramps, body aches, muscle and bone pain, muscle spasms, insomnia, and severe depression.”



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

Withdrawal signs and symptoms closely resemble those of Influenza or the common cold.



***Point out “withdrawal” signs of Narcotic Analgesics are essentially the opposite of their “under the influence” signs.***

***Point out involuntary tremors and twitching of the legs give rise to the expression “kicking the habit.”***

The addicted user at this point is nauseated, gags, vomits, and may experience significant weight loss.

The withdrawal syndrome continues to decrease in intensity over time and is usually greatly reduced by the fifth day, disappearing in one week to 10 days. A common misconception regarding withdrawal from Narcotic Analgesics is they may be fatal. In reality, however, although Narcotic withdrawal is extremely uncomfortable, it rarely, if ever proves fatal.



***Solicit participants’ comments or questions concerning onset and duration of the effects of Narcotic Analgesics.***

## D. Overdose Signs and Symptoms

Session 17: Narcotic Analgesics

### Overdose Signs and Symptoms

- Blue lips and pale or blue body
- Clammy skin
- Coma
- Convulsions
- Slow and shallow breathing

DRE 17-13

**Slide 13.**

Narcotic Analgesics depress respiration. In overdoses, the user's breathing will become slow and shallow.

Other signs and symptoms of an overdose of a Narcotic Analgesic include clammy skin, convulsions and coma, blue lips and pale or blue body. Due to the rapid onset of an injected drug, an unconscious person may be found with a needle still in their arm.



***Point out a person suffering from Narcotic Analgesic overdose may appear to be in shock.***

Death can occur from severe respiratory depression. The danger of death is heightened by the fact the addicted user may not know the strength of the drug he or she is taking. Clarification: the percentage of pure Heroin in the sample the subject uses may be much higher than what the subject expects and is accustomed. In some cases, the drug has been altered by adding another drug such as fentanyl, which is a more potent Narcotic Analgesic.

Narcotic Analgesic overdoses are sometimes treated by the administration of a Narcotic antagonist such as Narcan. A Narcotic antagonist works at neuron receptor sites, blocking or counteracting the effects of Narcotic Analgesics. In effect, these substances precipitate withdrawal. The short duration of effects produced by Narcotic antagonists, however, require continued medical monitoring of the user.



***Solicit participants' comments and questions concerning signs and symptoms of an overdose of Narcotic Analgesics.***

## E. Expected Results of the Evaluation

Session 17: Narcotic Analgesics

### Narcotic Analgesic Symptomatology Chart

HGN	None
VGN	None
LOC	None
Pupil Size	Constricted
Reaction to Light	Little or None Visible
Pulse Rate	Down
Blood Pressure	Down
Temperature	Down
Muscle Tone	Flaccid

DRE 17-14

**Slide 14.**

*Observable Evidence of Impairment:* Neither Horizontal Gaze Nystagmus (HGN) nor Vertical Gaze Nystagmus (VGN) will be present. Eyes will not exhibit Lack of Convergence (LOC).

### *Psychophysical Tests*



Instructor Note

***Point out, if the user has administered enough Narcotic Analgesic to exceed his or her level of tolerance, his or her performance on the SFSTs may be uncoordinated and performance may be similar to that caused by CNS Depressants.***

Performance on the Modified Romberg Balance (MRB) test will be impaired. The subject may appear drowsy and have slow time estimation.

Performance on the Walk and Turn (WAT) and One Leg Stand (OLS) will often be impaired and reflect the slow and deliberate movements caused by this category of drugs.

Performance on Finger to Nose (FTN) can also be impaired. The subject may appear drowsy, possibly “on the nod,” and exhibit slow and deliberate movements.

*Vital Signs:* Pulse will be down. Blood pressure will be down. Body temperature will be down.



Instructor Note

***Remind participants these cardiovascular indicators may not be present if the subject is a tolerant user who has taken a “normal” dose of the drug.***

Muscle tone will be flaccid.

*Dark Room:* Pupil size generally will be constricted.



**Point out constricted pupils are one of the most reliable indicators of a Narcotic Analgesic. The technical term for “constricted pupils” is “Miosis.”**

Pupil reaction to light will be little or none visible.

Session 17: Narcotic Analgesics

### General Indicators

- Depressed reflexes
- Droopy eyelids
- Drowsiness
- Dry mouth
- Euphoria
- Itching
- Nausea
- “On the nod”
- Puncture marks
- Slowed reflexes
- Slow, low, raspy speech
- Slowed breathing

DRE 17-15

**Slide 15.**

- Depressed reflexes
- Droopy eyelids (Ptosis)
- Drowsiness
- Dry mouth
- Euphoria
- Itching – caused by the release of Histamines



**Source:**

Julien’s Primer of Drug Action, 14th edition, 2019

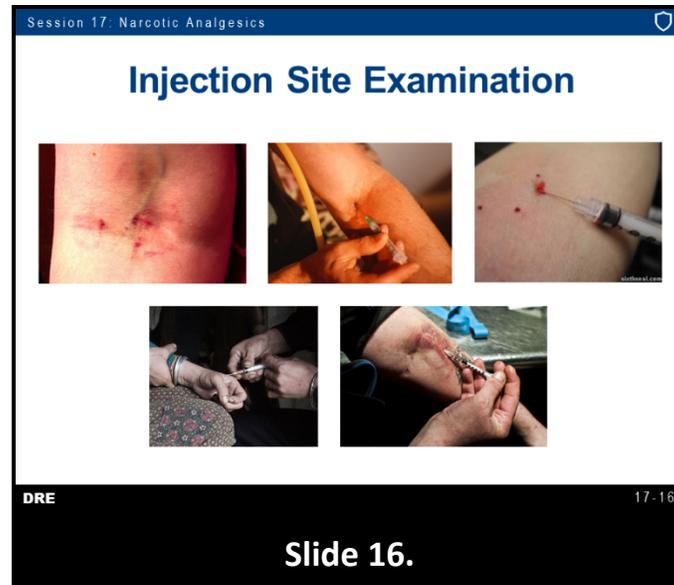
- Nausea
- “On the nod”
- Puncture marks
- Slowed reflexes
- Slow, low, raspy speech
- Slowed breathing



**For more information and details regarding possible effects refer to**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## F. Injection Site Examination



Drugs and medication are injected into the body in three ways.

**Intramuscular:** Legal injections are usually Intramuscular (abbreviated as I/M).

“Intramuscular” is defined as administering by entering a muscle.

**Intravenous:** For medically drawing of blood or emergency medical procedures, the injection is made into a blood vessel (Intravenous – abbreviated as I/V). Here, veins are usually used.

Arteries are deep, thus not lending themselves to injection. “Intravenous” defined as entering a vein.

**Subcutaneous:** Subcutaneous (S/C) means just under the skin. It is commonly referred to as “skin popping”.



**Let the participants know insulin injections are “Subcutaneous” (S/C) and are not normally I/M or I/V injections. Insulin is never injected into a blood vessel because the person could go into a coma.**

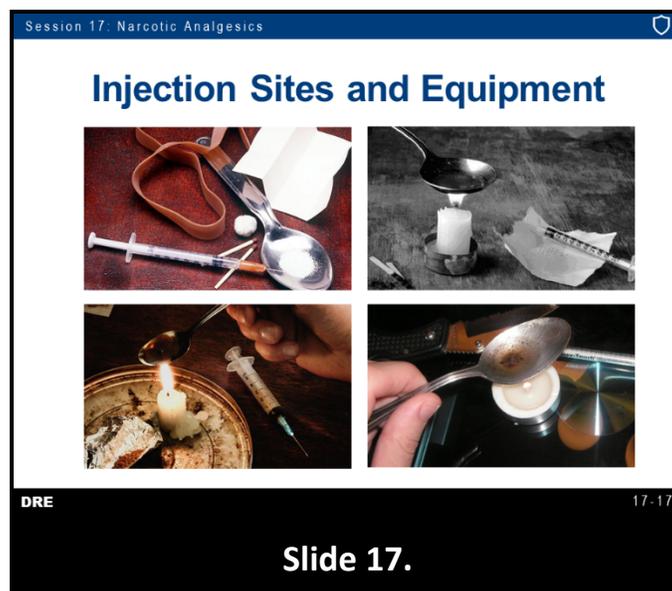
The primary instrument for injection is the hypodermic syringe. It consists of a hollow needle, a barrel (tube) and a plunger. Needles vary in size, with the primary variance being the inside diameter of the needle or the gauge. A 26-gauge needle is used by a diabetic. The greater the number the larger the gauge, the smaller the inside diameter of the needle. Most illegal drug users prefer a larger gauge needle. The hypodermic marks are smaller and are, therefore, less noticeable making it more difficult for the DRE to see them.

As a DRE, you may be asked in court to describe the difference between a medical and non-medical injection site. A medical injection is usually I/M. Some exceptions would be in a blood donation, an emergency, or a lab test.

If the technician is unable to find a vein during the first try, there may be multiple injections. There may also be bruising near the site.

The injection mark for medical purposes can be described as: Clean; No scarring or scabbing.

Most IM medical injections will not be evident during a DRE evaluation. Usually there will be only one mark and it will be larger than the typical non-medical injection. Medical injections are made with new, sterile needles.



Examination of subject's injection sites can give many clues to their drug habits. The slang term for an injection site is a "mark". Many drugs can be injected. The presence of injection sites may be a sign of drug abuse. Examination of injection sites is just one of the 12 steps in the evaluation. Injection sites are a sign of drug abuse which may or may not be present. This may be evidence of habitual use. The trauma to the skin, muscles, and the blood is the basic concept of injection sites.

The user's equipment is commonly referred to as a "hype kit" or "works." The kit contains a "cooker" which is any device such as a bottle cap, a metal spoon, etc., used to heat the drug with water to form an injectable solution. Other parts of the "kit" include: A handle to hold the "cooker" over the flames; Matches, lighters (primarily disposable, adjustable flame types) used to heat the substance in the "cooker"; and, a tourniquet, which can be a rubber tubing, a tie, belt, etc. It is tied around the arm, above the injection site, to cause the vein to bulge or rise, thus making it easier to inject. "Cottons" are the cotton balls or cigarette filters used to "purify" the drug. The user places the "cottons" into their cooker and draws the drug up through the cottons. The cottons are saved for later use since they contain some of the drug.

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Session 17. Narcotic Analgesics

## Non-Medical Injection Site

Over a vein

- Usually multiple marks in various stages of healing
- Injection sites may be jagged

DRE 17-18

**Slide 18.**

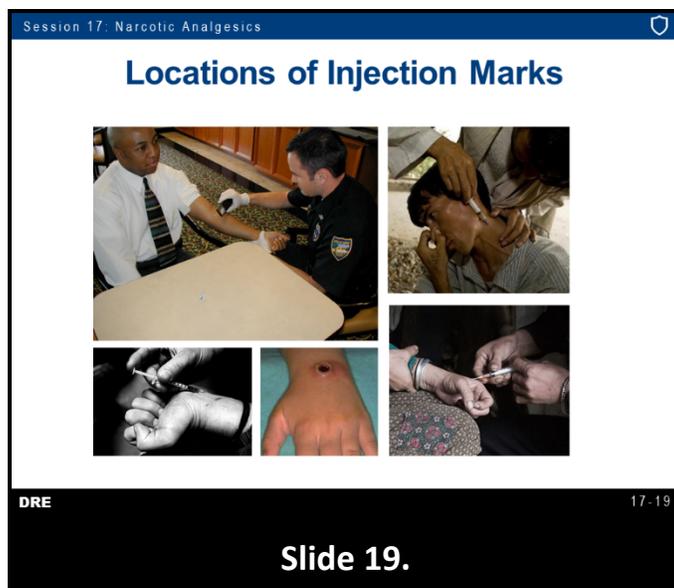
The non-medical (illicit) mark is usually over a vein. There will usually be multiple marks in various stages of healing. It takes approximately two weeks for a “mark” to totally heal. For example, the Heroin user will inject approximately four to six times each day (every four to six hours). Therefore, they will inject approximately 2,000 times in one year. Users frequently use the same needle over and over again, thus making it become dull or barbed.

Frequently the needles are carried in pockets or socks and the rubbing against clothing causes them to be dull or barbed. Since the used needles make it more difficult to pierce the skin and vein, the injection sites may be jagged. A barbed needle may tear the skin on the way in and on the way out. Use of old, dirty, and shared needles cause the spread of infections and diseases such as AIDS.

**ALWAYS WEAR PROTECTIVE GLOVES PRIOR TO CONDUCTING THE EXAMINATION.**

---

## G. Expected Locations of Injection Marks



Prior to conducting the injection site examination, always remember to wear gloves. Injection sites may be located anywhere on the subject's body. Conduct a thorough, slow, methodical examination of the subject's hands and arms beginning with the left.

Using a magnifying light or "ski light" examine the inner arm as it is extended with the palm facing you.



***Point out "ski light" is short for schematic light. An ideal light is a 10 power magnification light.***

Beginning at the bicep, slowly examine the arm; document the findings of your examination.

Ask the subject to contract the arm, grasping their shoulder. Starting at the wrist, slowly examine the arm to the elbow documenting the results. This forces the individual's veins to protrude. Next examine the outer arm as it is extended palm facing downward. Start the examination at the shoulder moving to the wrist. Subject should extend and spread his/her fingers when examining the hands. Examine both sides of the hands, with particular attention to the areas between the fingers, under watch bands and rings. Conduct the entire procedure for the right side.

Ankles are a common injection area. Subject should be instructed to remove their shoes and socks to allow the DRE to examine them for puncture wounds. The most common area is on the foot or the ankle. Subject's sometimes hide hypodermic needles in their socks, shoes, and the heel compartments of their shoes.

On a case-by-case basis, the DRE may need to examine other parts of the body for marks. Another such area may be the legs.

**ALWAYS follow your agency's rules, policies, and procedures and laws regarding invasive type searches.**

*Other Indicators of Injection Sites:* Users may “sterilize” a needle by using an open flame. This results in dark carbon deposits left on the needle. When the user inserts the needle, the carbon deposits are then injected into the skin. This is termed “tattooing” and results in a “tattoo effect” when the carbon is left under the skin when the needle is removed.

Users may frequently use the same spot to inject as an attempt to reduce their likelihood of detection. The veins may become hard and thick from continuous injections and this makes them difficult to find. After about 10 to 20 injections, a large sore forms causing the site to enlarge and bruise. Upon close examination, the site may reveal there are numerous, overlapping puncture wounds in the same area. This is referred to as “tunnel” or “corn”. The entire vein area becomes scarred and hardened and, over time, future injections may not be possible. The area becomes silvery-blue in color and raised. This is referred to as “tracks” or “silver streaks”. AS A GENERAL RULE: one inch of tracks indicates approximately 50 – 100 separate injections have been administered in this area.

In an attempt to hide evidence of intravenous drug usage, users may inject into decorative tattoos. Tattoos designed to hide puncture wounds are frequently colored and found on the inner arms.

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Session 17: Narcotic Analgesics

## Puncture Healing

“Scabbing”  
and  
“Trap Dooring”



DRE 17-20

**Slide 20.**

*Basic Principles of Puncture Healing:* Any needle that punctures the skin leaves a scab. A scab is simply a crust formed by the drying of the discharge from the puncture. Scab is the dried remains of blood, plasma (a cellular, colorless fluid part of the blood), lymph fluid (a thin fluid that bathes all the tissues of the body), and puss (a thick yellowish/greenish fluid that forms at an injection(s) site). These dried remains fill the gap caused by the puncture of the skin. As the fluids dry, they harden (clot and gel). Users will sometimes peel a corner of a healing scab up and inject into that area then cover the injection site with the scab. This injecting under a scab to hide multiple puncture wounds is referred to as “Trap Dooring.”

*Puncture Healing Timetable:* There are no exact timetables for wounds to heal, but there are some general guidelines. Chronic disease, poor nutrition, etc. retard the puncture healing process. Fresh puncture wounds, less than 24 hours old, will appear as a red dot and may be oozing fluids. Scabs develop within about 24 hours after a puncture and may include light bruising and a reddened border. As a general rule, when the scab first forms, it is bright red; with age, the color gets darker. After about 14 days, a scab usually starts to peel or flake and then falls off. The skin under the scab is shriveled and is lighter in color than the surrounding tissue.



**Source:**

Tennant, F. S. (n.d.). Identifying the Cocaine User. *3rd*. 1985: Veract.



## Classifying Age of Puncture Wounds

- **Fresh** – Under 12 hours after injection
- **Early** – 12 - 96 hours after injection



DRE

17-21

### Slide 21.

There is no exact science to classifying the age of puncture wounds. Following are some general guidelines. Fresh puncture wounds are defined as under 12 hours after injection and will be a red dot and have an oozing appearance or blood crater with no scab formation. Early puncture wound is 12 – 96 hours (half day to 4 days) after injection. It will have a light scab, light bruise, reddened border, and a crater appearance. Late puncture wound is 5 – 14 days old and will have a dark scab, dark bruise, and the crater will flatten. Healing puncture wound is over 14 days. The scab will be flaking and falling off with shriveled light colored skin underneath.



***For more information and details regarding possible effects refer to:***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## H. Conclusion



The injection site examination may reveal evidence of recent use.

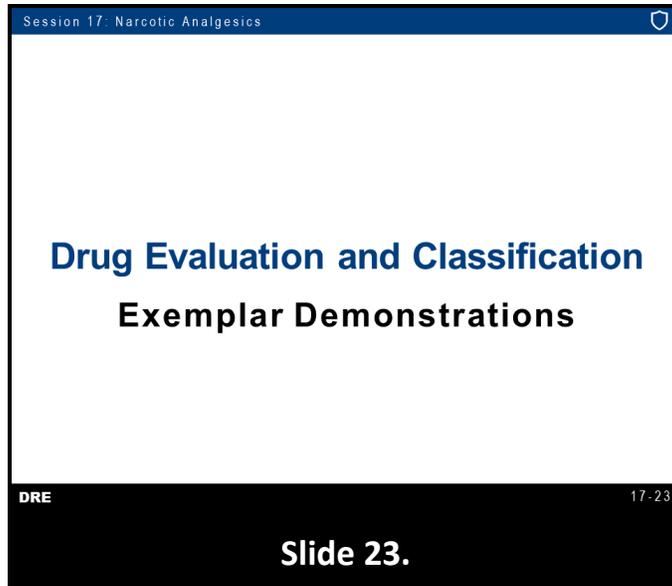


***Point out DREs may want to photograph new or recent injection marks for evidential purposes.***

The presence of marks, however, doesn't mean drug influence or impairment at the time of the evaluation. Conducting an injection site examination is a skill. As with all skills, such as taking blood pressure, competency improves with practice.

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## I. Review of the DEC Program Exemplars



*Instructor  
Note*

***Refer participants to the exemplars found at the end of Session 17 of their participant guides.***

***Point out the exemplars are examples and serve as a guide.***

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.



*Instructor  
Note*

***Relate the items on the exemplars to the Narcotic Analgesics Symptomatology Chart.***



Session 17: Narcotic Analgesics

## Narcotic Analgesics



DRE 17-24

**Slide 24.**



**VIDEO DEMONSTRATION:** *Click video to begin.*

*Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.*

*Show video example of subject under the influence of a Narcotic Analgesic. (Approximately 23 minutes).*

Session 17: Narcotic Analgesics

## Questions?

DRE 17-25

**Slide 25.**



**Solicit participants' comments and questions concerning the Narcotic Analgesic and Injection Site Examination.**



## Test Your Knowledge

1. What are the two subcategories of Narcotic Analgesics?
2. What three distinguishing characteristics do all Narcotic Analgesics share?
3. What is another, more common, name for the drug called Diacetylmorphine?

DRE

17-26

**Slide 26.**

### Test Your Knowledge

1. What are the two subcategories of Narcotic Analgesics?
2. What three distinguishing characteristics do all Narcotic Analgesics share?
3. What is another, more common, name for the drug called Diacetylmorphine?



1. ***Opiates and Opioids***
2. ***They relieve pain, they will produce withdrawal signs and symptoms after chronic use, and their use will suppress the withdrawal signs and symptoms.***
3. ***Heroin***



## Test Your Knowledge

4. What is Methadone commonly used to treat?
5. An analgesic is a drug that \_\_\_\_\_?
6. What subcategory does Demerol belong?

DRE

17-27

**Slide 27.**

### Test Your Knowledge

4. What is Methadone commonly used to treat?
5. An analgesic is a drug that \_\_\_\_\_?
6. What subcategory does Demerol belong?



4. ***A drug used to treat narcotic addiction.***
  5. ***Relieves pain***
  6. ***Synthetic Opioid***
-

## Session 17 Appendix

*Powdered Opium:* Also known as smoking Opium. Powdered Opium is a simple refinement of raw Opium. It is used medically to treat diarrhea (administered orally). The development of more effective opiates and synthetics has virtually eliminated its use medically. In recent years, there has been little street use of Opium. It is important to realize, however, drug use trends can and do change. Remains popular as a drug of abuse (smoked) among some Asian-American communities.

*Morphine:* The principal natural alkaloid of Opium. Morphine was first isolated from Opium in 1805. It is used medically to suppress severe pain (e.g., with terminal cancer patients) and is highly addictive. Morphine was widely used during the Civil War. Morphine addiction was termed “Soldier’s disease”. At one time, Morphine was the most commonly abused Narcotic Analgesic. Morphine is typically used as the standard for comparison with other Narcotic Analgesics.



***For your information: Named after Morpheus, the Greek God of Dreams.***

*Codeine:* Codeine is another natural alkaloid of Opium. Its technical name is Methyldorphine. It was first isolated in 1832. Codeine’s pain-killing ability is much weaker than Morphine’s. It is used medically to suppress coughing or minor pain. Clarification: Narcotic Analgesic addicts often turn to Codeine when they cannot get more popular drugs. Codeine is definitely an addictive drug.

*Heroin:* Heroin is the most commonly-abused illicit Narcotic Analgesic. The generic, or technical, name for Heroin is “Diacetyl Morphine.”



***Write “Diacetyl Morphine” on the dry erase board or easel/easel pad.***

Heroin derived from Morphine in 1874. It was first thought to be a non-addictive substitute for Morphine. Heroin was approved for general use by the American Medical Association in 1906. By the 1920’s it was evident Heroin was much more addictive than Morphine. Importation and manufacture of Heroin have been illegal in this country since 1925. It is a Schedule I drug, which means it has no legitimate medical uses in the United States.

*Dilaudid:* Another derivative from Morphine. Technical Name: Hydromorphone Hydrochloride. *Dilaudid* was first produced in 1923. It is sometimes called “Drug Store Heroin” since it is commercially available from medical and pharmaceutical sources. Dilaudid has the same addictive liabilities as does Heroin or Morphine. It is used medically for short-term relief of moderate to severe pain and to suppress severe, persistent coughs. It can be administered via injection, orally, or in suppositories and is sometimes abused by addicts who are unable to obtain Morphine or Heroin.

*Hydrocodone:* Derived from Codeine but is more closely related to Morphine in its pharmacological profile. Hydrocodone (Vicodin, Norco, Lortab) is the most widely prescribed

Opioid with many of the same actions as Codeine but produces less nausea. It is used orally for relief of moderate to severe pain, but also commonly taken in liquid form as an antitussive/cough suppressant.

*Thebaine:* Thebaine is an Opiate alkaloid of Opium. It is not used therapeutically and is converted into several drugs including Oxycodone and Oxymorphone.

*Oxymorphone:* Numorphan is a derivative of Thebaine and used to treat moderate to severe pain. It is sometimes used before surgery to cause sedation and to reduce anxiety. As a narcotic pain reliever, it works by dulling the pain perception center in the brain. It is used medically for the relief of chronic pain. It is sold in ampules (injection) and in suppositories. Previously (pre-1972) it was sold in tablets and was a favorite substitute for Heroin among addicts; addicts now generally prefer Dilaudid as a Heroin substitute.



**Source:**

Baselt, Randall C. (2020). *Disposition of Toxic Drugs and Chemicals in Man. Twelfth Edition.*

*Oxycodone:* Oxycodone is a Thebaine derivative. It is somewhat less addictive than Morphine, but more than Codeine. Two examples commonly prescribed are OxyContin (Brand Name) and Percodan (Oxycodone combined with aspirin). It is also produced under the brand name of Percocet, which is Oxycodone combined with Acetaminophen. OxyContin is a controlled-release tablet that contains large amounts of Oxycodone (10-80mg), but users have learned to defeat the slow release process. Street names include: "Oxy"; "OC"; "Killer".

*Buprenorphine:* A Thebaine derivative with powerful analgesia. As an analgesic, it is about 25 to 40 times more potent than Morphine.



**Source:**

Baselt, Randall C. (2020). *Disposition of Toxic Drugs and Chemicals in Man. Twelfth Edition.*

It is an ingredient of the drug Suboxone and Buprenex. Depending on the application form, Buprenorphine is normally prescribed for the treatment of moderate to severe chronic pain. It is commonly used in the treatment of Opioid addiction, much like Methadone. Buprenorphine Hydrochloride is normally administered by intramuscular injection, intravenous infusion, via a transdermal patch, or as a sublingual (under the tongue) tablet. It is also used in the treatment of narcotic addiction.



***If possible, display slides of these various drugs.***

*Demerol:* Meperidine (Demerol) is a short-acting Opioid used to treat moderate-to-severe pain, to help put people to sleep before surgery, and provide pain relief after childbirth. It was first produced in 1939. Demerol is one of the most widely used Synthetic Opiates for relief of pain

and for sedation and is also one of the Narcotic Analgesics most frequently abused by medical personnel. One medical advantage of Demerol is it produces less respiratory depression than other Narcotic Analgesics; thus, a fatal overdose is less likely with Demerol.



***Point out pupillary constriction ordinarily is one of the most reliable indicators of a Narcotic Analgesic.***

***Methadone:*** Developed in Germany during World War II because of wartime shortages of Morphine and first marketed in America in 1947. The effects are similar to Morphine's, although they develop more slowly and last longer than do Morphine's effects. Withdrawal symptoms are slower and milder than are Morphine's.



***Ask participants: "What is one of the most common medical uses of Methadone in this country?"***

Methadone is used extensively in "maintenance programs" as a substitute for Heroin for addicts undergoing therapy and treatment.



***Remind participants one characteristic shared by all Narcotic Analgesics is they suppress withdrawal symptoms of chronic Morphine administration.***

In theory, the daily dose of Methadone given to a Heroin addict allows the addict to function normally with no physical need for up to 24 hours. Methadone has a much longer duration of effects than Heroin and is not designed to be injected. It is also used medically to relieve moderate to severe pain and to suppress coughing. Methadone (Dolophine) is an Opioid used to treat pain and as maintenance therapy or to help with detoxification in people with Opioid dependence.

***Fentanyl:*** Fentanyl (Sublimaze, Actiq) is a highly potent, synthetic Opioid pain medication with a rapid onset and short duration of action. It is 80 to 100 times more potent than Morphine. It was introduced into medical practice as an intravenous anesthetic under the trade name of Sublimaze in the 1960s.



***Source:***

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

Fentanyl prescriptions have grown rapidly in recent years, causing a rise in abuse of legal and illegal forms. Fentanyl pharmaceutical products are currently available in the dosage forms of oral transmucosal lozenges, commonly referred to as the Fentanyl "lollipops" (Actiq), effervescent buccal tablets (Fentora), sublingual spray (Subsys), nasal spray (Lazanda), transdermal patches (Duragesic), and injectable formulations. Oral transmucosal lozenges and effervescent buccal tablets are used for the management of break-through cancer pain in

patients who are already receiving Opioid medication for their underlying persistent pain. Transdermal patches are used in the management of chronic pain in patients who require continuous Opioid analgesia. Fentanyl citrate injections are administered intravenously, intramuscularly, spinally, or epidurally for potent analgesia and anesthesia.

#### Fentanyl Analogs

Well over 1000 distinct fentanyl analogs have been identified and described. Examples include carfentanil, acetylfentanyl, and methylfentanyl.

#### Novel Synthetic Opioids (NSO)

NSOs are often promoted as heroin or oxycodone substitutes. Examples include U-47700, AH-7921, and MT-45.



**Source:**

Couper, F. J., & Logan, B. K. (2022). *Drugs and Human Performance Fact Sheets*. National Highway Traffic Safety Administration .

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Joseph Koher</b>		DRE # <b>21707</b>	Rolling Log # <b>22-005-0112</b>	Evaluator's Agency <b>Huntington PD</b>	Case# <b>(Session XVII - #1)</b>																																
Recorder/Witness <b>Sgt. Jay Powers, WV SP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Huntington PD</b>																																	
Arrestee's Name (Last, First, Middle) <b>Schmack, Charlie J.</b>		Date of Birth <b>05/14/1987</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Travis Hogan</b>																																
Date Examined / Time / Location <b>01/23/22 / 1505 / Huntington PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>64872</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>																																	
Miranda Warning Given Given by: <b>Ofc. Hogan</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Nothing</b>	When? <b>N/A</b>	What have you been drinking? How much? <b>Just coffee 4 or 5 cups</b>	Time of last drink? <b>N/A</b>																																
Time now/ Actual <b>About 4 pm / 1508</b>	When did you last sleep? <b>Last night</b>	How long? <b>5 or 6 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No "You tell me"		Attitude: <b>Cooperative, Passive</b>		Coordination: <b>Poor, Relaxed, Unstable</b>																																	
Speech: <b>Low, Raspy</b>		Breath odor: <b>Normal</b>		Face: <b>Pale</b>																																	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right																																	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																	
Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy		Pulse/Time		20/30 <b>One Leg Stand</b> 22/30																																	
<table border="1" style="width: 100%;"> <tr> <td>HGN</td> <td>Left Eye</td> <td>Right Eye</td> </tr> <tr> <td>Lack of Smooth Pursuit</td> <td>None</td> <td>None</td> </tr> <tr> <td>Maximum Deviation</td> <td>None</td> <td>None</td> </tr> <tr> <td>Angle of Onset</td> <td>None</td> <td>None</td> </tr> </table>		HGN	Left Eye	Right Eye	Lack of Smooth Pursuit	None	None	Maximum Deviation	None	None	Angle of Onset	None	None	<table border="1" style="width: 100%;"> <tr> <td>Convergence</td> <td>Right eye</td> <td>Left eye</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>		Convergence	Right eye	Left eye																			
HGN	Left Eye	Right Eye																																			
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Angle of Onset	None	None																																			
Convergence	Right eye	Left eye																																			
<table border="1" style="width: 100%;"> <tr> <td>1. <b>56 / 1518</b></td> <td></td> </tr> <tr> <td>2. <b>52 / 1538</b></td> <td></td> </tr> <tr> <td>3. <b>52 / 1550</b></td> <td></td> </tr> </table>		1. <b>56 / 1518</b>		2. <b>52 / 1538</b>		3. <b>52 / 1550</b>		<table border="1" style="width: 100%;"> <tr> <td>Cannot keep balance</td> <td><b>3</b></td> </tr> <tr> <td>Starts too soon</td> <td></td> </tr> <tr> <td>Stops walking</td> <td></td> </tr> <tr> <td>Misses heel-toe</td> <td></td> </tr> <tr> <td>Steps off line</td> <td></td> </tr> <tr> <td>Uses arms</td> <td></td> </tr> <tr> <td>Actual steps taken</td> <td></td> </tr> </table>		Cannot keep balance	<b>3</b>	Starts too soon		Stops walking		Misses heel-toe		Steps off line		Uses arms		Actual steps taken		<table border="1" style="width: 100%;"> <tr> <td>1st Nine</td> <td>2nd Nine</td> </tr> <tr> <td><b>2</b></td> <td><b>1</b></td> </tr> <tr> <td><b>1</b></td> <td><b>1</b></td> </tr> <tr> <td><b>1</b></td> <td></td> </tr> <tr> <td><b>1</b></td> <td><b>2</b></td> </tr> <tr> <td><b>9</b></td> <td><b>9</b></td> </tr> </table>		1st Nine	2nd Nine	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>2</b>	<b>9</b>	<b>9</b>
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<b>Modified Romberg Balance</b> Approx. 4" 4"    Approx. 2" 2"  On the nod. Licking his lips		<b>Walk and Turn Test</b>  Slow, deliberate steps		Type of footwear: <b>Lace-up boots</b>																																	
<b>Time Estimation</b> <b>44</b> estimated as 30 seconds		Describe turn <b>Slow, deliberate steps</b>		Cannot do test (explain) <b>N/A</b>																																	
<b>Finger to Nose</b> (Draw lines to spots touched)		<table border="1" style="width: 100%;"> <tr> <th>PUPIL SIZE</th> <th>Room light (2.5 - 5.0)</th> <th>Darkness (5.0 - 8.5)</th> <th>Direct (2.0 - 4.5)</th> </tr> <tr> <td>Left Eye</td> <td>2.0</td> <td>3.0</td> <td>2.0</td> </tr> <tr> <td>Right Eye</td> <td>2.0</td> <td>3.0</td> <td>2.0</td> </tr> </table>		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Left Eye	2.0	3.0	2.0	Right Eye	2.0	3.0	2.0	Nasal area: <b>Clear</b>																					
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Right Eye	2.0	3.0	2.0																																		
 Slow movements. On the nod.		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Little or none visible</b>																																	
Blood Pressure <b>110 / 64</b>		Temperature <b>97.0 °F</b>		<b>RIGHT ARM</b> <b>LEFT ARM</b> 																																	
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Red puncture mark. Numerous bruises along veins on inside of both arms.																																			
What drugs or medications have you been using? <b>"I don't use drugs. I'm just tired."</b>		How much? <b>N/A</b>	Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>																																	
Date / Time of arrest: <b>01/23/22 1350</b>	Time DRE was notified: <b>1430</b>	Evaluation start time: <b>1505</b>	Evaluation completion time: <b>1600</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																																	
DRE/Officer's Signature: <b>Joseph Koher</b>		Reviewed/approved by / date:			DRE#																																
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis																																			

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Schmack, Charlie J.**

- 1. Location:** The evaluation was conducted in the booking room at the Huntington Police Department. The booking room is well illuminated and has a smooth tile floor. The darkroom examinations were conducted in the staff restroom adjacent to the interview room.
- 2. Witnesses:** Sergeant Jay Powers of the West Virginia State Police witnessed and recorded the entire evaluation. The arresting officer, Officer Travis Hogan observed the psychophysical tests.
- 3. Breath Alcohol Test:** The suspect's breath test result was 0.00%. The test was administered by Officer Hogan using the Intoxilyzer 9000 prior to my arrival.
- 4. Notification and Interview of the Arresting Officer:** I was on-duty and was notified by Dispatch to contact Officer Hogan at HPD regarding a drug evaluation. When contacted, Officer Hogan advised that the suspect (Charlie J. Schmack) was found slumped over the steering wheel of his vehicle on 8<sup>th</sup> Street. He had his foot on the brake and he appeared to be unconscious and was unresponsive. Officer Hogan was preparing to use Narcan when the suspect became responsive. During the contact, Officer Hogan did not detect an odor of an alcoholic beverage on the suspect's breath. However, he did observe indicators of possible drug impairment, which included slow lethargic movements while retrieving his identification, with slow, thick, and raspy speech. He also observed that the suspect had small, constricted pupils. He observed what appeared to be a red puncture mark on the inside of the suspect's right arm and noted that he was frequently licking his lips. The suspect consented to SFSTs at roadside and Officer Hogan administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. No clues of HGN were observed, however, he did observe impairment clues on the W&T and the OLS tests. After completing the SFSTs, Officer Hogan arrested the suspect for DWI and transported him to HPD for processing. After obtaining a 0.00 BAC result, Officer Hogan requested the assistance of a DRE. (Refer to Officer Hogan's arrest report for additional details)
- 5. Initial Observation of the Suspect:** I first observed the suspect in the booking room at HPD. He appeared to be "on the nod." His eyes were partially closed, his head kept nodding forward, and his breathing was slow and shallow. He responded to my questions slowly, and his speech was low and raspy sounding. He had a dry mouth and frequently licked his lips. His movements were slow and deliberate. He was wearing blue jeans, a red tee-shirt, and lace-up boots. I introduced myself and asked if he would participate in a drug evaluation. He replied by stating, "I guess so." I asked if he had been informed of his Miranda rights and he confirmed that he had. I asked if he had any injuries or physical defects, and he indicated he did not, and that he was not under the care of a doctor or dentist. He told me he had not eaten anything today and drank 4 or 5 cups of coffee during the day. When asked if he was taking any medications or drugs, he responded "You tell me." He advised he was not blind in either eye and did not wear glasses. When asked when he last slept, he indicated he had slept about 5 or 6 hours the night before. His coordination was poor, and he was unstable on his feet when he stood and walked.
- 6. Medical Problems and Treatment:** The suspect did not report any injuries or physical problems. During the evaluation, none were mentioned by the suspect and none were observed.
- 7. Psychophysical Indicators of Impairment:** The psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, he confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect:  
**Modified Romberg Balance:** During this test, the suspect swayed approximately 4" front to back and approximately 2" side to side. His time estimation was slow, estimating 30 seconds in 44 seconds. He appeared to be "on the nod" and was licking his lips during the test.

**Walk & Turn:** For this test, a line on the booking room floor was used. The suspect lost his balance three times during the instructions stage. Once he started the walking stage, he stopped immediately after taking his first step. When he continued, he stepped off the line with his next step. He missed touching heel to toe on his ninth step and stopped. He appeared to be confused on how to continue. He was instructed to make his turn as directed and he then made a slow and deliberate turn, but as instructed. On the second nine steps, he missed touching heel to toe on his second step and continued along the line taking slow and deliberate steps. When he reached his eighth step, he stopped and again appeared to be confused on what to do next. Three times he was reminded to count his steps out loud and when he did count out loud, his counting was very faint and difficult to hear. He used his arms to balance once on the first nine steps and twice on the second nine steps.

**One Leg Stand:** For this test, when the suspect raised his right leg, he swayed side to side. He used his arms for balance during the entire test and he put his foot down at count 1,012. He counted slowly throughout the test, counting to 1,020 in 30 seconds. When he raised his left leg, he again swayed side to side. He also used his arms for balance for most of the test. He put his foot down on counts 1,014 and 1,021. He again counted slowly, counting to 1,022 in the 30 second timed period.

**Finger to Nose:** During this test, the suspect swayed forward approximately 2 – 3 inches. He was unable to touch the tip of his nose with the tip of his index finger on five of the six attempts. His arm movements were slow and deliberate, and he again appeared to be on the nod during portions of the test.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited equal tracking, equal pupil size and did not exhibit resting nystagmus. No HGN clues or Vertical Gaze Nystagmus were observed. His eyes converged as directed. His pupil sizes were estimated in three lighting levels and were 2.0 mm in both eyes in Room Light, 3.0 mm in both eyes in Near Total Darkness, and 2.0 mm in both eyes in Direct Light. The Room Light and Near Total Darkness estimates were below the DRE average ranges for the lighting conditions. The Direct Light estimate was at the low end of the DRE average range. The suspect had droopy eyelids and his pupillary reaction to light was little or none visible.

**Vital Signs:** The suspect's pulse rates were low throughout the evaluation at 56, 52, and 52 beats per minute (bpm). All three were below the DRE average range. His blood pressure of 110/64 millimeters of Mercury (mmHg) and body temperature of 97.0 °F, were low and below the DRE average ranges. The suspect's muscle tone was flaccid. Numerous times during the vital signs examinations he appeared to be on the nod and was licking his lips.

**9. Signs of Ingestion:** A red injection mark was located on the inside of the suspect's right arm. He claimed it was from a blood donation from a couple of days prior. He also had numerous bruised areas along the veins on the inside of both of his arms. His nasal and oral cavities were clear.

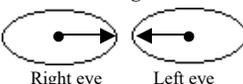
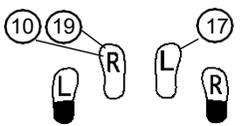
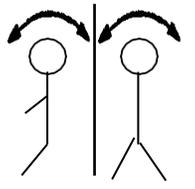
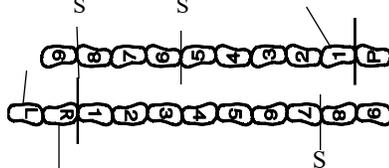
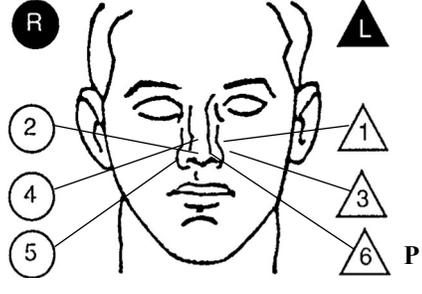
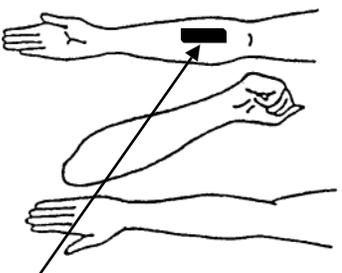
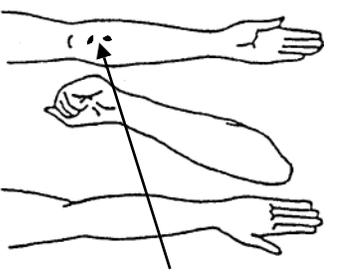
**10. Suspect's Statements:** After explaining my observations to the suspect, I again asked him about drug use. He denied using drugs and continued to claim he was just tired.

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.

**12. Toxicological Sample:** The suspect provided a blood sample, which was collected at the local hospital and submitted as evidence pending delivery to the State Police Forensic Laboratory for analysis.

**13. Miscellaneous:** Officer Hogan advised after the evaluation that while securing the suspect's vehicle, a syringe was located on the passenger side floorboard. The syringe contained a small amount of liquid which will be forwarded to the State Police Forensic Laboratory for analysis.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Ofc Michael Thiele</b>		DRE # 18946	Rolling Log # 22-009-0045	Evaluator's Agency <b>Los Vegas Metro PD</b>		(Session XVII - #2)														
Recorder/Witness <b>Officer Daniel Slattery, NV HP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Las Vegas Metro PD</b>																
Arrestee's Name (Last, First, Middle) <b>Wynn, Hara</b>		Date of Birth 4/10/1987	Sex M	Race W	Arresting Officer (Name, ID#) <b>Officer Jarrod Hurley #19598</b>															
Date Examined / Time / Location <b>7/05/22 / 1840 / Clark Co. Detention</b>		Breath Test: Results: 0.000	Test Refused <input type="checkbox"/> Instrument #: 32455		Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>															
Miranda Warning Given Given by: Ofc. Hurley	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Couple of candy bars"		When? 3 pm	What have you been drinking? How much? Water, Big Gulp A couple	Time of last drink? N/A														
Time now/ Actual 7 pm / 1845	When did you last sleep? Last night	How long? "A few hours"	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No															
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "No, no medicine"			Attitude: Cooperative		Coordination: Poor, Sluggish, Unstable															
Speech: Low, Raspy		Breath odor: Normal		Face: Pale																
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal														
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy														
Pulse and Time 1. <u>56</u> / <u>1855</u> 2. <u>52</u> / <u>1908</u> 3. <u>52</u> / <u>1920</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye      Left eye		24/30 <b>One Leg Stand</b> 22/30 														
<b>Modified Romberg Balance</b> Approx. 3" 3" 3" 3"  Counted slow. On the nod.	<b>Walk and Turn Test</b>  Walked slowly with deliberate steps.		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken		1 <sup>st</sup> Nine      2 <sup>nd</sup> Nine <table border="1" style="display: inline-table;"><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table> L      R <table border="1" style="display: inline-table;"><tr><td>All</td><td>All</td></tr><tr><td>All</td><td>All</td></tr><tr><td>2</td><td>1</td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down Counted slowly. Scratching arms and face.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	All	All	All	All	2	1
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
<input type="checkbox"/>	<input type="checkbox"/>																			
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<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
All	All																			
All	All																			
2	1																			
<b>Time Estimation</b> 44 estimated as 30 seconds	Describe turn Slow, deliberate steps	Cannot do test (explain) N/A		Type of footwear: Athletic shoes																
<b>Finger to Nose</b> (Draw lines to spots touched)  Slow arm movements. Leaned forward.		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Clear														
		Left Eye	2.0	2.5	1.5	Oral cavity: White coating. Dry lips														
		Right Eye	2.0	2.5	1.5	Reaction to Light: Little to none visible														
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<b>RIGHT ARM</b>  Scar tissue			<b>LEFT ARM</b>  Fresh puncture marks													
Blood Pressure 108 / 66	Temperature 97.0 °F	Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:																
What drugs or medications have you been using? "I'm not going to answer that"		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A																
Date / Time of arrest: 7/05/22 / 1735	Time DRE was notified: 1815	Evaluation start time: 1840	Evaluation completion time: 1935	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																
Officer's Signature: <i>Michael Thiele</i>		Reviewed/approved by / date:				DRE #														
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant														
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input checked="" type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis														

# DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Wynn, Hara**

- 1. Location:** The evaluation was conducted in the booking area of the Clark County Detention Center in Las Vegas, NV. The area is well illuminated and has a concrete floor with no obstructions. The dark room examinations were conducted in the booking area restroom that was adequately darkened for the examinations.
- 2. Witnesses:** Officer Daniel Slattery of the Nevada HP witnessed and recorded the evaluation.
- 3. Breath Alcohol Test:** The suspect's breath test result was 0.00% and was obtained prior to my arrival by the arresting officer, Officer Jarrod Hurley of the Las Vegas Metro PD.
- 4. Notification and Interview of the Arresting Officer:** I was on duty and at approximately 1815 hours, I was requested to contact Officer Hurley of the LVMPD regarding a drug evaluation. After contacting Officer Hurley at the Clark County Detention Center, it was determined he had arrested the suspect for DUI after the vehicle he was operating failed to stop at a red traffic light on Tropicana Ave. nearly colliding with another vehicle. Officer Hurley further advised that after stopping the suspect's vehicle, he did not detect an odor of an alcoholic beverage on his breath, but he showed indicators of impairment. He reported that the suspect passed over his driver's license three times while looking for it. The suspect also had slow and deliberate hand movements. Officer Hurley noticed the suspect's speech was slow, thick, and slurred. He also observed that the suspect's pupils were constricted for the lighting conditions. Officer Hurley administered SFSTs at roadside, which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing no clues of HGN, but he did observe three clues on the W&T and three clues on the OLS. According to Officer Hurley, throughout the tests, the suspect was unstable on his feet, and his movements were slow and sluggish. Officer Hurley arrested the suspect for DUI and transported him to the Detention Center for processing. According to Officer Hurley, who is a certified DRE, while the suspect was in the back of his patrol vehicle, he was slumped over and appeared to be on-the-nod. After obtaining a .00 BAC, he requested DRE assistance as he was needed for a crash investigation call.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the booking room at the Detention Center. Officer Hurley had just conducted the breath test and was completing his paperwork when I arrived. I noted the suspect was repeatedly scratching his arms and neck. His head kept nodding forward, and he appeared to be "on the nod." When he spoke, his voice was low and raspy. His pupils appeared to be constricted. His coordination and movements were poor, sluggish and deliberate. He was wearing blue jeans, a brown button-up shirt, and lace-up athletic shoes. I introduced myself and asked if he would participate in a drug evaluation, which he agreed to do. I confirmed he had been informed of his Miranda rights and that he would answer my questions. I asked if he had any injuries or physical defects that might prevent him from doing the tests, and he indicated he did not. He advised that he was not currently under the care of a doctor or dentist. He indicated he had eaten a couple of candy bars around 3 pm and had drank some water and a Big Gulp earlier. When asked if he was taking any medication or drugs, he responded "No, no medicine." He told me he was not blind in either eye and did not use eye glasses. When asked when he had last slept and for how long, he indicated last night and for a few hours. His responses to my questions were slow and at times thick and slurred. His eyelids were droopy, and his face was pale-colored.
- 6. Medical Problems and Treatment:** The suspect did not report any injuries or physical problems, and none were mentioned or observed during the evaluation.
- 7. Psychophysical Indicators of Impairment:** Each of the tests were explained and demonstrated to the suspect prior to him attempting them. Several times the instructions had to be repeated, as he appeared to be having attention difficulties. After each demonstration, he indicated he understood the instructions. The following tests were administered:

**Modified Romberg Balance:** During this test, the suspect swayed approximately three inches front to back and side to side. He had a slow time estimation, estimating the passage of 30 seconds in 44 seconds. I asked how he had estimated the 30 seconds and he replied, "I just tried to count in my head." He appeared to be on-the-nod during portions of the test and frequently scratched his arms and neck.

**Walk and Turn:** For this test, a painted line on the booking room floor was used. During the test, the suspect lost his balance twice during the instruction stage. During the walking stage, he took slow and deliberate steps, stopped while walking one time on the first nine steps and twice on the second nine steps. He stepped off the line to his right on the first step after making his turn, which was slow and made with deliberate steps. He also raised his arms for balance once on the first nine steps and three times on the second nine steps. He had to be reminded three times to count his steps out loud.

**One Leg Stand:** When the suspect stood on his left foot and raised his right foot, he counted slowly and swayed noticeably throughout the test. He also used his arms to balance throughout the test and put his foot down at 1,010 and 1,019. His count was slow, reaching 1,024 in the 30 second timed period. When he stood on his right foot and raised his left foot, he again swayed throughout the test. He also used his arms to balance during the entire test and put his foot down at 1,017. His count was again slow, reaching 1,022 in the 30 second timed period. After completing the test, he continued to scratch his arms and neck area.

**Finger to Nose:** During this test, the suspect leaned forward when attempting to touch his nose. He missed the tip of his nose with the tip of his index finger on five of his six attempts. He used the pad of his fingers on attempts 4, 5 and 6. He had slow hand and arm movements throughout the test.

8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect's pupils were checked in three lighting conditions and were estimated at 2.0 mm in both eyes in Room Light, 2.5 mm in both eyes in Near Total Darkness, and 1.5 mm in both eyes in Direct Light. All were below the DRE average ranges. The suspect's pupil reaction to light was little or none visible. The suspect's eyes were able to converge as directed and rebound dilation was not observed.

**Vital Signs:** The suspect's pulse, blood pressure, and body temperature were below the DRE average ranges. His pulse rates were measured at 56, 52 and 52 beats per minute (bpm). His blood pressure was measured at 108/66 mmHg. His temperature was 97.0 F using an oral thermometer. His muscle tone was flaccid. Several times during the vital signs examinations he appeared to be on-the-nod.

9. **Signs of Ingestion:** The suspect had scars on his right inside forearm and two fresh puncture wounds on the inside of his left arm. When asked about the fresh puncture wounds, he stated, "I think they're just scratches." When asked if he injected drugs, he took a long pause and then said, "I used to." The scars and marks were photographed and were submitted with the arresting officer's report.

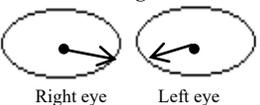
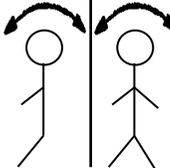
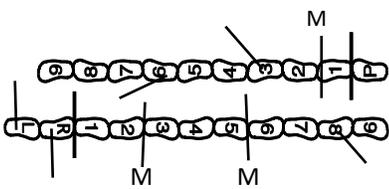
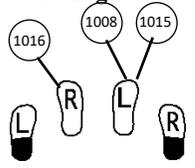
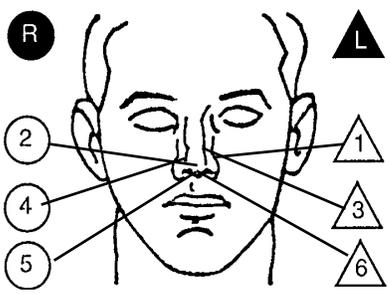
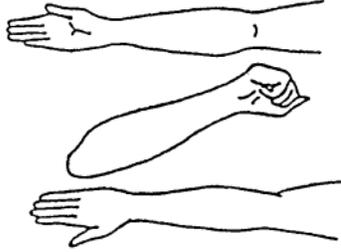
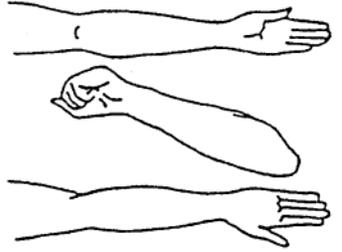
10. **Suspect's Statements:** After explaining my observations to the suspect, I again asked him about drug use. He responded by saying, "I'm not going to answer that."

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Narcotic Analgesic and unable to operate a vehicle safely.

12. **Toxicological Sample:** The suspect provided a urine sample to Officer Hurley that will be forwarded to the Nevada DPS Crime Laboratory for analysis.

13. **Miscellaneous:** Refer to Officer Hurley's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Trooper Marc Russell</b>		DRE # <b>16856</b>	Rolling Log # <b>22-010-0057</b>	Evaluator's Agency <b>Wyoming Highway Patrol</b>	Case# <b>(Session XVII - #3)</b>	
Recorder/Witness <b>Sgt. Duane Ellis, Wyoming HP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Rock Springs PD</b>		
Arrestee's Name (Last, First, Middle) <b>Cotton, Ozzie</b>		Date of Birth <b>05/16/1986</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Amanda Clawson</b>	
Date Examined / Time / Location <b>07/05/22 / 2030 / Sweetwater Co. Jail</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>59305</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by: <b>Officer Clawson</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Cheeseburger</b>	When? <b>1 pm</b>	What have you been drinking? How much? <b>Nothing</b>	Time of last drink? <b>N/A</b>	
Time now/ Actual <b>9 PM / 2035</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 9 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"Sore elbow"</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I used to take pain pills"</b>			Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Slow, Unsteady</b>	
Speech: <b>Slow, Thick</b>		Breath odor: <b>Normal</b>		Face: <b>Pale (Beard)</b>		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy				
Pulse/Time	HGN	Left Eye	Right Eye	Convergence		
1. <b>58 / 2042</b>	Lack of Smooth Pursuit	None	None			
2. <b>56 / 2115</b>	Maximum Deviation	None	None	Right eye      Left eye		
3. <b>56 / 2130</b>	Angle of Onset	None	None			
Modified Romberg Balance Approx. 2" 2"    Approx. 2" 2"  Scratching arms	Walk and Turn Test 		Cannot keep balance <b>2</b>		23/30 <b>One Leg Stand</b> 21/30 	
	Stops walking		Starts too soon			
Misses heel-toe		Stops counting out loud on step #5. Reminded to count out loud. Slow deliberate steps.		L   R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down  Slow count.		
Steps off line		Uses arms		1st Nine      2nd Nine		
Actual steps taken				2      1		
				1      2		
				4      2		
				9      9		
Time Estimation <b>40</b> estimated as 30 seconds	Describe turn <b>Slow, but as instructed</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Brown slip-on boots</b>	
Finger to Nose (Draw lines to spots touched)  Slow arm movements. Searching for nose.		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area: <b>Clear</b>
		Left Eye	2.0	2.5	1.5	Oral cavity: <b>White coating. Dry mouth.</b>
		Right Eye	2.0	2.5	1.5	Reaction to Light: <b>Little or none visible</b>
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
		RIGHT ARM 		LEFT ARM 		
		Nothing observed				
Blood Pressure <b>112 / 64</b>	Temperature <b>97.2 °F</b>					
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		What drugs or medications have you been using? <b>"I used to take pain pills."</b>				
		How much? <b>A couple pills a day</b>		Time of use? <b>Couple weeks ago</b>	Where were the drugs used? (Location) <b>N/A</b>	
Date / Time of arrest: <b>07/05/22 1915</b>	Time DRE was notified: <b>1940</b>	Evaluation start time: <b>2030</b>	Evaluation completion time: <b>2145</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation		
DRE/Officer's Signature: <b>Marc Russell</b>		Reviewed/approved by / date:			DRE#	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis				

## DRUG INFLUENCE EVALUATION NARRATIVE

### Suspect: Cotton, Ozzie

- 1. Location:** The evaluation was conducted at the Sweetwater County Jail booking room. The room is well illuminated, has a smooth concrete floor with no obstructions and has ample room for conducting a drug influence evaluation. The darkroom examinations were conducted in the staff restroom.
- 2. Witnesses:** Sergeant Duane Ellis of the Wyoming Highway Patrol witnessed and recorded the evaluation. Arresting Officer Amanda Clawson witnessed the evaluation through the psychophysical tests and then had to respond to a reckless driver call.
- 3. Breath Alcohol Test:** The suspect's breath test was a 0.00% and was administered prior to my arrival to the County Jail.
- 4. Notification and Interview of the Arresting Officer:** I was on-duty working a holiday impaired driving enforcement detail and was requested to contact Officer Clawson of the Rock Springs PD at the Sweetwater County Detention Center regarding a drug evaluation. After contacting Officer Clawson, she advised that the suspect's vehicle was observed drifting in and out of his traffic lane and driving 15 mph under the posted speed on Gateway Blvd near College Drive. According to Officer Clawson, during the personal contact, she did not detect an alcoholic beverage odor on the suspect's breath but observed some indicators of possible drug impairment. The suspect had slow, and deliberate movements, constricted pupils, and slow, thick, slurred speech. According to Officer Clawson, the suspect did not have any medical conditions, injuries, or physical defects. The suspect consented to SFSTs and Officer Clawson administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS) and Finger to Nose (FTN) tests. She reported observing no clues of HGN but did observe numerous impairment clues on the W&T and OLS tests. On the FTN test, the suspect had difficulty touching his nose as directed. At the conclusion of the SFSTs, Officer Clawson arrested the suspect for DWI, and transported him to the Detention Center for processing. After obtaining a .00 breath test result, she requested the assistance of a DRE.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the booking area at the Detention Center. He was sitting on a bench and was continually scratching his arms. He had a dry mouth and had a smacking sound when he spoke. When he stood, he was unstable, and several times used the wall next to the bench to steady himself. He mentioned that he was cold even though the booking area was warm. He was wearing blue jeans, a brown tee shirt, and brown slip-on boots. I introduced myself and asked if he would complete a drug evaluation, which he agreed to. I asked if he had been informed of his Miranda rights and he indicated that he had and he agreed to answer my questions. I determined that he did not have any injuries or physical defects, and he only mentioned having a sore elbow. He indicated he was otherwise healthy and was not under the care of a doctor or dentist. He told me he had eaten a cheeseburger around 1 pm and had drunk a Monster energy drink at that time. When asked if he was taking any medication or drugs, he responded "No" and added "I used to take pain pills." He indicated he had slept the night before for about nine hours. Numerous times during the initial contact with the suspect, he appeared to be on the nod, and I had to repeat my questions to get a response from him.
- 6. Medical Problems and Treatment:** The suspect stated he had a sore right elbow but did not require medical attention for it. When asked how he had hurt his elbow he indicated that he had slipped on some ice and fell. During the evaluation, he did not report any other injuries or medical issues, and none were observed.
- 7. Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, he confirmed understanding my instructions. The following psychophysical tests were conducted:

**Modified Romberg Balance:** During this test, the suspect swayed approximately two inches front to back and side to side. His time estimation was slow, estimating 30 seconds in 40 seconds. He was asked how he had estimated the 30 seconds and he replied, “One Mississippi, two Mississippi. Like that.” He scratched his arms numerous times during the test.

**Walk & Turn:** For this test, a painted line of the concrete floor was used. During the test, the suspect lost his balance twice during the instruction stage. During the walking stage he missed touching heel to toe twice on the first nine steps, stepped off the line once, and used his arms to balance four times. His turn was slow but completed as instructed. On the second nine steps, he missed touching heel to toe once, stepped off the line twice, and raised his arms to balance two times. He stopped counting his steps out loud after the 5<sup>th</sup> step on the first nine steps and several times had to be reminded to count his steps out loud.

**One Leg Stand:** When the suspect stood on his left foot and raised his right foot he swayed while balancing, moving side to side. He also used his arms for balance during the entire test and put his foot down at his count of 1,016. His counting was slow, counting to 1,023 in the 30 second timed period. When standing on his right foot and raising his left foot, he again swayed side to side. He used his arms for balance during the entire test and put his foot down at his counts of 1,008 and 1,015. He again counted slowly, counting to 1,021 in the 30 second timed period.

**Finger to Nose:** During this test, the suspect leaned forward and did not touch the tip of his nose with the tip of his index finger as instructed on three of the six attempts (Attempts 1, 3 & 4). His hand and arm movements were slow and deliberate, and he appeared to be searching for his nose on each attempt.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect’s pupil sizes were estimated in three different lighting levels and were: 2.0 in Room Light, 2.5 mm in Near Total Darkness and 1.5 mm in Direct Light. All were below the DRE average ranges for the lighting conditions. His pupil reaction to light was little or none visible. Rebound dilation was not observed and he was able to converge his eyes as instructed.

Vital Signs: The suspect’s pulse rates were checked three times during the evaluation and were 58, 56 and 56 beats per minute (bpm). All three were below the DRE average range of 60 to 90 bpm. His blood pressure was measured at 112/64, which was also below the DRE average ranges. His body temperature was measured with an oral thermometer at 97.2 °F which was below the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect’s nasal was clear. His mouth was dry, and he had a white coating on his tongue and at the edges of his mouth. No indicators of injection signs were observed on his arms and hands.

10. **Suspect’s Statements:** After reviewing my observations with the suspect, I again asked him about drug use. He denied any current drug use but indicated he used to take pain pills. He could not remember the name of the pills or the doctor that prescribed them. When asked how long ago he had used the pain pills, he was slow to respond but stated, “Maybe a couple of weeks ago.” He claimed he used the pain pills for his sore elbow.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.

12. **Toxicological Sample:** At the end of the evaluation, the suspect provided a urine sample. However, it was difficult for the suspect to provide the sample and it was eventually obtained by Officer Clawson. The sample was submitted as evidence and will be forwarded to the state crime laboratory for analysis.

13. **Miscellaneous:** Refer to Officer Clawson’s DUI arrest report for additional details.

# DRE

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## MID-COURSE REVIEW

### CONTENTS

A. Drugs, Drug Categories, and the Drug Influence Evaluation .....	2
B. Eyes and Vital Signs .....	9
C. Physiology.....	25
D. Questions and Answers.....	30

### LEARNING ACTIVITIES

- Instructor/Participant Dialogues
- Participant-Led Demonstrations



***This is an after-normal-class-hours session participants are free to attend or not but are encouraged to attend. Its principal purpose is to help solidify the knowledge and skills they have begun to acquire from the Pre-School and from the first four days of the DRE 7-Day School.***

***This session must be highly interactive. Don't simply present information or conduct demonstrations. Make the participants do it. Ask questions and call upon participants to conduct the demonstrations required. Try to involve everybody and convey your gratitude for the fact they have attended this session.***

## A. Drugs, Drug Categories, and the Drug Influence Evaluation

Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

### Drugs, Drug Categories, and the Drug Influence Evaluation

- Define the word “drug”
- Name the seven drug categories
- Name the four subcategories of CNS Depressants
- Name the three subcategories of CNS Stimulants
- Name the two sub-categories of Narcotic Analgesics

DRE MID-2

**Slide 2.**

Define the word “drug.”



***(Session 2) Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.***

Name the seven drug categories.



***(Session 2) CNS Depressants, CNS Stimulants, Hallucinogens, Dissociative Anesthetics, Narcotic Analgesics, Inhalants, and Cannabis***

Name the subcategories of Central Nervous System (CNS) Depressants.



***(Session 9) Antidepressants, Anti-psychotic Tranquilizers, Sedative-Hypnotics, and other.***

Name the four subcategories of CNS Stimulants.



***(Session 10) Cocaine, the Amphetamines, and "Others."***

Name the two sub-categories of Narcotic Analgesics.



***(Session 17) Opiates and Opioids (Synthetics)***

Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

**Identify the Drug Category for:**

- Desoxyn
- Secobarbital
- Fentanyl
- Alprazolam
- Phenyl Cyclohexyl Piperidine
- "Ecstasy"
- ETOH
- Demerol
- Psilocybin

DRE MID-3

**Slide 3.**

Identify the category for each of the listed drugs.

Desoxyn



***(Session 10) CNS Stimulants***

Secobarbital (Seconal)



***(Session 9) CNS Depressants (Sedative-Hypnotics)***

Fentanyl



***(Session 17) Narcotic Analgesics***

Alprazolam (Xanax)



***(Session 9) CNS Depressants (Sedative-Hypnotics)***

Phenyl Cyclohexyl Peperidine



***(Session 16) Dissociative Anesthetics***

“Ecstasy” (MDMA)



***(Session 14) Hallucinogens***

ETOH



***(Session 9) CNS Depressants***

Demerol



***(Session 17) Narcotic Analgesics***

Psilocybin



***(Session 14) Hallucinogens***

## 12 Components of the Drug Influence Evaluation

DRE

MID-4

Slide 4.

List the twelve components of the Drug Influence Evaluation in the proper sequence.



### *(Session 4)*

- 1. Breath alcohol test*
- 2. Interview of the arresting officer*
- 3. Preliminary examination*
- 4. Examinations of the eyes*
- 5. Divided attention tests*
- 6. Examination of vital signs*
- 7. Dark room examinations*
- 8. Examination of muscle tone*
- 9. Examination for injection sites*
- 10. Subject's statements and other observations*
- 11. Opinion of evaluator*
- 12. Toxicological analysis*

## Demonstrations

- Preliminary Examination
- Eye Examinations
- Administration of the Divided Attention Tests
- Vital Signs Examinations
- Darkroom Examinations
- Check for Muscle Tone and the Inspection for Injection Sites

DRE

MID-5

**Slide 5.**



***For demonstrations, allow participants to refer to the standard Drug Influence Evaluation Form.***

***Be sure to provide appropriate positive feedback and constructive criticism of the demonstrators' performances.***

Demonstrate the Preliminary Examination

Demonstrate the Eye Examinations

Demonstrate the Administration of the Divided Attention Tests

Demonstrate the Vital Signs Examinations

Demonstrate the Darkroom Examinations

Demonstrate the Check for Muscle Tone and the inspection for Injection Sites

### Identify the Drug Category for:

- Morphine
- Adderall
- Chlordiazepoxide
- Ketamine
- Oxycodone
- Ritalin
- Bufotenine
- Methaqualone

DRE

MID-6

### Slide 6.

Identify the category for each of the listed drugs.

Morphine



***(Session 17) Narcotic Analgesics***

Adderall



***(Session 10) CNS Stimulants***

Chlordiazepoxide



***(Session 9) CNS Depressants***

Ketamine



***(Session 16) Dissociative Anesthetics***

Oxycodone



***(Session 17) Narcotic Analgesics***

Ritalin



***(Session 10) CNS Stimulants***

Bufotenine



***(Session 14) Hallucinogens***

Methaqualone



***(Session 9) CNS Depressants***

## B. Eyes and Vital Signs

Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

### Eyes and Vital Signs Review

Horizontal Gaze Nystagmus (HGN)

DRE MID-7

**Slide 7.**

Name the three clues of Horizontal Gaze Nystagmus (HGN).



***(Session 5) Lack of Smooth Pursuit, Distinct and Sustained Nystagmus at Maximum Deviation, Angle of Onset***

***Demonstrate the check for "Lack of Smooth Pursuit."***

***Demonstrate the check for "Distinct and Sustained Nystagmus at Maximum Deviation."***

***Ask the participant demonstrator: How long should the eye be held at maximum deviation? (A minimum of four seconds)***

***Demonstrate the check for "Angle of Onset."***

***Ask the participant demonstrator: What is the formula that expresses the approximate relationships between BAC and Angle of Onset? (BAC = 50 – Angle of Onset)***

Name the categories of drugs that cause HGN.



***(Session 9) CNS Depressants, (Session 16) Dissociative Anesthetics, and (Session 19) Inhalants***

## Eyes and Vital Signs Review

### Vertical Gaze Nystagmus (VGN)

DRE

MID-8

**Slide 8.**

Name the drug categories that will cause Vertical Gaze Nystagmus (VGN).



***(Session 9) CNS Depressants, (Session 16) Dissociative Anesthetics, and (Session 19) Inhalants***

***Demonstrate the check for VGN.***

Name the test always administered immediately after VGN.



***(Session 5) Lack of Convergence***

***Demonstrate the test for LOC.***

Name the categories of drugs that usually will cause slow reaction to light.



***(Session 9) CNS Depressants, (Session 10) CNS Stimulants, (Session 19) Inhalants***

## Eyes and Vital Signs Review

### Pupil Size and Rebound Dilation

- Name the lighting conditions under which we make estimations of pupil size
- Name the other things a DRE looks for while shining the light directly into the subject's eye

DRE

MID-9

**Slide 9.**

Name the lighting conditions under which we make estimations of pupil size.



***(Session 5) Room light, near-total darkness, direct light***

Name the other things a Drug Recognition Expert (DRE) looks for while shining the light directly into the subject's eye.



***(Session 5) Rebound Dilation and Pupil Reaction to Light***

## Eyes and Vital Signs Review

### Pupil Size and Rebound Dilation

- How quickly must the pupil start to constrict if it is considered to exhibit normal reaction to light?
- Define Rebound Dilation
- State the DRE average ranges of pupil size for the three lighting conditions

DRE

MID-10

### Slide 10.

How quickly must the pupil start to constrict if it is considered to exhibit normal reaction to light?



Instructor  
Note

*(Session 5) Within one second*

Define Rebound Dilation.



Instructor  
Note

*(Session 5) A period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and the range between minimum and maximum is equal to or greater than 1mm and does not return to its original constricted size.*

State the DRE average ranges of pupil size for the three lighting conditions.



Instructor  
Note

- (Session 5)*
- *Room light: 2.5 – 5.0 mm*
  - *Near Total Darkness: 5.0 – 8.5 mm*
  - *Direct Light: 2.0 – 4.5 mm*

## What Do These Terms Mean?

- Miosis
- Mydriasis
- Ptosis

DRE

MID-11

**Slide 11.**

Define each of the listed terms.

Miosis



***(Session 5) Abnormally small (constricted) pupils***

Mydriasis



***(Session 5) Abnormally large (dilated) pupils***

Ptosis



***(Session 9) Droopy eyelids***

## Pupil Dilation and Constriction

- What categories of drugs cause dilation of the pupils?
- What categories of drugs cause constriction?

DRE

MID-12

**Slide 12.**

What categories of drugs cause dilation of the pupils?



***(Session 10) CNS Stimulants, (Session 14) Hallucinogens, (Session 21) Cannabis  
(although sometimes only slight dilation, if any)***

What categories of drugs cause constriction?



***(Session 17) Narcotic Analgesics***

## More Drugs to Categorize

- Oxycodone
- Halcion
- Gabapentin
- Peyote
- Ritalin
- Diazepam
- Dexedrine
- Codeine
- Lorazepam

DRE

MID-13

### Slide 13.

Identify the category for each of the listed drugs.

Oxycodone



*(Session 17) Narcotic Analgesic*

Halcion



*(Session 9) CNS Depressant*

Gabapentin



*(Session 9) CNS Depressant*

Peyote



*(Session 14) Hallucinogen*

Ritalin



*(Session 10) CNS Stimulant*

Diazepam



***(Session 9) CNS Depressant***

Dexedrine



***(Session 10) CNS Stimulant***

Codeine



***(Session 17) Narcotic Analgesic***

Lorazepam



***(Session 9) CNS Depressant***

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Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

### Circulatory System Review

- Define “Pulse”
- Define “Pulse Rate”
- Define “Artery”
- Define “Vein”

DRE MID-14

**Slide 14.**

Define “Pulse.”



***(Session 7) The rhythmic dilation and relaxation of an artery that results from the beating of the heart***

***(Also acceptable: The expansion and contraction of an artery, caused by the surging flow of blood)***

Define "Pulse Rate."



***(Session 7) The number of pulsations in an artery per minute***

Define "Artery."



***(Session 7) A strong, elastic blood vessel that carries blood from the heart to the body tissues***

Define "Vein."



***(Session 7) A blood vessel that carries blood back to the heart from the body tissues***

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Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

**Where Are These Pulse Points Located?**

- Radial
- Brachial
- Carotid

DRE MID-15

**Slide 15.**

Radial



***(Session 7) Wrist***

Brachial



***(Session 7) Crook of the arm***



***(Session 7) Neck***

Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

### Pulse Point Location

- What is the normal range of adult pulse rate?
- Name the drug categories that usually cause elevated pulse rate.
- Name the drug categories that usually cause lowered pulse rate.

DRE MID-16

**Slide 16.**

What is the normal range of adult pulse rate?



***(Session 7) 60 – 90 beats per minute***

Name the drug categories that usually cause elevated pulse rate.



***(Session 10) CNS Stimulants, (Session 14) Hallucinogens, (Session 16) Dissociative Anesthetics, (Session 19) Inhalants, (Session 21) Cannabis***

Name the drug categories that usually cause lowered pulse rate.



***(Session 9) CNS Depressants, (Session 17) Narcotic Analgesics***

## Blood Pressure Review

- Define “Blood Pressure”
- How often does a person’s blood pressure change?
- When does the blood pressure reach its highest value?
- When does the blood pressure reach its lowest value?

DRE

MID-17

**Slide 17.**

Define “Blood Pressure.”



***(Session 7) The force exerted by blood on the walls of the arteries***

How often does a person’s blood pressure change?



***(Session 7) It is always changing, from instant to instant***

When does the blood pressure reach its highest value?



***(Session 7) When the heart is fully contracted, and blood is sent rushing into the arteries***

When does the blood pressure reach its lowest value?



***(Session 7) When the heart is fully expanded, just before it starts to contract for the next “pumping” action***

Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

### Blood Pressure Review

DRE MID-18

**Slide 18.**

Name the two medical instruments used to measure blood pressure.



***(Session 7) SPHYGMOMANOMETER and (Session 7) STETHOSCOPE***

***Select a participant to come to the dry erase board or easel/easel pad and print "SPHYGMOMANOMETER" and "STETHOSCOPE."***

Name the sounds we hear through the stethoscope when we take a blood pressure measurement.



***(Session 7) KOROTKOFF SOUNDS***

***Select a participant to come to the dry erase board or easel/easel pad and print "KOROTKOFF SOUNDS."***

## Blood Pressure Review



DRE

MID-19

**Slide 19.**

What does this “Hg” mean?



***(Session 7) Chemical symbol for the element Mercury; abbreviation for the Latin word Hydrargyrum, meaning “Mercury”***

***Print “Hg” on the dry erase board or easel/easel pad.***

In what units is blood pressure measured?



***(Session 7) Millimeters of Mercury***

***Print “mm” on the dry erase board or easel/easel pad right in front of the “Hg.”***

Suppose at some particular instant, a person has a blood pressure of 120 mmHg. What does “120 mmHg” mean?



***(Session 7) It means the pressure would be strong enough to push a column of liquid Mercury up a glass tube to a height of 120 millimeters***

***If one is available, display a Sphygmomanometer that has a liquid mercury pressure gauge.***

## Drugs and Blood Pressure

- Name the drug categories that usually cause a lowered blood pressure
- Name the drug categories that elevate blood pressure

DRE

MID-20

### Slide 20.

Name the drug categories that usually cause a lowered blood pressure.



***(Session 9) CNS Depressants, (Session 17) Narcotic Analgesics, and the (Session 19) Anesthetic Gases subcategory of Inhalants***

Name the drug categories that elevate blood pressure.



***(Session 10) CNS Stimulants, (Session 14) Hallucinogens, (Session 16) Dissociative Anesthetics, (Session 21) Cannabis, and the (Session 19) other two subcategories (Volatile Solvents and Aerosols) of Inhalants***

### Some Technical Terms to Define

- Systolic
- Diastolic
- Bradycardia
- Tachycardia
- Hypertension
- Hypotension

DRE

MID-21

**Slide 21.**

State the meaning of each of the listed terms.

Systolic



***(Session 7) The highest value of blood pressure***

Diastolic



***(Session 7) The lowest value of blood pressure***

Bradycardia



***(Session 7) Abnormally slow heart rate, pulse rate below the normal range***

Tachycardia



***(Session 7) Abnormally rapid heart rate, pulse rate above the normal range***

Hypertension



***(Session 7) Abnormally high blood pressure***

## Hypotension



***(Session 7) Abnormally low blood pressure***

Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

### Blood Pressure Measurement

- State the normal range of systolic blood pressure.
- State the normal range of diastolic blood pressure.

DRE MID-22

**Slide 22.**

State the normal range of systolic blood pressure.



***(Session 7) 120 – 140 mmHg***

State the normal range of diastolic blood pressure.

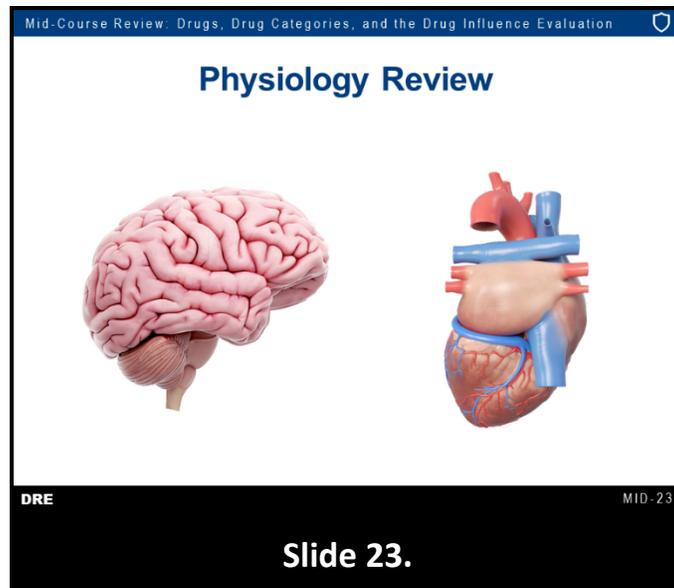


***(Session 7) 70 – 90 mmHg***

***Demonstrate the measurement of blood pressure.***

***Tell the participant demonstrator to explain out loud everything he or she does to take blood pressure measurement.***

## C. Physiology



Define “Physiology.”



*(Session 6) For the purposes of this training course, Physiology is the study of the functions of living organisms and their parts.*

What is the expression we use to remember the names of the ten major body systems?



*(Session 6) MURDERS INC*

**MURDERS INC.**

DRE

MID-24

**Slide 24.**

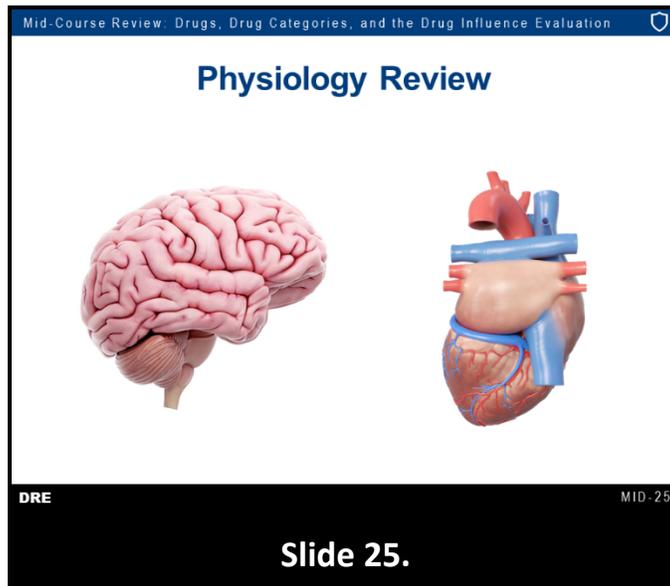


***Select a participant to come to the dry erase board of easel/easel pad and print "MURDERS INC" vertically.***

***Have participant write while class states what each letter stands for.***

***(Session 6)***

- ***Muscular (have a participant print out each name)***
- ***Urinary***
- ***Respiratory (or, reproductive)***
- ***Digestive***
- ***Endocrine***
- ***Reproductive (or, respiratory)***
- ***Skeletal***
- ***Integumentary***
- ***Nervous***
- ***Circulatory***



State the word that means “dynamic balance involving levels of salts, water, sugars and other materials in the body’s fluids.”



***(Session 6) Homeostasis***

Which artery carries blood from the heart to the lungs?



***(Pre-School, Session 6) Pulmonary***

What is unique about the Pulmonary artery, compared to all other arteries?



***(Pre-School, Session 6) It is the only artery that takes blood from the right side of the heart***

***(Pre-School, Session 6) It is the only artery that carries deoxygenated blood (i.e., blood depleted of oxygen)***

What are the Pulmonary veins?



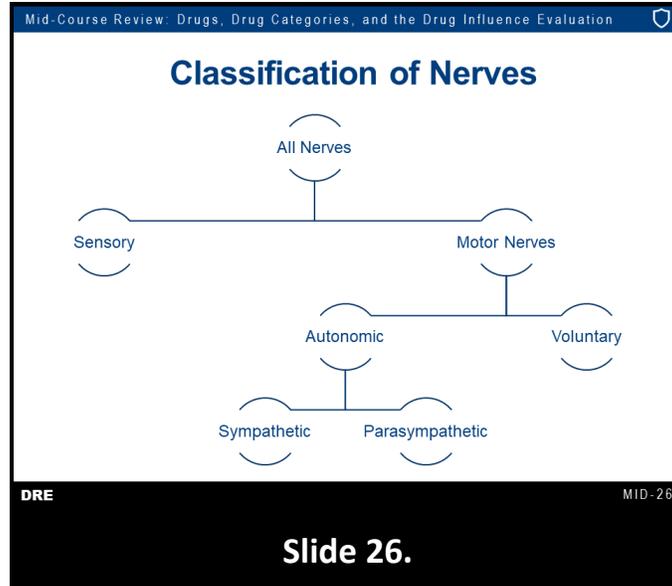
***(Pre-School, Session 6) The veins that carry blood back to the heart from the lungs***

What is unique about the Pulmonary veins?



***(Pre-School, Session 6) They are the only veins that bring blood to the left side of the heart***

***(Pre-School, Session 6) They are the only veins that carry oxygenated blood***



What do these terms mean?

Sensory



***(Session 6) Afferent Nerves***

Motor Nerves



***(Session 6) Efferent Nerves***

Voluntary



***(Session 6) Conscious control***

Autonomic



***(Session 6) Not conscious control***

Sympathetic



*(Session 6) Fear, stress, etc.*

Parasympathetic



*(Session 6) relaxation, tranquility, etc.*

Mid-Course Review: Drugs, Drug Categories, and the Drug Influence Evaluation

### More Technical Terms to Define

- Neuron
- Synapse
- Neurotransmitter
- Axon
- Dendrite

DRE MID-27

**Slide 27.**

Define each of the listed terms.

Neuron



*(Session 6) A nerve cell, the basic “building block” of a nerve*

Synapse



*(Session 6) The gap or space between two nerve cells*

Neurotransmitter



*(Session 6) A chemical that flows across the synapse, to carry a message from one neuron to the next*

Axon



***(Session 6) The end of a neuron that sends out the neurotransmitter***

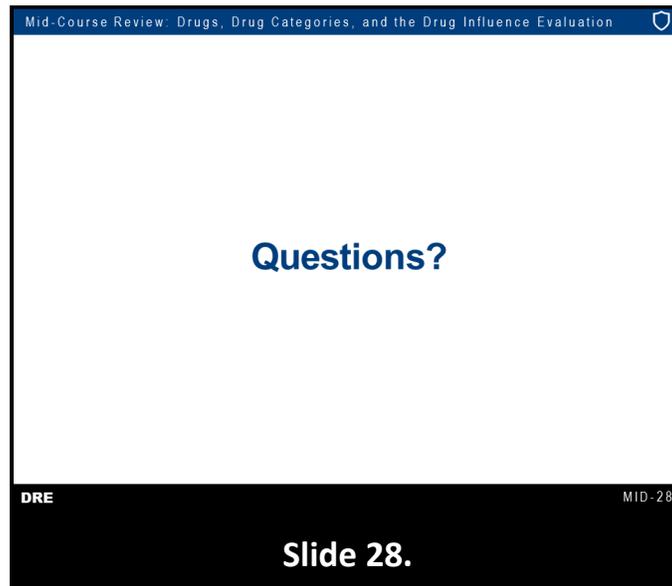
Dendrite



***(Session 6) The end of a neuron that receives the neurotransmitter***

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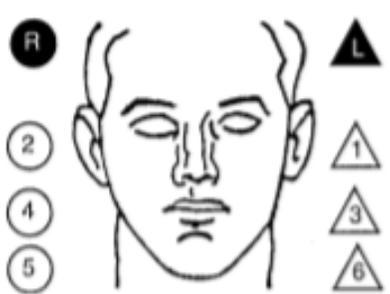
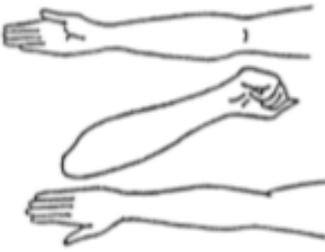
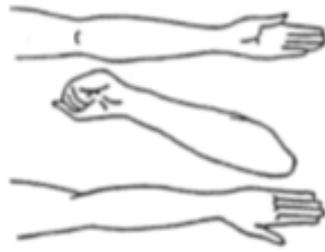
## D. Questions and Answers



***Segment D can last as long as necessary.***

***Solicit and answer participants' questions about anything covered thus far in their training.***

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #		Rolling Log #		Evaluator's Agency		Case #								
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property			Arresting Officer's Agency											
Arrestee's Name (Last, First, Middle)		Date of Birth		Sex	Race	Arresting Officer (Name, ID#)										
Date Examined / Time / Location		Breath Test Results:		Test Refused <input type="checkbox"/> Instrument #:		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>										
Miranda Warning Given		<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today?		When?		What have you been drinking? How much?		Time of last drink?							
Time now/ Actual	When did you last sleep?		How long?		Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No			Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No								
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No			Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No											
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No				Attitude:			Coordination:									
Speech:			Breath odor:			Face:										
Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft			Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal									
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input type="checkbox"/> Droopy									
Pulse and Time	HGN	Left Eye	Right Eye	Convergence		/30	One Leg Stand	/30								
1. _____ / _____ 2. _____ / _____ 3. _____ / _____	Lack of Smooth Pursuit Maximum Deviation Angle of Onset			 Right eye      Left eye			 L      R      L      R									
Modified Romberg Balance Approx.      Approx.	Walk and Turn Test			Cannot keep balance _____ Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Uses arm(s) _____ Actual steps taken _____			<table border="1" style="width: 100%;"> <tr> <td>L</td> <td>R</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </table> Sways while balancing Uses arm(s) to balance Hopping Puts foot down	L	R							
L	R															
Time Estimation _____ estimated as 30 seconds	Describe turn		Cannot do test (explain)		Type of footwear:											
<b>Finger to Nose</b> (Draw lines to spots touched)  			PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area:									
			Left Eye				Oral cavity:									
			Right Eye				Reaction to Light:									
			Rebound Dilation: <input type="checkbox"/> Yes <input type="checkbox"/> No													
			RIGHT ARM		LEFT ARM											
																
Blood Pressure /		Temperature °F														
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid																
Comments:																
What drugs or medications have you been using?			How much?		Time of use?		Where were the drugs used? (Location)									
Date / Time of arrest:		Time DRE was notified:	Evaluation start time:	Evaluation completion time:		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation										
Officer's Signature:			Reviewed/approved by / date:					DRE #								
Opinion of Evaluator:																
<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol		<input type="checkbox"/> CNS Stimulant		<input type="checkbox"/> Dissociative Anesthetic		<input type="checkbox"/> Inhalant								
<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input type="checkbox"/> Hallucinogen		<input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Cannabis								

# 18 DRE

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## PRACTICE: TEST INTERPRETATION

### LEARNING OBJECTIVES

- Analyze the results of a complete drug influence evaluation and identify the category or categories of drugs affecting the individual examined
- Articulate the basis for the drug category identification

### CONTENTS

A. Interpretation Demonstrations .....	3
B. Interpretation Practice .....	5

### LEARNING ACTIVITIES

- Instructor-Led Demonstrations
- Small-Group Practice
- Participant-Led Presentations



## Learning Objectives

- Analyze results of a complete drug influence evaluation and identify category(ies) of drugs affecting individual examined
- Articulate basis for drug category identification

DRE

18-2

**Slide 2.**



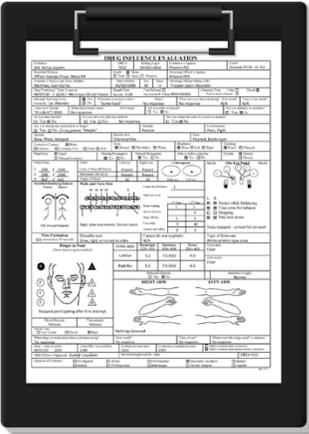
***Briefly review the objectives, content, and activities of this session.***

## A. Interpretation Demonstrations

Session 18 Practice - Test Interpretation

### Practice: Test Interpretation

Case No. 1:  
Martinez



DRE 18-3

**Slide 3.**

Case No.1: Martinez



**Direct participants to turn to Case No. 1: Martinez exemplar at the end of this session in their guide.**

**Preliminary Examination:** Review the results of the preliminary examination of subject Martinez.



**Ask participants: "What category or categories of drugs would produce preliminary examination results consistent with this exemplar?" Probe to draw out the basis for participants' responses.**

**Eye Examinations:** Review the results of the eye examination of subject Martinez.



**Ask participants to discuss the category or categories of drugs that would cause these examination results.**

**Psychophysical Tests:** Review the results of the psychophysical tests of subject Martinez.



**Ask participants to discuss the category or categories of drugs that would produce these psychophysical test results.**

*Vital Signs Examinations:* Review the results of the vital signs examinations of subject Martinez.



***Ask participants to discuss the category or categories of drugs that would cause these results.***

*Dark Room Examinations:* Review the results of the dark room examinations of subject Martinez.



***Ask participants to discuss the category or categories of drugs that would produce these results.***

*Other Evidence:* Review the results of the examinations for injection sites and muscle rigidity and of the final interview of subject Martinez.



***Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.***

*Opinion of the Evaluator*



***Point out the evidence indicates Subject Martinez is under the influence of a Dissociative Anesthetic.***

***Solicit participants' questions concerning this demonstration.***

---

## B. B. Interpretation Practice



### Instructions

1. Assign participants to work in teams of three to four members.
2. Each participant will review all four exemplars (Cases 2-5 Groves, Hatos, Jackson, and Stevens).
3. The groups are to discuss the evidence among themselves and reach a conclusion concerning the category of drugs, if any.
4. Give groups approximately 20 minutes to review the four exemplars and reach their conclusions.
5. Each group will present their conclusions to the class.

Session 18: Practice - Test Interpretation

**Practice: Test Interpretation**

Case No. 2:  
Groves



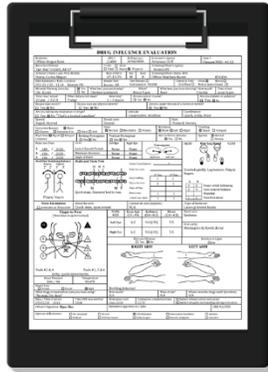
DRE 18-4

**Slide 4.**

Session 18: Practice - Test Interpretation

**Practice: Test Interpretation**

Case No. 3:  
Hatos



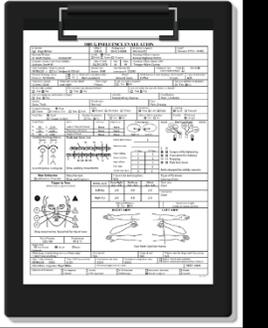
DRE 18-5

**Slide 5.**

Session 18: Practice - Test Interpretation

**Practice: Test Interpretation**

Case No. 4:  
Jackson



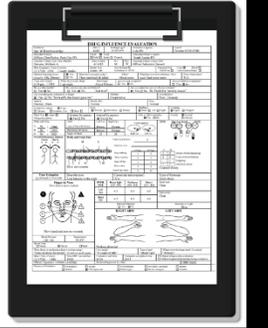
DRE 18-6

**Slide 6.**

Session 18: Practice - Test Interpretation

**Practice: Test Interpretation**

Case No. 5:  
Stevens



DRE 18-7

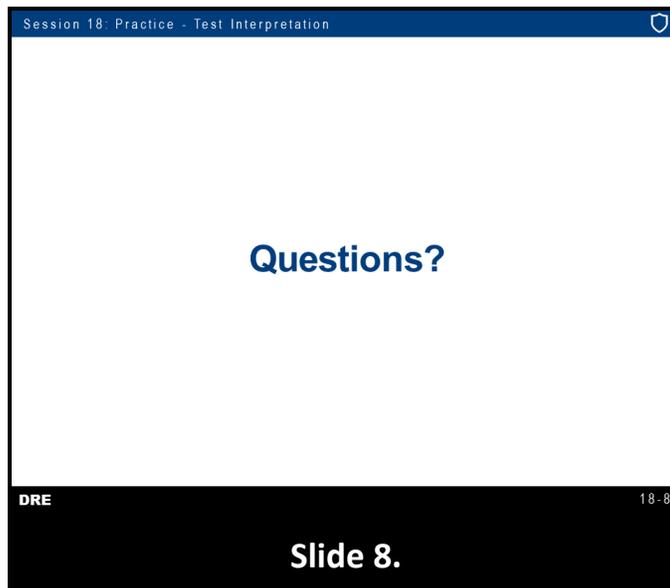
**Slide 7.**



### Discussion and Feedback of Results

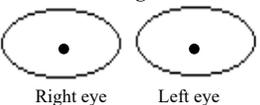
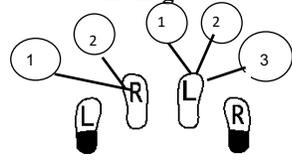
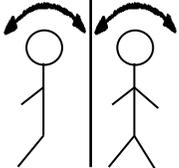
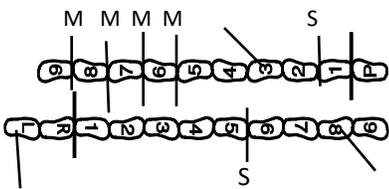
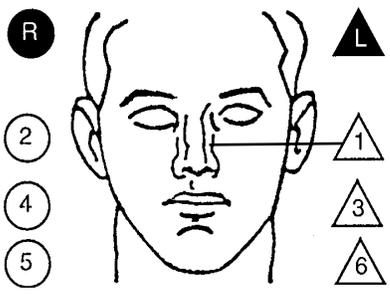
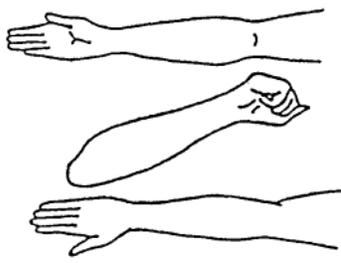
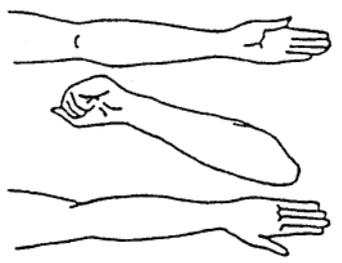
- Use slides 4, 5, 6, and 7 to review and discuss the four exemplars.
- Poll teams to determine their conclusions concerning the category of drugs present in each subject.
- Offer appropriate comments concerning the groups' performance.

<u>Subject</u>	<u>Categories</u>
Martinez	Dissociative Anesthetics
Groves	Narcotic Analgesic
Hatos	CNS Stimulant
Jackson	Narcotic Analgesic
Stevens	CNS Depressant



**Solicit participants' comments and questions concerning this practice session.**

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer George Chwe</b>		DRE # <b>22213</b>	Rolling Log # <b>22-015-0142</b>	Evaluator's Agency <b>Mesa PD</b>	Case# <b>(Session XVIII - #1 IG)</b>												
Recorder/Witness <b>Trooper Justin Maunder, Arizona DPS</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Gilbert PD</b>													
Arrestee's Name (Last, First, Middle) <b>Martinez, Juan Carlos</b>		Date of Birth <b>05/20/1988</b>	Sex <b>M</b>	Race <b>H</b>	Arresting Officer (Name, ID#) <b>Officer Joseph Rohr #23898</b>												
Date Examined / Time / Location <b>09/07/22 / 2210 / Mesa PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>Intox 8000 #30100</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>													
Miranda Warning Given Given by: <b>Officer Rohr</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>"Some food"</b>	When? <b>No response</b>	What have you been drinking? How much? <b>No response N/A</b>	Time of last drink? <b>N/A</b>												
Time now/ Actual <b>"It's dark"/ 2035</b>	When did you last sleep? <b>No response</b>	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No													
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No response</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No														
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>(Long pause) "Maybe"</b>			Attitude: <b>Passive</b>	Coordination: <b>Poor, Rigid</b>													
Speech: <b>Slow, Thick, Delayed</b>		Breath odor: <b>Chemical-like</b>		Face: <b>Flushed, Blank stare</b>													
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right													
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No													
Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy																	
Pulse/Time	HGN	Left Eye	Right Eye	Convergence	NA/30												
1. <u>104</u> / <u>2044</u>	Lack of Smooth Pursuit	Present	Present		<b>One Leg Stand</b> NA/30 												
2. <u>108</u> / <u>2058</u>	Maximum Deviation	Present	Present	Right eye      Left eye													
3. <u>Ref</u> / <u>N/A</u>	Angle of Onset	30	30														
<b>Modified Romberg Balance</b> Approx.      Approx.	<b>Walk and Turn Test</b>		Cannot keep balance <u>1</u>														
			Starts too soon														
Did not participate	Rigid, slow movements. Did not count.		Stops walking														
			Misses heel-toe														
			Steps off line														
			Uses arms														
			Actual steps taken														
			<table border="1" style="width: 100%; text-align: center;"> <tr> <td>1st Nine</td> <td>2nd Nine</td> </tr> <tr> <td>1</td> <td>1</td> </tr> <tr> <td></td> <td>4</td> </tr> <tr> <td>1</td> <td>1</td> </tr> <tr> <td>3</td> <td>All</td> </tr> <tr> <td>9</td> <td>9</td> </tr> </table>			1st Nine	2nd Nine	1	1		4	1	1	3	All	9	9
1st Nine	2nd Nine																
1	1																
	4																
1	1																
3	All																
9	9																
<b>Time Estimation</b> N/A estimated as 30 seconds	Describe turn <b>Slow, rigid, arms out to sides</b>		Cannot do test (explain) N/A		Type of footwear: <b>White athletic type shoe</b>												
<b>Finger to Nose</b> (Draw lines to spots touched)		<b>PUPIL SIZE</b>		Nasal area: Clear													
		<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>													
		<b>Left Eye</b>	5.5	7.5 (UV)	4.0												
		<b>Right Eye</b>	5.5	7.5 (UV)	4.0												
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Normal</b>													
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>													
																	
		Nothing observed															
Blood Pressure Refused	Temperature Refused		Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid														
What drugs or medications have you been using? <b>No response</b>		How much? <b>No response</b>		Time of use? <b>No response</b>	Where were the drugs used? (Location) <b>No response</b>												
Date / Time of arrest: <b>09/07/22 2105</b>	Time DRE was notified: <b>2140</b>	Evaluation start time: <b>2210</b>	Evaluation completion time: <b>2305</b>	<input type="checkbox"/> Subject refused entire evaluation <input checked="" type="checkbox"/> Subject stopped participating during evaluation													
DRE/Officer's Signature: <b>George Chwe</b>		Reviewed/approved by / date:			DRE#												
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis															

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Martinez, Juan Carlos**

1. **Location:** The evaluation was conducted in the DRE processing area at the Mesa Police Department. The area is well illuminated and has a smooth concrete floor with no obstructions. The darkroom examinations were conducted in an adjacent room.
2. **Witnesses:** The evaluation was witnessed and recorded by Trooper Justin Maunder of the Arizona DPS. The arresting officer, Officer Joseph Rohr of the Gilbert PD witnessed the psychophysical tests and the blood draw.
3. **Breath Alcohol Test:** The suspect's breath test was conducted by Officer Rohr prior to my arrival using the Intoxilyzer 8000. The result was 0.00% BAC.
4. **Notification and Interview of the Arresting Officer:** On 09/07/22 while working a Labor Day East Valley DUI Task Force, I was dispatched to Mesa PD to assist with a suspected drugged driver arrest. The arresting officer, Officer Joseph Rohr, was requesting DRE assistance with the arrest. Upon my arrival, I spoke with Officer Rohr who reported that the suspect's vehicle had crossed into oncoming traffic on South Gilbert Road and had nearly hit another vehicle. He also reported that the vehicle did not have its headlights on as required. Officer Rohr stated that the suspect was slow to respond to his emergency lights and travelled approximately four blocks before finally stopping. When pulling to the right side of the roadway, his vehicle nearly struck several parked cars. Officer Rohr stated that when contacted, the suspect had a dazed-like appearance and had difficulty producing his operator's license and other paperwork as requested. His speech was thick and slurred and he had a strong chemical-like odor on his breath. The suspect also had poor balance and was unsteady as he stood and walked. Officer Rohr administered SFSTs and observed six clues during the HGN test with an immediate angle of onset as well as the presence of Vertical Gaze Nystagmus (VGN). The suspect was unable to complete the Walk and Turn (WAT) and One-Leg Stand (OLS) tests due to his poor balance and coordination and the tests were stopped for the suspect's safety.
5. **Initial Observation of the Suspect:** I first observed the suspect in the Mesa DRE processing area. He was seated in a chair and appeared disoriented. He was slow to respond to questions and was looking straight ahead most of the time. His face was flushed, and he appeared to be sweating. When he stood, several times he used his chair to maintain his balance. His movements were rigid-like and stiff. I introduced myself and confirmed there was no language barrier with the suspect and requested that he participate in a drug evaluation. He appeared to be confused and it took nearly 60 seconds for him to respond, at which time he asked, "Am I under arrest?" After explaining the procedure to him, he agreed to do the evaluation. During my initial contact with the suspect, he would occasionally stop talking, sometimes failing to complete his sentences. When asked if he was taking any medications or drugs, he stated, "maybe" after a long pause and a blank-like stare at the wall.
6. **Medical Problems and Treatment:** No medical or physical problems were reported by the suspect and none were observed or detected during the drug evaluation.
7. **Psychophysical Indicators of Impairment:** The suspect did not complete all the psychophysical tests as requested. After explaining each test to him, he appeared confused and did not attempt some of the tests. For each test, I had to repeat my instructions several times. The following psychophysical tests were requested:

**Modified Romberg Balance:** After demonstrating this test, he looked up at the ceiling and appeared to be ignoring me. His stance was very rigid-like, and he did not attempt the test as requested. After several unsuccessful requests for him to attempt the test, the test was discontinued.

**Walk and Turn:** A line on the floor was used for this test. The suspect lost his balance to the right during the instructions. When directed to begin the test, he remained in the heel to toe starting position for about 30 seconds before taking his first step. His steps were rigid with stiff movements. He did not count out loud as directed and was reminded several times to count his steps out loud, which he failed to do. He stopped walking once and stepped off the line once on the first nine steps. His turn was slow, rigid-like and he extended his arms out to his sides when completing the turn. On the second nine steps he again did not count out loud and stopped walking after his first step. He appeared confused on what to do next and was advised to continue the test. He continued slowly and stepped off the line one time and missed touching heel to toe on steps 6, 7, 8 and 9. He used his arms to balance three times on the first nine steps and on all his steps on the second nine steps. His movements were slow and rigid throughout the test.

**One Leg Stand:** After explaining this test to the suspect three times, he attempted to stand on his left foot and extend his right foot off the floor as directed. He immediately put his foot down at his count of “1” and “2”. He swayed badly when trying to balance and used his arms for balance. The test was stopped at that point for safety reasons. When requested to stand on his right foot and extend his left foot off the floor, he again had difficulty, putting his foot down at his counts of “1”, “2” and “3”. He again swayed while balancing, used his arms for balance and the test was stopped for safety reasons when he put his foot down the 3<sup>rd</sup> time and nearly fell.

**Finger to Nose:** After explaining the test to the suspect two times, he agreed to attempt the test. On his first attempt of touching his left finger to the tip of his nose, he opened his eyes and touched the bridge of his nose using the pad of his left index finger. His arm movement was slow and rigid, and he kept his finger to his nose until he was told to remove it. At that time, he discontinued his participation in the test and the test was stopped.

8. **Clinical Indicators of Impairment:**

**Eye Signs:** HGN was present with all six clues observed with an approximate 30-degree angle of onset. VGN was also present. The suspect’s eyes showed a lack of convergence (LOC) with his eyes not moving from center and looking straight ahead. A second LOC test provided the same results. The suspect’s pupil sizes were estimated at 5.5 mm in Room Light, 7.5 mm in Near Total Darkness and 4.0 mm in Direct Light. Due to the dark coloring of the suspect’s pupils, a UV Light was used for the Near Total Darkness estimate after attempting the estimate with a normal penlight. Rebound dilation was not present and his reaction to light was normal.

**Vital Signs:** The suspect’s pulse was checked twice during the evaluation as he refused the 3<sup>rd</sup> check. Both (104 and 108 bpm) were above the DRE average range. He refused to have his blood pressure and temperature checked claiming he was not sick.

9. **Signs of Ingestion:** I did not inspect the suspect’s nasal and oral cavities because the suspect stopped participating in the evaluation when in the darkroom. The suspect had a chemical-like odor on his breath.

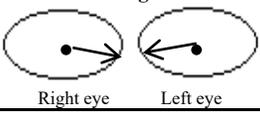
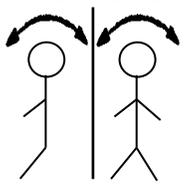
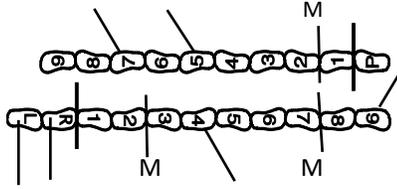
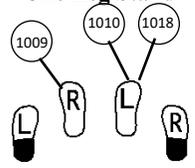
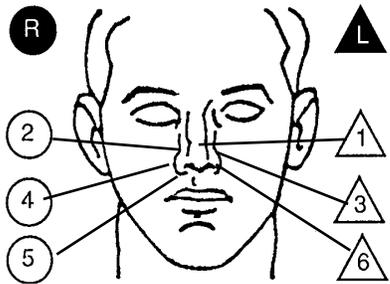
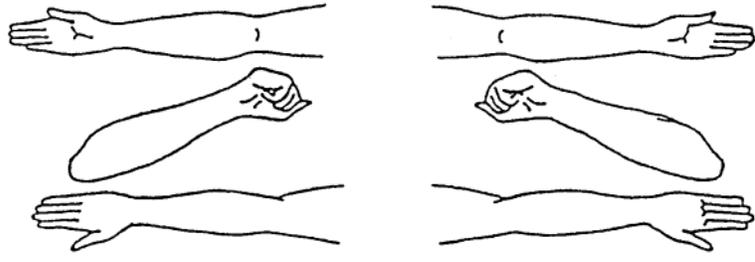
10. **Suspect’s Statements:** The suspect had been advised of his Miranda rights after being arrested and at that time agreed to answer questions. However, when asked about drug use, he gave no responses and would only stare straight ahead or look up at the ceiling.

11. **DRE’s Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a **Dissociative Anesthetic** and is unable to operate a vehicle safely.

12. **Toxicological Sample:** After completing the evaluation and as a certified State of Arizona phlebotomist, I collected a blood sample from the suspect. The sample was turned over to Officer Rohr and submitted as evidence pending delivery to the DPS Crime Laboratory for analysis.

13. **Miscellaneous:** Refer to Officer Rohr’s arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Nick Knoll</b>		DRE # 16667	Rolling Log # 22-019-0112	Evaluator's Agency Coeur d'Alene PD	Case# (Session XVIII - #2 IG)	
Recorder/Witness <b>Officer Justin Anderson, Post Falls PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Idaho State Police</b>		
Arrestee's Name (Last, First, Middle) <b>Groves, Robert R.</b>		Date of Birth 08/10/1987	Sex M	Race W	Arresting Officer (Name, ID#) <b>Tpr. Troy Tulleners #30467</b>	
Date Examined / Time / Location 09/15/22 / 1730 / ISP District 1 HQ		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 65882	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by: Tpr. Tulleners	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Bacon, Eggs &amp; Toast</b>	When? <b>About noon</b>	What have you been drinking? How much? <b>Just coffee 3 or 4 cups</b>	Time of last drink? <b>N/A</b>	
Time now/ Actual <b>About 8 pm / 1735</b>	When did you last sleep? <b>Last night</b>	How long? <b>4 or 5 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"A sore back"</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"I took a couple of pills for my back"</b>		Attitude: <b>Cooperative, Relaxed</b>		Coordination: <b>Poor, Unsteady</b>		
Speech: <b>Mumbling, Slow, Slurred at times</b>		Breath odor: <b>Normal</b>		Face: <b>Normal</b>		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy				
Pulse/Time 1. <u>58</u> / <u>1740</u> 2. <u>56</u> / <u>1756</u> 3. <u>56</u> / <u>1815</u>		HGN Lack of Smooth Pursuit: <b>None</b> Maximum Deviation: <b>None</b> Angle of Onset: <b>None</b>		Convergence  Right eye      Left eye		
Modified Romberg Balance Approx. 3" 3"      Approx. 3" 3" 		Walk and Turn Test  Slow, deliberate movements.		22/30 <b>One Leg Stand</b> 24/30  L      R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Counted slowly.		
Time Estimation <u>36</u> estimated as 30 seconds		Describe turn <b>Slow, but as instructed</b>		Cannot do test (explain) <b>N/A</b>		
Finger to Nose (Draw lines to spots touched)  Slow hand and arm movements. Searched for tip of nose. Moved head forward.		PUPIL SIZE			Nasal area: Clear	
		Room light (2.5 - 5.0)			Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye			2.0	3.0
Right Eye			2.0	3.0	2.0	
Blood Pressure <b>118 / 62</b>		Temperature <b>97.4 °F</b>		Reaction to Light: <b>Little or none visible</b>		
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM      LEFT ARM 				
What drugs or medications have you been using? <b>"A couple of pills for my back"</b>		How much? <b>"Just two"</b>		Time of use? <b>About 2 pm</b>	Where were the drugs used? (Location) <b>At home</b>	
Date / Time of arrest: <b>09/15/22 1640</b>		Time DRE was notified: <b>1705</b>		Evaluation start time: <b>1730</b>	Evaluation completion time: <b>1845</b>	
DRE/Officer's Signature: <b>Nick Knoll</b>		Reviewed/approved by / date:			DRE#	
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis						

## DRUG INFLUENCE EVALUATION NARRATIVE

**Subject: Groves, Robert R.**

- 1. Location:** The drug influence evaluation was conducted at the Idaho State Police District 1 Office in Coeur d' Alene, ID. The darkroom examinations were conducted inside a restroom at that location. The area where the evaluation was conducted has smooth tile flooring and adequate lighting for conducting an evaluation.
- 2. Witnesses:** Officer Justin Anderson from the Post Falls PD witnessed and recorded the entire evaluation.
- 3. Breath Alcohol Test:** A breath test was administered to Groves by Trooper Tulleners prior to my arrival. The test result was a 0.00 BAC.
- 4. Notification and Interview of the Arresting Officer:** On 9/15/22 at approximately 1705 hours, I was requested to contact Trooper Tulleners at the ISP District 1 Office regarding a drug influence evaluation. Upon my arrival, Trooper Tulleners advised that he had observed a vehicle operated by Groves drifting over the center line and traveling 10 mph under the posted speed limit on Highway 95. When Trooper Tulleners activated his emergency lights to stop the vehicle, it drifted over the painted fog line as if to stop but continued for approximately a half mile before finally stopping along the gravel shoulder and nearly going into a ditch. When contacted, Groves had slow, thick, slurred speech. He also noted that Groves had small, constricted pupils. He was also having difficulties with divided attention tasks which included retrieving his operator's license and vehicle registration simultaneously. When asked to exit his vehicle, Groves forgot to remove his seatbelt. Once he was able to exit his vehicle, he used it for support. Trooper Tulleners administered SFSTs and observed that Groves's balance and coordination were poor, and he was unable to complete the Walk and Turn and One Leg Stand tests as directed. Trooper Tulleners did not observe any HGN clues or VGN. During the contact with Groves, Trooper Tulleners described him as being slow and lethargic acting. While leaning against his vehicle, Groves would slowly close his eyes, and his head would lower, causing his chin to rest against his chest. No odor of an alcoholic beverage was detected on Groves's breath. When questioned about possible drug use, Groves was hesitant to answer. However, he did admit taking a couple of pills earlier in the day. Groves was arrested for DUI and transported to the ISP District Office for processing. After obtaining a breath test result of 0.00, Trooper Tulleners requested that I conduct the evaluation to free him to handle a crash investigation call.
- 5. Initial Observation of the Subject:** I first observed Groves in the interview room at the ISP District Office. He appeared sleepy, and his head was nodding forward. His speech was slow, thick, slurred and faint. When he stood up from the interview chair, he lost his balance and used the desk to steady himself. He appeared to have droopy eyelids and constricted pupils. I noted that he was wearing blue jeans, lace-up brown shoes, and a black long-sleeve shirt. I informed him why I had been called and asked if he would participate in a drug evaluation. He seemed confused and I explained the process to him several times. He finally indicated that he understood my request and would participate. When asked what time he thought it was, he stated "About 8:00 pm." (The actual time was 5:35 pm). He stated that he did sleep well the night before, getting about four or five hours of sleep. He had bacon, eggs and toast about noon and drank three or four cups of coffee throughout the day.
- 6. Medical Problems and Treatment:** Groves stated he had "twisted" his back about two weeks prior but had not sought medical treatment for it. When asked, he stated he felt he could perform the psychophysical tests. He further stated he had no other physical problems, and none were observed or mentioned during the evaluation. He stated he was not under the care of a doctor or dentist, was not epileptic or diabetic, and did not take insulin. He further stated he did not have any medical problems. Groves indicated he works in home remodeling and is generally in good health.
- 7. Psychophysical Indicators of Impairment:** Prior to requesting Groves to perform each of the psychophysical tests, I explained and demonstrated each one and ensured that his back would not affect his ability to attempt the tests. He acknowledged that he understood the tests and could do them. The following tests were administered to Groves:

**Modified Romberg Balance:** During this test, Groves had a slow time estimation, estimating the passage of 30 seconds in 36 seconds. He also had a forward and backward sway and a side-to-side sway of approximately three inches in each direction.

**Walk and Turn:** During this test, Groves lost his balance to the right twice while in the instructions stage. During the walking stage, he missed heel to toe two times during the first nine steps on steps 3 and 8 and one time during the second nine steps at step 2. He also stepped off the line two times in each direction at steps 4 and 9 on the first nine steps, and steps 5 and 7 on the second nine steps. He also used his arms to balance three times during the first nine steps and two times on the second nine steps. His turn was completed as instructed but done with slow and deliberate steps. His walking was noticeably slow during the entire test.

**One Leg Stand:** While standing on his left foot and extending his right foot off the floor, Groves swayed while balancing, used his arms for balance once, and put his foot down at count 1,009. When standing on his right foot and extending his left foot off the floor, he again swayed while balancing, used his arms for balance twice, and put his foot down at counts 1,010, and 1,018. He counted slowly during the 30 second timed periods, counting to 1,022 when standing on his left foot and to 1,024 when standing on his right foot.

**Finger to Nose:** During this test, Groves missed the tip of his nose with the tip of his index finger on all six attempts. His arm movements were slow, and he appeared to be searching for his nose on each attempt. He touched the middle of his nose on the first attempt and missed his nose completely on the other five attempts.

#### **8. Clinical Indicators of Impairment:**

**Eye Signs:** The eye examinations were conducted in the staff restroom which provided adequate darkness to conduct the examinations. Groves exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. Horizontal Gaze Nystagmus (HGN) clues and Vertical Gaze Nystagmus (VGN) were not observed. He was able to converge his eyes as instructed. During the pupil size examinations, his pupils were estimated at 2.0 mm in both eyes in Room Light, 3.0 mm in both eyes in Near Total Darkness and 2.0 mm in both eyes in Direct Light. All three estimations were below or at the low end of the DRE average ranges and constricted for the lighting conditions. Rebound dilation was not present and his reaction to light was little or none visible. He had to be reminded several times to keep his eyes open during the examinations.

**Vital Signs:** Groves' pulse was measured three times during the evaluation and were 58 beats per minute (bpm), 56 bpm and 56 bpm. The results were below the DRE average range for pulse rate. His blood pressure was measured at 118/62 millimeters of mercury (mmHg), which was also below the DRE average ranges for both the systolic and diastolic range. His body temperature was measured at 97.4°, which is below the DRE average range. His muscle tone was flaccid.

**9. Signs of Ingestion:** Groves' nasal area and oral cavity were both clear. There were no indicators of injection sites on his arms and hands, and there were no other observable signs of drug ingestion.

**10. Subject's Statements:** Trooper Tulleners advised Groves of his Miranda rights and he agreed to answer questions. I confirmed he understood his rights prior to asking him questions regarding drug use. When asked what drugs he had taken, he indicated he had taken a "couple pills" at about 2 pm. When asked what kind of pills he had taken, he was not sure and only described them as helping with his back and making him sleepy. When asked if they effected his driving, he stated he "felt fine" and was driving "okay".

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Groves is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.

**12. Toxicological Specimen:** As a certified phlebotomist, I collected a blood sample from Groves at approximately 1845 hours. The blood sample was submitted into evidence pending laboratory testing.

**13. Miscellaneous:** Refer to Trooper Tullener's DUI arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Rogan Ross</b>		DRE # <b>22458</b>	Rolling Log # <b>22-011-0058</b>	Evaluator's Agency <b>Arkansas DOT</b>	Case # <b>(Session XVIII - #3 IG)</b>																						
Recorder/Witness <b>Cpl. Ray Triplett, Arkansas SP</b>		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency <b>Benton PD</b>																							
Arrestee's Name (Last, First, Middle) <b>Hatos, Carlos Miguel</b>		Date of Birth <b>07-13-79</b>	Sex <b>M</b>	Race <b>H</b>	Arresting Officer (Name, ID#) <b>Officer Matthew Kuntz #31436</b>																						
Date Examined / Time / Location <b>07/22/22 2110 Benton PD</b>		Breath Test: Results: <b>.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>703558</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>																							
Miranda Warning Given by: <b>Ofc. Kuntz</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Chicken sandwich</b>	When? <b>About 5 pm</b>	What have you been drinking? How much? <b>Beer 1 bottle</b>	Time of last drink? <b>6 pm</b>																						
Time now/ Actual <b>10 pm / 2115</b>	When did you last sleep? <b>Today</b>	How long? <b>2 - 3 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																							
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																									
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "That's a loaded question"		Attitude: <b>Cooperative, Restless</b>		Coordination: <b>Quick, Jerky, Poor</b>																							
Speech: <b>Rapid, Slurred</b>		Breath odor: <b>Rancid</b>		Face: <b>Flushed, Sweaty</b>																							
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right																							
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																							
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy																									
Pulse and Time 1. <u>108</u> / <u>2122</u> 2. <u>106</u> / <u>2135</u> 3. <u>106</u> / <u>2150</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye <b>None</b>	Right Eye <b>None</b>	<b>Convergence</b>  Right eye      Left eye	<b>38/30</b> <b>One Leg Stand</b> <b>41/30</b>  Counted quickly. Leg tremors. Fidgety fingers.																						
<b>Modified Romberg Balance</b> Approx. 2" 2"      Approx. 3" 3"  Fidgety fingers	<b>Walk and Turn Test</b>  Quick steps. Slammed heel to toes.		Cannot keep balance _____ <b>1</b> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken _____	<table border="1" style="margin-left: auto; margin-right: auto;"><thead><tr><th>1<sup>st</sup> Nine</th><th>2<sup>nd</sup> Nine</th></tr></thead><tbody><tr><td>1</td><td>1</td></tr><tr><td>2</td><td>2</td></tr><tr><td> </td><td> </td></tr><tr><td>2</td><td>2</td></tr><tr><td>9</td><td>9</td></tr></tbody></table>	1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine	1	1	2	2			2	2	9	9	<table border="1" style="margin-left: auto; margin-right: auto;"><thead><tr><th>L</th><th>R</th></tr></thead><tbody><tr><td>3</td><td>2</td></tr><tr><td>2</td><td>3</td></tr><tr><td> </td><td> </td></tr><tr><td>1</td><td>1</td></tr></tbody></table> Sways while balancing Uses arms to balance Hopping Puts foot down	L	R	3	2	2	3			1	1
1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine																										
1	1																										
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3	2																										
2	3																										
1	1																										
<b>Time Estimation</b> <b>23</b> estimated as 30 seconds	Describe turn <b>Quick steps, spun around</b>	Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Lace-up brown boots</b>																							
<b>Finger to Nose</b> (Draw lines to spots touched)  Pads #2 & 4      Pads #1 & 6 <b>Jerky, quick movements.</b>	<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: <b>Redness</b>																						
	<b>Left Eye</b>	6.5	9.0 (UV)	5.5	Oral cavity: <b>Missing teeth/tooth decay</b>																						
	<b>Right Eye</b>	6.5	9.0 (UV)	5.5																							
	Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Reaction to Light: <b>Slow</b>																						
<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 																									
Blood Pressure <b>166 / 84</b>	Temperature <b>99.8°F</b>	<b>Nothing detected</b>																									
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid	What drugs or medications have you been using? <b>"No man, I'm clean"</b>		How much? <b>N/A</b>	Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>																						
Date / Time of arrest: <b>07/22/22 2015</b>	Time DRE was notified: <b>2050</b>	Evaluation start time: <b>2110</b>	Evaluation completion time: <b>2215</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																							
Officer's Signature: <i>Rogan Ross</i>		Reviewed/approved by / date:			DRE #																						
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input checked="" type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis																											

# DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Hatos, Carlos Miguel**

- 1. Location:** The drug influence evaluation was conducted at the Benton Police Department in the interview room. The darkroom examinations were conducted inside a storage room at that location. The floor surface was a smooth level tile floor.
- 2. Witnesses:** Cpl. Ray Triplett, a DRE instructor with the Arkansas State Police witnessed and recorded the evaluation. The arresting officer, Officer Matthew Kuntz from the Benton Police Department was present and witnessed the psychophysical and darkroom examinations.
- 3. Breath Alcohol Test:** A breath test had been requested and was administered to the suspect at 2105 hours by Officer Kuntz. The result was a 0.00 % BAC.
- 4. Notification and Interview of the Arresting Officer:** On 07/22/22, I was on-duty and was requested at 2050 hours to meet Officer Kuntz from the Benton PD who was requesting a DRE evaluation for a DUI suspected of being under the influence of drugs. Upon my arrival to BPD, Officer Kuntz advised he had investigated a single vehicle crash involving the suspect on N. East Street. It was determined the suspect had been driving at a high rate of speed and failed to negotiate a turn onto Military Road. His vehicle skidded across the roadway and struck a signpost and went into a ditch at that location. When contacted at the scene, the suspect appeared nervous, was very talkative, and unable to stand still. Officer Kuntz also noticed that the suspect's pupils appeared dilated for the lighting conditions. He suspected the driver may be impaired and after determining he was not injured, administered SFSTs. Neither HGN nor VGN were observed. However, the suspect showed signs of impairment on the Walk & Turn test and six clues were observed. He also had difficulty with the One Leg Stand test and two clues of impairment were observed. Officer Kuntz also conducted the Finger-to-Nose test and the suspect had quick jerky movements and was not able to touch the tip of his nose as directed. According to Officer Kuntz, the suspect was fidgety and talkative during the entire contact at the crash scene. The suspect was subsequently arrested for DUI and transported to the BPD. He consented to a breath test and after obtaining a 0.00 BAC, Officer Kuntz requested the assistance of a DRE.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the BPD Interview Room. I confirmed that Officer Kuntz had advised him of his Miranda warnings, and he acknowledged that he understood them. I requested the suspect to participate in a drug influence evaluation and he agreed. He was asked a few initial questions and preliminary observations were made. He stated the current time was 10:00 pm (2200 hours) and the actual time was 9:15 pm (2115 hours). He said he last slept earlier in the day for 2 or 3 hours. When asked if he had been drinking alcoholic beverages, he replied yes, explaining he drank one beer about 6:00 pm (1800 hours). His face appeared flushed and sweaty and he was very talkative. When standing, he repeatedly moved about and was frequently using his arms when talking. He was also making abrupt, quick hand movements, and was animated and restless. When he was not speaking, he appeared to be grinding his teeth. His pupils appeared dilated in the lighted room. He stated he was not blind in either eye and did not wear contacts or glasses. An initial check for HGN did not show any nystagmus clues. When asked if he was taking any medication or drugs he replied, "That's a loaded question" and then laughed. I noted he was wearing dirty jeans, a soiled white tee-shirt, and lace-up brown boots. His hands were soiled, and he looked very disheveled. I observed that his teeth were stained and several of his front teeth were missing.
- 6. Medical Problems and Treatment:** The suspect stated he is not presently under the care of a doctor or dentist. He stated he is not diabetic, is not epileptic and does not take insulin. He indicated that he had no physical problems or medical issues that would prevent him from doing the drug evaluation. Nothing was observed during the evaluation to indicate he needed immediate medical care.

7. **Psychophysical Indicators of Impairment:** During the evaluation, the suspect was asked to perform each one the psychophysical tests. Prior to requesting him to perform the tests, I explained and demonstrated each one and asked if he understood the instructions. After getting a verbal confirmation, the following tests were administered to the suspect per DRE protocol:

**Modified Romberg Balance:** The suspect was able to remain in the instructional position while the instructions were given. His time estimation was fast, estimating the passage of 30 seconds in 23 seconds. I asked how he had estimated the 30 seconds and he stated, "I just tried to count the numbers in my head." During the test, he swayed front to back approximately two inches in each direction, and side-to-side approximately three inches in each direction. He was also constantly moving his fingers on both hands during the test and shuffling from one foot to the other.

**Walk and Turn:** The suspect did attempt to perform this test and was able to complete it. For this test a line in the tile flooring was used. During the instructions stage of the test, he was not able to maintain his balance while listening to my instructions and broke the heel-to-toe stance one time. During the walking stage of the test, he missed touching heel to toe two times during the first nine steps at steps 3 and 8 and stopped while walking at step 9. When making the turn, he took quick steps and spun around in one quick movement. On the second nine steps he stopped while walking once at step 4 and missed touching heel to toe on steps 6 and 7. He slammed his heels to his toes when walking. He also raised his arms to balance twice on the first nine steps and twice on the second nine steps. He was given the opportunity to remove his boots for the test and he elected to keep them on.

**One Leg Stand:** Per DRE protocol, this test was conducted in two parts by having the suspect maintain his balance while standing on his left foot and then the right foot. While standing on his left foot and raising his right foot off the floor, he swayed while balancing three times, used his arms to balance twice, and put his foot down at count 1,014. He counted quickly, counting to 1,038 when 30 seconds had elapsed.

During the second part of the test, standing on his right foot and extending his left foot off the floor, he swayed while balancing two times, used his arms to balance three times, and put his foot down at count 1,017. He again counted quickly, counting to 1,041 when 30 seconds had elapsed. During both attempts, leg tremors were observed. When his arms were at this sides, he constantly moved his fingers.

**Finger to Nose:** The suspect was able to stand in the instructional stance while the instructions were given. The suspect did attempt to perform the test and was able to complete it. However, his finger to nose touches were not completed as instructed. He missed touching the tip of his nose with the tip of his index finger five out of six attempts (Attempts 1, 2, 4, 5, and 6). On attempt 1, he touched his upper lip. On attempt 2, he touched the right side of his nostril. On attempt 3, he did touch the tip of his nose. On attempt 4, he touched his upper lip. On attempt 5, he touched his upper lip, and on attempt 6, he touched the side of his nose. He used the pad of his fingers instead of the tip of his finger as instructed on attempts 1, 2, 4, and 6. His hand and arm movements were quick and jerky. He also talked throughout the test.

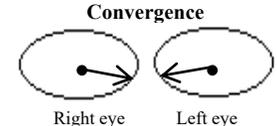
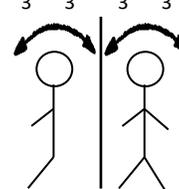
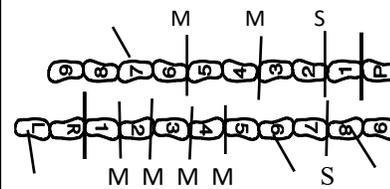
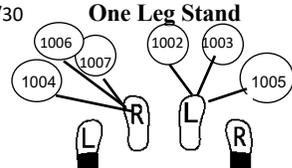
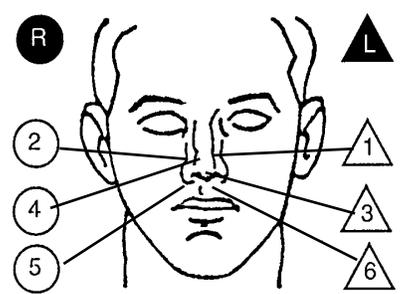
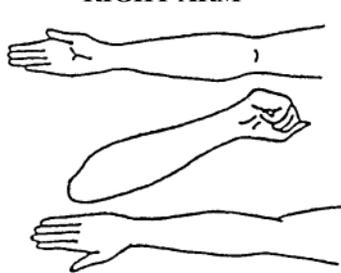
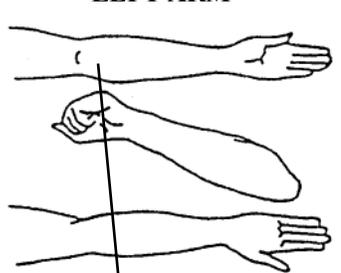
8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect's eyes were examined during the evaluation and pupil size was estimated in three different lighting conditions. He did not exhibit HGN or VGN. He was able to converge his eyes as directed. During the pupil size examinations, his pupils were estimated in Room Light at 6.5 mm in each eye, in Near Total Darkness at 9.0 mm in each eye, and in Direct Light at 5.5 mm in each eye. Because of his dark colored eyes, an ultraviolet (UV) light was used for the Near Total Darkness estimate after attempting the estimation with a normal penlight. The pupil size estimations in all three lighting levels were above the DRE average ranges. Rebound dilation was not present and he had a slow reaction to light.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation and were 108, 106 and 106 beats per minute (BPM). All three results were above the DRE average range for pulse rate. His blood pressure was measured with a systolic pressure of 166 mm/Hg and a diastolic pressure of 84 mm/Hg, which were above the DRE average ranges. His body temperature was measured at 99.8° Fahrenheit, which is above the DRE average range. His muscle tone was rigid. During the vital sign examinations, he remained fidgety and was continually wiggling his legs and feet.

9. **Signs of Ingestion:** The suspect's nasal area showed redness in both nostrils. He was missing several front teeth as well as some other teeth. Tooth decay was also present. There were no indicators of injection sites on either arm.
10. **Suspect's Statements:** Officer Kuntz had advised the suspect of his Miranda rights after his arrest. I also advised him of his rights, and he agreed to answer my questions. When asked what drugs he had used, he stated, "No man, I'm clean." He then went into a lengthy discussion on how he had stopped using drugs. When asked what drugs he used when he was using them, he stated, "I used them all" then laughed.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a **CNS Stimulant** and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** After completing the evaluation, a urine sample was requested and was collected from the suspect at 2210 hours by Officer Kuntz. The sample was submitted into evidence for laboratory testing.
13. **Miscellaneous:** Refer to Officer Kuntz's report for additional details of the arrest.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Virgil Miller</b>		DRE # <b>10828</b>	Rolling Log # <b>22-015-0098</b>	Evaluator's Agency <b>Wichita PD</b>	Case# <b>(Session XVIII - #4 IG)</b>
Recorder/Witness <b>Lt. Matt Payne Kansas HP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Kansas Highway Patrol</b>	
Arrestee's Name (Last, First, Middle) <b>Jackson, Scott M.</b>		Date of Birth <b>06/15/1978</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Trooper Mark Crump</b>
Date Examined / Time / Location <b>07/18/22 / 2215 / Sedgwick CO Jail</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>13240</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Tpr Crump</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Ham sandwich</b>	When? <b>Around noon</b>	What have you been drinking? How much? <b>Coffee 2 cups</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>10 pm / 2218</b>	When did you last sleep? <b>Last night</b>	How long? <b>7 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: <b>Cooperative, Passive</b>	Coordination: <b>Poor, Unstable</b>	
Speech: <b>Slow, Thick</b>		Breath odor: <b>Normal</b>		Face: <b>Pale, Droopy</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy			
Pulse/Time 1. <u>54</u> / <u>2231</u> 2. <u>54</u> / <u>2247</u> 3. <u>52</u> / <u>2309</u>		HGN Lack of Smooth Pursuit <b>None</b>	Left Eye <b>None</b>	Right Eye <b>None</b>	Convergence  Right eye    Left eye
Modified Romberg Balance Approx.    Approx. 3" 3"    3" 3"  Scratching face. Licking lips		Walk and Turn Test  Slow, wobbly movements		Cannot keep balance <b>1</b>	NA/30 <b>One Leg Stand</b> NA/30 
Starts too soon		Stops walking		1st Nine    2nd Nine	
Misses heel-toe		Steps off line		Uses arms	
Actual steps taken				9    9	
Time Estimation <b>39</b> estimated as 30 seconds		Describe turn <b>Slow, walking turn</b>		Cannot do test (explain) <b>N/A</b>	
Type of footwear: <b>Lace-up shoes</b>		PUPIL SIZE		Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)
Finger to Nose (Draw lines to spots touched)  Slow movements. Searched for tip of nose		Left Eye		2.0	3.0
		Right Eye		2.0	3.0
Blood Pressure <b>122 / 68</b>		Temperature <b>97.2 °F</b>		Direct (2.0 - 4.5)	
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Little or none visible</b>	
RIGHT ARM 		LEFT ARM 		Two fresh injection marks	
Comments: What drugs or medications have you been using? <b>"I didn't use anything."</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>
Date / Time of arrest: <b>07/18/22 2015</b>	Time DRE was notified: <b>2110</b>	Evaluation start time: <b>2215</b>	Evaluation completion time: <b>2310</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <i>Virgil Miller</i>			Reviewed/approved by / date:		DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Jackson, Scott M.**

1. **Location:** The drug influence evaluation was conducted at the Sedgwick County Jail in Wichita, KS. The darkroom examinations were conducted inside a darkened interview room at that location. The evaluation floor surface was a level tile floor with no obstructions.
2. **Witnesses:** Lt. Matthew Payne of the Kansas Highway Patrol witnessed and recorded the evaluation.
3. **Breath Alcohol Test:** The suspect provided a breath test to Trooper Crump prior to my arrival to the jail. According to Trooper Crump, the test resulted in a .00 BAC.
4. **Notification and Interview of the Arresting Officer:** I was on-duty and requested to contact Trooper Crump of the Kansas HP at the Sedgwick County Jail regarding a DRE drug evaluation. After contacting Trooper Crump, it was determined he had observed the suspect's vehicle driving under the posted speed on Highway 36 and drifting in and out of the traffic lane. When he attempted to stop the vehicle, it continued for over a half mile before finally stopping. When Trooper Crump contacted the driver, his speech was thick and slow, and he appeared disoriented. Trooper Crump administered SFSTs at roadside and the suspect displayed poor coordination and was unable to complete the SFSTs as directed. Trooper Crump reportedly observed four clues on the Walk and Turn test and four clues on the One Leg Stand test. The driver also had difficulty touching the tip of his nose as directed on the Finger-to-Nose test. Trooper Crump did not observe HGN or VGN, but did observe that the driver had small, constricted pupils at roadside even in the darkness. The driver was subsequently arrested for DUI and transported to the Sedgwick County Jail for processing. When the breath test resulted in a .00 BAC, Trooper Crump requested a DRE for further investigation. According to Trooper Crump, the suspect denied any drug usage.
5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the jail. His face appeared pale and droopy. He appeared to be cooperative and not overly concerned about his situation. When he spoke, his speech was slow, thick, and slurred. When walking to the evaluation area, his coordination was poor, and he was unsteady on his feet. He also staggered several times and used the wall to steady himself. I noticed that he had dry lips with a white coating at the corners of his mouth. He was wearing blue jeans, a blue tank top and white lace-up athletic shoes.
6. **Medical Problems and Treatment:** The suspect stated he had no physical problems and was not experiencing any medical issues. None were observed or mentioned during the evaluation.
7. **Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, each one was demonstrated, and instructions given on how to complete the test. After each demonstration, he indicated he understood the test. Per DRE protocol, I administered the following tests:

**Modified Romberg Balance:** During this test, the suspect had a slow time estimation, estimating the passage of 30 seconds in 39 seconds. Using a line in the brick wall behind and to the side of the suspect, I estimated he had an approximate 3-inch front to back and side to side sway. While completing the test, he was licking his lips and several times scratched his face and neck. At times, his head slumped forward.

**Walk and Turn:** For this test, a line in the tile floor was used. The suspect lost his balance to the right once while in the instructions stage. During the walking stage he stopped while walking one time in each direction (step 7 on first nine steps and step 1 on the second nine steps). He also missed touching heel to toe four times during the first nine steps (steps 2, 3, 4, and 5) and two times during

the second nine steps (steps 4 and 6). He stepped off the line two times during the first nine steps at steps 6 and 8, and one time during the second nine steps at step 7. He also used his arms to balance two times on the first nine steps and three times during the second nine steps. He made an improper turn by using both feet in a slow deliberate walking turn. He was asked if his shoes gave him any difficulty completing the test and he stated, "No, these are my normal shoes."

**One Leg Stand:** During the first part of this test, standing on his left foot and extending his right foot off the floor, he swayed while balancing, used his arms for balance, and put his foot down at counts 1,004, 1,006, and 1,007. He was in danger of falling and the test was stopped for safety concerns. During the second part of the test, standing on his right foot and extending his left foot off the floor, he again swayed while balancing, used his arms for balance, and put his foot down at counts 1,002, 1,003, and 1,005. This portion of the test was also stopped for safety concerns.

**Finger to Nose:** During this test, the suspect missed the tip of his nose with tip of his index finger as instructed on five of the six attempts (#1, #2, #4, #5, #6). His hand and arm movements were slow, and he appeared to search for the tip of his nose on each attempt. He also brought his head forward for each attempt.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** Neither HGN nor VGN were present. He was able to converge his eyes as instructed. Rebound dilation was not observed. His pupils had little or none visible reaction to light. During the pupil size examinations, his pupils were estimated at 2.0 mm in each eye in Room Light (RL), 3.0 mm in each eye in Near Total Darkness (NTD), and 2.0 mm in each eye in Direct Light (DL). The RL and NTD estimations were below the DRE average ranges. The DL estimations were at the lower end of the DRE average range for the lighting condition.

**Vital Signs:** The suspect's pulse rates were checked three times during the evaluation. The results were 54, 54 and 52 beats per minute (bpm). All three were below the DRE average range for pulse rate. His blood pressure was measured at 122/68, which was also below the DRE average ranges. His body temperature was measured using an oral thermometer and was 97.2°, which was below the DRE average range. The suspect was asked about his low vital signs and if he was aware of why they would be low, and he had no explanation.

**9. Signs of Ingestion:** The suspect's nasal area and oral cavity were clear. Two fresh injection marks were located on his left inner forearm. When asked about the marks, he responded "I didn't use anything." I examined the injection marks with my ski-light and both had a red, blood covering. He also had some bruising near the fresh marks.

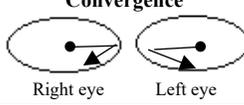
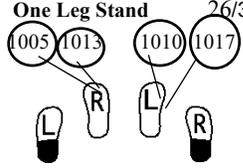
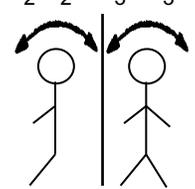
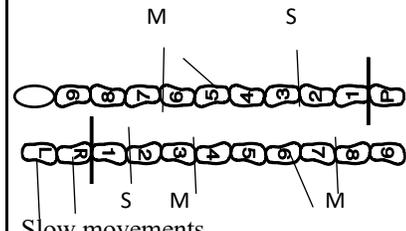
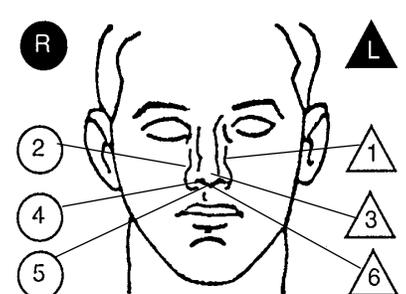
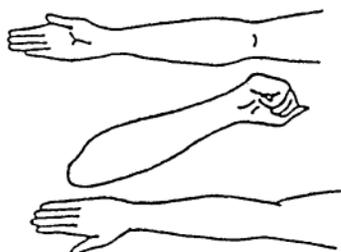
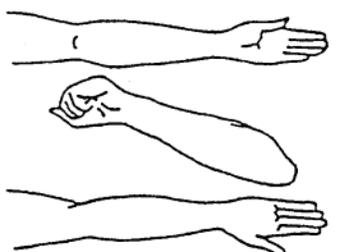
**10. Suspect's Statements:** Trooper Crump advised the suspect of his Miranda rights and he agreed to answer questions. I readvised him of his rights prior to my questions about drug use. When asked what drugs he had taken, he again denied any usage stating, "I didn't use anything. Are we about done?"

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a Narcotic Analgesic and is unable to operate a vehicle safely.

**12. Toxicological Specimen:** A blood sample was collected from the suspect at 2350 hours by a certified phlebotomist and witnessed by Trooper Crump. The blood sample was submitted into evidence by Trooper Crump for laboratory testing.

**13. Miscellaneous:** After completing my evaluation, Trooper Crump advised that the suspect had an outstanding warrant for his arrest for Possession of a Dangerous Drug. Refer to Trooper Crump's report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. William Loveridge</b>		DRE # 8652	Rolling Log # 22-015-0044	Evaluator's Agency <b>Lehi PD</b>		Case # (Session XVIII-#5 IG)																			
Recorder/Witness <b>Officer Clint Parker, Park City PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>South Jordan PD</b>																					
Arrestee's Name (Last, First, Middle) <b>Stevens, William A.</b>		Date of Birth 4/14/85	Sex M	Race W	Arresting Officer (Name, ID#) <b>Officer Sebastian Dessert</b>																				
Date Examined / Time / Location 11/17/22 1930 County Intake		Breath Test: Results: .00		Test Refused <input type="checkbox"/> Instrument #: 47533		Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>																			
Miranda Warning Given Given by: Ofc. Dessert	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Ham sandwich &amp; salad</b>		When? <b>About noon</b>	What have you been drinking? How much? <b>Just some water</b>	Time of last drink? <b>N/A</b>																			
Time now/ Actual <b>6:30 pm / 1935</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 8 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																				
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"Just tired"</b>		Are you under the care of a doctor or dentist? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Dr. Frank for "anxiety issues"</b>																					
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Some pills the doctor gave me."</b>			Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Unsteady</b>																				
Speech: <b>Slurred, Thick</b>		Breath odor: <b>Normal</b>		Face: <b>Normal</b>																					
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/>		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal																			
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy																			
Pulse and Time 1. <u>52</u> / <u>1944</u> 2. <u>56</u> / <u>1955</u> 3. <u>56</u> / <u>2020</u>		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye Present Present 35	Right Eye Present Present 35	Convergence  Right eye      Left eye		24/30 <b>One Leg Stand</b> 26/30 																		
<b>Modified Romberg Balance</b> Approx. 2" 2"      Approx. 3" 3" 		<b>Walk and Turn Test</b> 		Cannot keep balance <u>2</u> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken _____		1st Nine      2nd Nine <table border="1" style="display: inline-table;"><tr><td>1</td><td>1</td></tr><tr><td>2</td><td>1</td></tr><tr><td>1</td><td>1</td></tr><tr><td>3</td><td>2</td></tr><tr><td>9</td><td>10</td></tr></table>	1	1	2	1	1	1	3	2	9	10	L      R <table border="1" style="display: inline-table;"><tr><td>3</td><td>2</td></tr><tr><td>2</td><td>3</td></tr><tr><td> </td><td>1</td></tr><tr><td>2</td><td>2</td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down Counted slowly	3	2	2	3		1	2	2
1	1																								
2	1																								
1	1																								
3	2																								
9	10																								
3	2																								
2	3																								
	1																								
2	2																								
<b>Time Estimation</b> 36 estimated as 30 seconds		Describe turn <b>Lost balance to the right</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Dress shoes</b>																			
<b>Finger to Nose</b> (Draw lines to spots touched) 		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: <b>Clear</b>																			
		Left Eye	4.5	6.5	4.0	Oral cavity: <b>Clear</b>																			
		Right Eye	4.5	6.5	4.0																				
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Slow</b>																					
<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 																							
Blood Pressure 120 / 66	Temperature 99.3°F	<b>Nothing detected</b>																							
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid																									
What drugs or medications have you been using? <b>"Some medicine for anxiety" (Could not recall name)</b>		How much? <b>"A couple of pills"</b>		Time of use? <b>"About 5 pm"</b>	Where were the drugs used? (Location) <b>"At home"</b>																				
Date / Time of arrest: 11/17/22 1826	Time DRE was notified: 1900	Evaluation start time: 1930	Evaluation completion time: 2035	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																					
Officer's Signature: <i>William Loveridge</i>		Reviewed/approved by / date:				DRE #																			
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant																			
		<input type="checkbox"/> Medical	<input checked="" type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																			

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Stevens, William A.**

1. **Location:** The drug influence evaluation was conducted at the Salt Lake County Intake Center, Salt Lake City, UT. The darkroom examinations were conducted inside a restroom at that location. The floor surface where the evaluation was conducted was a level concrete floor and free of obstructions.
2. **Witnesses:** The evaluation was witnessed and recorded by Officer Clint Parker from the Park City Police Department.
3. **Breath Alcohol Test:** A breath test was administered to the suspect by the arresting officer upon my arrival and the result was a .000 BAC.
4. **Notification and Interview of the Arresting Officer:** I was on duty and was asked to contact Officer Dessert of the South Jordan Police Department regarding a DRE evaluation. Upon my arrival, Officer Dessert advised he had observed the suspect's vehicle stopped partially in the travel lane on the South Jordan Parkway. According to Officer Dessert, the suspect was sitting in the driver's seat and had a drunk-like appearance. His speech was thick, slurred, and slow. After determining the suspect had driven his vehicle to its present location, Officer Dessert had him exit the vehicle to evaluate his sobriety. Officer Dessert requested the suspect to perform SFSTs, and he complied. Officer Dessert observed six clues of HGN, and VGN was also present. Officer Dessert was unable to detect an odor of an alcoholic beverage on the suspect's breath. The suspect had difficulty performing other SFSTs as directed. Officer Dessert observed four clues on the Walk and Turn (W&T) test and three clues on the One Leg Stand (OLS) test. Officer Dessert also had the suspect perform the Finger to Nose test, and he was unable to touch his nose as directed. Officer Dessert placed the suspect under arrest for DUI and transported him to the Salt Lake County Intake Center for processing.
5. **Initial Observation of the Suspect:** I first observed the suspect in the interview room at the Intake Center. He appeared cooperative, and when he spoke, he had slow, slurred, thick speech. His coordination was poor, and he was unsteady on his feet having to use the interview chair to steady himself and maintain his balance. He was wearing black chino pants, a long-sleeve gray dress shirt, and black slip-on dress shoes. I confirmed that he had been advised of his Miranda warnings and he agreed to answer my questions and complete the drug evaluation.
6. **Medical Problems and Treatment:** When asked about medical issues or treatment, the suspect stated he was seeing Doctor Frank for some anxiety-related issues. Other than the anxiety issues mentioned by the suspect, no other conditions were mentioned or observed during the evaluation.
7. **Psychophysical Indicators of Impairment:** Prior to asking the suspect to perform the psychophysical tests, each one was explained and demonstrated. After each demonstration, the suspect was asked if he understood the test. The following tests were administered to the suspect:

**Modified Romberg Balance:** During this test, the suspect had a slow time estimation, estimating the passage of 30 seconds when 36 seconds had actually elapsed. When asked how he had estimated the passage of 30 seconds, he stated, "I just counted in my head." The suspect exhibited an approximate two-inch front to back and three-inch side to side sway.

**Walk and Turn:** For this test, a painted line on the floor was used. The suspect lost his balance to the right twice while in the instructions stage. During the walking stage on the first nine steps, he stopped while walking after step one, missed touching heel to toe at step 4, stepped off the line at step 6 and missed heel to toe at step 8. He also raised his arms for balance three times. When attempting the

turn, he lost his balance to the right and had to regain his position to start the second nine steps. When attempting the second nine steps, he stopped while walking at step 2, stepped off the line at step 5, missed heel to toe at step 7. He also raised his arms for balance two times and took one additional step at the end. He had to be reminded three times to look at his feet as he walked.

**One Leg Stand:** This test was conducted twice, once standing on his left foot, and once standing on his right. When standing on his left foot and raising his right foot off the floor, the suspect swayed while balancing three times, used his arms to balance twice and put his foot down at 1,005 and 1,013. While standing on his right foot and raising his left foot off the floor, he swayed while balancing twice, used his arms to balance three times, hopped once, and put his foot down at 1,010, and 1,017. His counting was slow, reaching 1,024 on the left foot and 1,026 on the right.

**Finger to Nose:** For this test, the suspect missed the tip of his nose with the tip of his index finger as directed on attempts 1, 2 and 3. He had slow hand and arm movements.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited six clues of Horizontal Gaze Nystagmus (HGN) with an angle of onset of approximately 35 degrees. Vertical Gaze Nystagmus (VGN) was also present. The suspect was not able to converge his eyes as directed with both eyes moving inward then moving down and out. This test was conducted twice with the same results. During the pupil size examinations, his pupils were estimated at 4.5 mm in both eyes in Room Light, 6.5 mm in both eyes in Near Total Darkness and 4.0 mm in both eyes in Direct Light. All three are within the DRE average ranges. Rebound dilation was not present. The suspect had a slow reaction to light.

**Vital Signs:** The suspect's pulse was measured three times during the evaluation. Each of the results were below the DRE average range measured at 52 bpm, 56 bpm and 56 bpm. His blood pressure was measured at 120/66 mmHg, which was below the DRE average range for the diastolic reading, and at the lower end of the DRE average range for the systolic reading. His body temperature was measured at 99.3°, which was within the DRE average range. His muscle tone was flaccid.

**9. Signs of Ingestion:** The suspect's nasal area and oral cavity were clear. There were no indicators of injection sites on his arms and hands.

**10. Suspect's Statements:** Officer Dessert had advised the suspect of his Miranda warnings when he was arrested, and he agreed to answer questions. When asked what drugs he had used, he stated he had taken "some medicine for anxiety," but insisted he was legal to drive because he had a prescription from his doctor. He could not remember the name of the medication and did not have the prescription with him when arrested. He indicated he had been using the prescription for about a week and was taking 3 or 4 pills per day. However, when asked about recent use of the medication, he stated he took "just a couple" pills at home around 5 pm.

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Stevens was under the influence of a **CNS Depressant** and was unable to operate a vehicle safely.

**12. Toxicological Specimen:** A urine sample was collected from the suspect by Officer Dessert. The sample was submitted into evidence pending laboratory testing.

**13. Miscellaneous:** Refer to Officer Dessert's DUI arrest report for additional details.

# 19 DRE

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## INHALANTS

### LEARNING OBJECTIVES

- Describe a brief overview of the Inhalant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category
- Describe the symptoms, observable signs and other effects associated with this category
- Describe the typical time parameters, i.e., onset and duration of effects associated with this category
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category

### CONTENTS

A. Overview of the Category.....	2
B. Possible Effects of Inhalants .....	7
C. Onset and Duration of Effects .....	8
D. Overdose Signs and Symptoms .....	9
E. Expected Results of the Evaluation.....	10
F. Review of the DEC Program Exemplars .....	13

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Review of the DEC Program Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations

Session 19: Inhalants

## Learning Objectives

- Describe a brief overview of the Inhalant category of drugs
- Identify common drug names and terms
- Identify common methods of administration
- Describe symptoms, observable signs, and other effects
- Describe typical time parameters
- List indicators likely to emerge during a drug influence evaluation

DRE 19-2

**Slide 2.**



*Briefly review the objectives, content, and activities of this session.*

### A. Overview of the Category

Session 19: Inhalants

## Overview of Inhalants



DRE 19-3

**Slide 3.**

Inhalants are breathable chemicals that produce mind-altering results. Inhalants vary widely in terms of the chemical involved and the specific effects produced. Depending on the nature of the particular Inhalant, the effects produced may be similar to those of Central Nervous System (CNS) Stimulants, CNS Depressants, or Hallucinogens. There are three subcategories of Inhalants: Volatile Solvents; Aerosols; and, Anesthetic Gases.



***If possible, display slides of these various drugs.***

The Volatile Solvents include a large number of readily available products, none of which are intended by their manufacturers to be used as impairing substances. “Volatile” means they evaporate easily to produce fumes.



***Ask participants to name a Volatile Solvent often abused as a drug.***

One abused Volatile Solvent is plastic cement, or “model airplane glue.” Plastic cement includes the following volatile chemicals: Phenylmethane (Toluene); Acetone; Naphtha; Aliphatic Acetates (straight-chained hydrocarbons); Hexane; Cyclohexane; and Benzene.

Other frequently-abused Volatile Solvents include: fingernail polish remover (contains Acetone); household cements and glues (rubber cements contain Benzene); lighter fluid (contains Naphtha); various glues (model airplane glue); gasoline; Kerosene; dry-cleaning fluids; paints (particularly oil or solvent based); paint thinners; spray paints; liquid correction fluid; and, engine degreasers.



## Abused Aerosols



DRE

19-5

**Slide 5.**

Aerosols are chemicals discharged from a pressurized container by the propellant force of a compressed gas. Difluoroethane (DFE) is often used for this purpose. Commonly-abused Aerosols include hair sprays, deodorants, insecticides, spray keyboard cleaner, and vegetable frying pan lubricants.



***If available, display slides of typically abused Aerosols.***

All of these abused Aerosols contain various hydrocarbon gases that produce drug effects.

---



The third subcategory is Anesthetic Gases. Anesthetic Gases are drugs that abolish pain. They are used medically during surgical procedures such as childbirth, dental surgery, etc. Adults may be more frequent users of the Anesthetic Gases subcategory than of the Aerosols or Volatile Solvents.

Anesthetic Gases that sometimes are abused as Inhalants are Ether and Nitrous Oxide. Many of these substances have a long history of medical and illicit use, e.g., Ether abuse dates to the 1790's in England. Nitrous Oxide has been used since 1845. It is still used in certain dental procedures. Nitrous Oxide is a propellant for whipped cream. Drug paraphernalia stores often sell Nitrous Oxide in cartridges identical to carbon dioxide containers. They are termed by users "whippets" and are allegedly sold to purchasers as devices to propel whipped cream.

Other common Inhalants in this subcategory are Amyl Nitrite, Butyl Nitrite, and Isobutyl Nitrite. Nitrites are vasodilating substances, formally used medically to relieve heart-related chest pain. They have since been replaced by other medications. Isobutyl Nitrite and Butyl Nitrite have essentially identical effects of Amyl Nitrite. Users claim these substances enhance sexual excitement. This may occur from dilation of genital arteries (vasodilation) and relaxation of other smooth muscles. Inhalation of these produces a distinct "rush" similar to that of the related substance, Nitrous Oxide.

Anesthetic gases can dilate the blood vessels around the heart thus causing a lowered blood pressure.

Common slang and brand names for the Nitrites are: "Rush" and "Locker Room." Examples: Amyl Nitrite and Butyl Nitrite are sold in small glass bottles or bulbs. The user simply opens the bottle and breathes in the fumes. They have been marketed in drug paraphernalia stores as room deodorizers.



## Methods of Administration



DRE

19-7

### Slide 7.

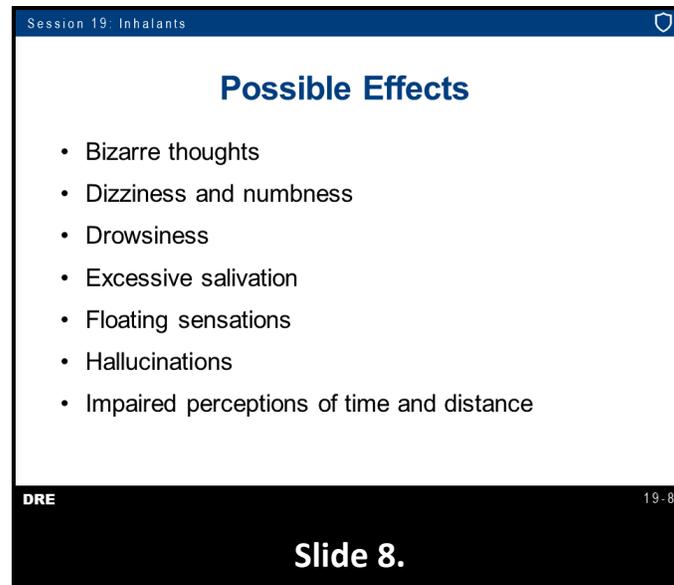
Inhalants obviously are administered by breathing or inhaling the fumes. Some are administered directly from the source. Some are soaked into rags, handkerchiefs, or tissue paper for repeated inhalation. Some are placed in paper or plastic bags which the user places over the face or head. These may be placed in twist lock beverage containers. Some are used by breathing the fumes or vapors from balloons. Some common street names Inhalant users use are huffing, hacking, ballooning and glading.



***Stress that participants should be familiar with all of the drug names in this category.***

***Solicit participants' comments or questions concerning this overview of Inhalants.***

## B. Possible Effects of Inhalants



Session 19: Inhalants

### Possible Effects

- Bizarre thoughts
- Dizziness and numbness
- Drowsiness
- Excessive salivation
- Floating sensations
- Hallucinations
- Impaired perceptions of time and distance

DRE 19-8

**Slide 8.**

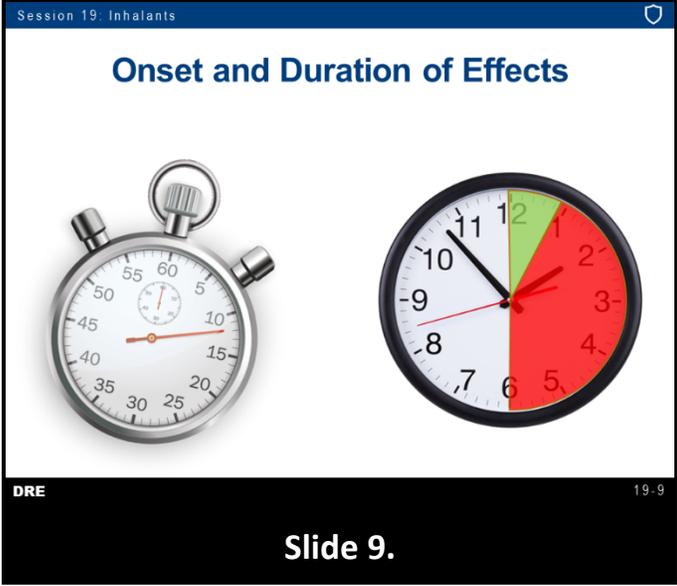
The effects of Inhalants vary somewhat from one substance to another. In fact, many of the Inhalants are classified as Depressants in medical texts. Their effects, consequently, often mirror alcohol intoxication. Common effects of Inhalants include bizarre thoughts, impaired perceptions of time and distance, dizziness and numbness, drowsiness, excessive salivation, floating sensations, and hallucinations. Persons under the influence of Inhalants may appear confused, disoriented, and/or lose consciousness.

---

### C. Onset and Duration of Effects

Session 19: Inhalants

## Onset and Duration of Effects



DRE 19-9

**Slide 9.**

Inhalants' effects are felt virtually immediately.



***Point out the route of passage of the drugs from lungs to brain can be traveled very quickly.***

Duration depends on the particular substance. The effects of Nitrous Oxide last 5 minutes or less. Amyl Nitrite and Isobutyl Nitrite produce effects that last a few seconds up to 20 minutes. Glue, paint, gasoline, and other commonly-abused Inhalants produce effects that last several or more hours.

---

## D. Overdose Signs and Symptoms



There is a risk of death due to overdose of Inhalants.

All Volatile Solvents make the heart more sensitive to adrenaline. This sometimes causes a dangerous cardiac arrhythmia. The term “Sudden Sniffing Death Syndrome” (SSDS) refers to sudden death by cardiac arrest from using inhalants.

Some Inhalants will depress the central nervous system to the point where respiration ceases. Others can produce instant death from heart failure.

Overdoses of Inhalants frequently induce nausea. If the user vomits while he or she is unconscious, death can result from aspiration of the vomitus.

Death can also result indirectly, if a person places a plastic bag over the head, loses consciousness, and suffocates.

Long-term abuse of Inhalants can cause central nervous system dysfunction and greatly reduce mental and physical abilities.

Evidence also exists of liver, kidney, bone, and bone marrow damage resulting from long-term Inhalant abuse.

There are no well-defined withdrawal symptoms for these substances. Physical dependence has not been documented, although habituation is common.



***Solicit questions and comments concerning overdose signs and symptoms.***

## E. Expected Results of the Evaluation

Session 19: Inhalants

### Inhalants Symptomatology Chart

HGN	Present
VGN	Present (High dose for that individual)
LOC	Present
Pupil Size	Normal <sup>(4)</sup>
Reaction to Light	Slow
Pulse Rate	Up
Blood Pressure	Up/Down <sup>(5)</sup>
Temperature	Up, Down or Normal
Muscle Tone	Normal or Flaccid

<sup>(4)</sup> Possibly dilated  
<sup>(5)</sup> Down with anesthetic gases –  
Up with volatile solvents and aerosols

DRE 19-11

**Slide 11.**

With Inhalants, there is significant variation in effects from one substance to another.

*Observable Evidence of Impairment:* Eye Exam: Horizontal Gaze Nystagmus (HGN) will generally be present.



***Point out immediate Onset of Nystagmus may be observed.***

Vertical Gaze Nystagmus (VGN) may be present.



***Point out high doses (for that individual) of Inhalants may cause VGN.***

Lack of Convergence (LOC) will be present.

*Psychophysical Exercise*

*Drug Evaluation Tests:* Performance on the Modified Romberg Balance (MRB), Walk and Turn (WAT), One Leg Stand (OLS), and Finger to Nose (FTN) tests will generally be impaired.



***Point out subjects may sway when performing the MRB, OLS, and FTN tests.***

***Point out subjects may take slow, deliberative steps on the WAT and will tend to stagger.***

*Vital Signs:* Pulse will be up. Pulse increase is due to many factors, including oxygen displacement. The heart may beat faster in order to supply body tissues with a sufficient supply of oxygen. Blood pressure will be up or down.



***Mention the Anesthetic Gases generally lower blood pressure while elevating pulse rate. The Volatile Solvents and the Aerosols usually elevate both blood pressure and pulse rate.***

The lowering of blood pressure by Anesthetic Gases is due to their vasodilation effect. The heart compensates for this vasodilation by increasing its heart rate. Effect on body temperature may be up, down, or DRE expected range.

*Dark Room:* Pupil size will be normal (DRE Expected Range) but may be dilated. Reaction to light generally will be slow. Anesthetic Gases may produce some dilation, although usually not to the extent seen with CNS Stimulants or Hallucinogens. No Inhalants produce pupillary constriction.



***Point out "Normal" referenced in the pupil size indicates the DRE averages or "expected range" for the pupil sizes.***

*Muscle Tone:* Muscle tone can be either normal or flaccid. Anesthetic gases normally cause the muscles to be flaccid.

Session 19: Inhalants

## Evaluation of Subjects Under the Influence of Inhalants

**General Indicators:**

- Bloodshot eyes
- Confused
- Flushed face, possibly sweating
- Odor of the inhaled substance
- Slow, thick, slurred speech
- Watery eyes



DRE 19-12

**Slide 12.**

- Bloodshot eyes
- Confused
- Disoriented
- Flushed face, possibly sweating
- Intense headaches
- Muscle weakness
- Non-communicative
- Odor of the inhaled substance
- Possible nausea
- Residue of the substance around the face and nose and on the hands or clothing
- Slow, thick, slurred speech
- Watery eyes

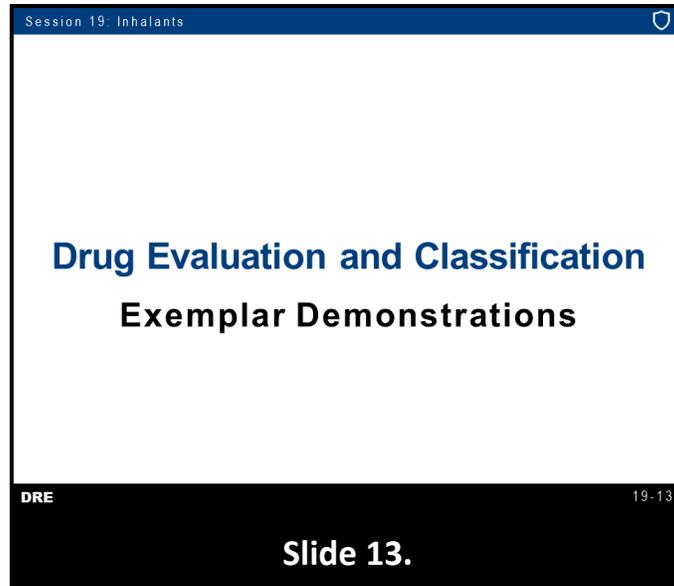
Speech usually clears up quickly when substance is no longer being inhaled.



***For more information and details regarding possible effects refer to:***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## F. Review of the DEC Program Exemplars



***Refer participants to the exemplars found at the end of Session 19 of their participant guide.***

***Point out the exemplars are examples and serve as a guide.***

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.



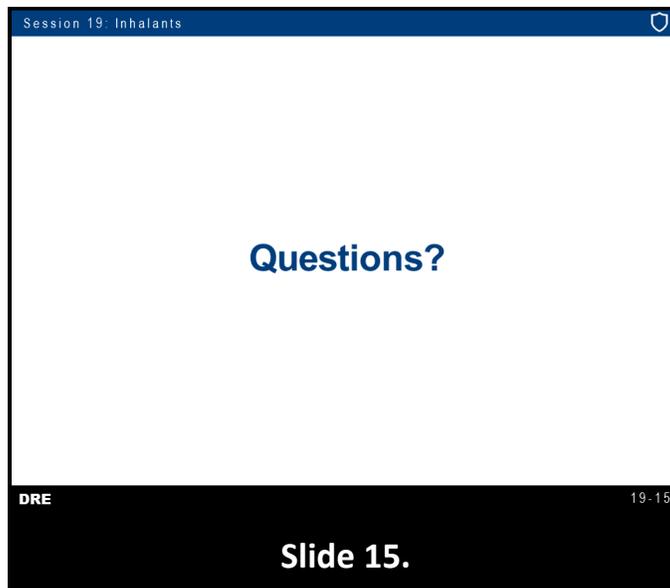
***Relate the items on the exemplars to the Inhalants Symptomatology Chart.***



**VIDEO DEMONSTRATION:** *Click video to begin.*

*Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.*

*Show video example of subject under the influence of an Inhalant. (Approximately 20 minutes).*



*Solicit participants' comments and questions concerning expected results of the evaluation of subjects under the influence of Inhalants.*



## Test Your Knowledge

1. What are the three subcategories of Inhalants?
2. What are some of the principal active ingredients in many Volatile Substances?
3. How do the effects of Anesthetic Gases differ from the effects of Volatile Solvents and Aerosols?
4. Do any of the subcategories of Inhalants cause pulse rate to decrease?
5. The effects of Amyl Nitrite and Butyl Nitrite last from a few seconds to up to \_\_\_\_\_ minutes.

DRE

19-16

### Slide 16.

### Test Your Knowledge

1. What are the three subcategories of Inhalants?
2. What are some of the principal active ingredients in many Volatile Substances?
3. How do the effects of Anesthetic Gases differ from the effects of Volatile Solvents and Aerosols?
4. Do any of the subcategories of Inhalants cause pulse rate to decrease?
5. The effects of Amyl Nitrite and Butyl Nitrite last from a few seconds to up to \_\_\_\_\_ minutes.

Instructor  
Note

1. ***Volatile Solvents, Aerosols, Anesthetic Gases***
2. ***Toluene, Acetone, Naphtha, Aliphatic Acetates, Hexane, Cyclohexane, Benzene***
3. ***Anesthetic gases lower blood pressure while keeping the pulse rate elevated, Volatile Solvents and Aerosols elevate blood pressure and pulse.***
4. ***No***
5. ***20***

# DRUG INFLUENCE EVALUATION

Evaluators <b>Lt. Joel Holt</b>		DRE # <b>15182</b>	Rolling Log # <b>22-008-0062</b>	Evaluator's Agency <b>Rio Rancho PD</b>	Case# <b>(Session XIX - #1)</b>										
Recorder/Witness <b>Captain Micah Doering New Mexico SP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Albuquerque Police Department</b>											
Arrestee's Name (Last, First, Middle) <b>Whippets, Walter Huffen</b>		Date of Birth <b>06/10/1999</b>	Sex <b>M</b>	Race <b>NA</b>	Arresting Officer (Name, ID#) <b>Officer Tim McCarson #6694</b>										
Date Examined / Time / Location <b>9/04/22 / 2240 / Albuquerque PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>17882</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>											
Miranda Warning Given Given by: <b>Ofc. McCarson</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>"Couple hot dogs"</b>	When? <b>About 4 pm</b>	What have you been drinking? How much? <b>Dr. Pepper Two bottles</b>	Time of last drink? <b>N/A</b>										
Time now/ Actual <b>9 PM? / 2242</b>	When did you last sleep? <b>This morning</b>	How long? <b>4 or 5 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Unstable</b>											
Speech: <b>Slurred, Confused</b>		Breath odor: <b>Rancid</b>		Face: <b>Flushed, Gold paint on chin</b>											
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right											
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy													
Pulse/Time 1. <u>104</u> / <u>2248</u> 2. <u>100</u> / <u>2319</u> 3. <u>96</u> / <u>2338</u>	HGN Lack of Smooth Pursuit Present Maximum Deviation Present Angle of Onset 40	Left Eye Present	Right Eye Present	Convergence  Right eye Left eye	NA/30 <b>One Leg Stand</b> NA/30 										
<b>Modified Romberg Balance</b> Approx. 4" 4" 4" 4" 	<b>Walk and Turn Test</b>  Lost balance three times. Nearly fell and test stopped.	Cannot keep balance <b>3</b> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken		<table border="1" style="width: 100%;"> <tr> <th>1st Nine</th> <th>2nd Nine</th> </tr> <tr> <td>3</td> <td></td> </tr> <tr> <td>3</td> <td></td> </tr> <tr> <td>3</td> <td></td> </tr> <tr> <td>NA</td> <td></td> </tr> </table>		1st Nine	2nd Nine	3		3		3		NA	
1st Nine	2nd Nine														
3															
3															
3															
NA															
<b>Time Estimation</b> <u>22</u> estimated as 30 seconds	Describe turn N/A	Cannot do test (explain) Nearly fell after three steps		Type of footwear: Lace-up black boots											
<b>Finger to Nose</b> (Draw lines to spots touched)  Done seated for safety reasons	<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Redness										
	<b>Left Eye</b>	4.0	7.0	3.5	Oral cavity: Red										
	<b>Right Eye</b>	4.0	7.0	3.5											
	Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Reaction to Light: Slow										
Blood Pressure <b>174 / 72</b>	Temperature <b>98.8 °F</b>	<b>RIGHT ARM</b> 													
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		<b>LEFT ARM</b> 													
Comments: What drugs or medications have you been using? <b>"I did a little Gold, but nothing else"</b>		How much? <b>"About two cans"</b>		Time of use? Prior to stop	Where were the drugs used? (Location) In the park										
Date / Time of arrest: <b>09/04/22 2135</b>	Time DRE was notified: <b>2205</b>	Evaluation start time: <b>2240</b>	Evaluation completion time: <b>2345</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation											
DRE/Officer's Signature: <b>Lt. J. Holt</b>		Reviewed/approved by / date:			DRE# <b>15182</b>										
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis															

## DRUG INFLUENCE EVALUATION NARRATIVE

### Suspect: Whippets, Walter Huffen

1. **Location:** The evaluation was conducted in the interview room at the Albuquerque Police Department. The room is well illuminated and has a smooth tile floor with no obstructions. The darkroom examinations were conducted in an adjacent interview room.
2. **Witnesses:** Captain Micah Doering of the New Mexico State Police witnessed and recorded the entire evaluation. Officer Tim McCarson, who was the arresting officer, observed the evaluation through the psychophysical tests until having to respond to a call for service.
3. **Breath Alcohol Test:** The arresting officer, Officer Tim McCarson administered a breath test to the suspect prior to the start of the evaluation obtaining a 0.00% result.
4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to contact Officer McCarson at the Albuquerque PD regarding a drug evaluation. Upon my arrival, Officer McCarson advised he had observed the suspect's vehicle driving without headlights and traveling 15 mph under the posted speed on Candelaria Road NE. Officer McCarson further reported that during the initial contact, he did not detect an odor of an alcoholic beverage on the suspect's breath, but he did observe gold paint on the suspect's chin, hands, and shirt sleeve. He also noted that the suspect's speech was slurred, and he appeared to be confused and disoriented. When asked where he was, the suspect thought he was in Rio Rancho. According to Officer McCarson, when the suspect exited his vehicle, he had poor balance and coordination. After determining that the suspect had no existing medical conditions, injuries, or physical defects, Officer McCarson attempted to administer SFSTs. He was able to conduct the Horizontal Gaze Nystagmus (HGN) but was unable to administer any other tests due to the suspect's poor balance. He reported observing six clues of HGN. Officer McCarson requested the suspect to count backwards from 79 to 59 and he was not able to count correctly, missing numbers and getting the order mixed up. Officer McCarson arrested the suspect for DWI and advised him of his Miranda warnings. When securing the suspect's vehicle, two partially empty cans of gold spray paint were found in the passenger seat under some clothing. When asked about the paint cans, the suspect claimed they belonged to a friend. Officer McCarson, who is a DRE, requested DRE assistance due to short staffing on his shift.
5. **Initial Observation of the Suspect:** I first observed the suspect in the interview room at the APD. I immediately noticed that his speech was slurred, and he was mumbling his words when he spoke. He was exhibiting poor balance while standing and several times used the chair and interview table to steady himself. I noted he was wearing black cargo pants, a gray sweatshirt, and black lace-up boots. He had gold paint smears on his chin and hands and had gold paint marks on his left shirt sleeve. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to do after I explained the DRE evaluation process. I confirmed he had been informed of his Miranda warnings and he agreed to answer my questions. I asked if he had any physical injuries or defects and he advised that he did not but mentioned that he did have a headache and at times felt lightheaded. He advised he was not under the care of a doctor or dentist. He told me he had eaten a couple of hot dogs around 4 pm and had drunk 2 or 3 Dr. Pepper's earlier in the evening. When asked if he was taking any medications or drugs, he indicated he was not, but when asked if he took insulin, he responded "What's that?" He advised he was not blind in either eye, did not wear corrective lenses and had good vision. During my initial contact with the suspect, his coordination remained poor and unstable.
6. **Medical Problems and Treatment:** The suspect was asked about any injuries or medical conditions and he indicated he had none. Other than him mentioning his headache and being lightheaded, no other conditions were reported during the evaluation. I inquired if he needed medical assistance for his headache and he indicated he did not and stated, "No, I'm okay."

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. Prior to attempting each test, I confirmed that he understood the instructions. The following tests were requested:

**Modified Romberg Balance:** When attempting this test, the suspect had extreme sway both front to back and side to side. Using a vertical line in the wall behind him, I estimated his sway at approximately 4” in each direction. When he tilted his head back to start the test, he immediately reached out to the wall to steady himself. His time estimation was fast, estimating the passage of 30 seconds in 22 seconds. When asked how he estimated the 30 seconds, he indicated he tried to picture a clock in his head.

**Walk & Turn:** During this test, the suspect started out in the instructions stage. However, while in that position, he lost his balance three times. Once he was instructed to begin the walking stage, he stepped off the line with his first three steps, missing heel to toe on each step, and used his arms to balance on each of the three steps. Due to his difficulty in performing the test, it was stopped for his safety.

**One Leg Stand:** During this test, when the suspect attempted to stand on his left foot and raise his right foot, he quickly put his foot down on counts 1,002, 1,003, and 1,005 to maintain his balance. He also swayed and used his arms for balance on each attempt to raise his right foot. He started hopping at count 1,006 and lost his balance and the test was stopped for safety reasons. The second part of the test, having the suspect stand on his right foot and raise his left foot, was not attempted due to his balance problems and for safety concerns.

**Finger to Nose:** For safety reasons, this test was conducted with the suspect in a seated position. He was not able to touch the tip of his nose with the tip of his index finger as instructed on any of the six attempts. He also repeatedly opened his eyes even though he was instructed several times to keep his eyes closed.

8. **Clinical Indicators of Impairment:**

**Eye Signs:** All six clues of HGN were observed with an estimated angle of onset of 40 degrees. Vertical Gaze Nystagmus (VGN) was not present. A Lack of Convergence (LOC) was observed with the test being conducted twice with the same results. His pupil sizes were within the DRE average ranges in all three lighting levels, estimated at 4.0 mm in both eyes in Room Light, 7.0 mm in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. His pupil reaction to light was slow. His eyes were red and bloodshot.

**Vital Signs:** The suspect’s pulse rates were checked three times during the evaluation and were 104 beats per minute (bpm), 100 bpm and 96 bpm. All three were above the DRE average range for pulse rate. His blood pressure of 174/72 was also above the DRE average ranges. His body temperature was measured at 98.8 °F and was within the DRE average. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect’s breath was rancid with a paint-like odor. Gold paint residue was located on the palms of both his hands and his fingers and was visible on his shirt sleeve. His nasal area was red and inflamed and his oral cavity was red.

10. **Suspect’s Statements:** After explaining my observations to the suspect, I again asked him about drug use. He claimed he did not use any drugs, but stated, “I did a little Gold, but nothing else” and then laughed out loud. The suspect freely provided detailed information about his use of various inhalants and indicated that he has been “huffing” for about 5 or 6 years.

11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of an Inhalant and unable to operate a vehicle safely.

12. **Toxicological Sample:** After completing my evaluation, the suspect was transported to the UNM Hospital where a blood sample was collected. The sample was submitted to the State Crime Lab for analysis.

13. **Miscellaneous:** Refer to Officer McCarson’s arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Trooper Tarek Chase</b>		DRE # <b>22561</b>	Rolling Log # <b>22-009-0032</b>	Evaluator's Agency <b>North Dakota HP</b>	Case# <b>(Session XIX - #2)</b>
Recorder/Witness <b>Lt. Sid Mann, Jamestown PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Fargo PD</b>	
Arrestee's Name (Last, First, Middle) <b>Poppers, Jack Dunn</b>		Date of Birth <b>09/10/2002</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Caleb Korb</b>
Date Examined / Time / Location <b>10/24/22 / 0130 / Fargo PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>57882</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: Ofc. Korb	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Fried Chicken</b>	When? <b>About 6 pm</b>	What have you been drinking? How much? <b>Water Couple of bottles</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>Midnight / 0135</b>	When did you last sleep? <b>Yesterday afternoon</b>	How long? <b>4 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"Nope, drugs are bad for you dude"</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Staggering at times</b>	
Speech: <b>Slow, Slurred</b>		Breath odor: <b>Chemical-like</b>		Face: <b>Flushed, Sweaty</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>98</u> / <u>0142</u> 2. <u>96</u> / <u>0158</u> 3. <u>92</u> / <u>0228</u>	HGN Lack of Smooth Pursuit Present Maximum Deviation Present Angle of Onset 35	Left Eye Present	Right Eye Present	Convergence  Right eye Left eye	
Modified Romberg Balance Approx. 4" 4" 4" 4"  Kept eyes open	Walk and Turn Test  S M M S S M M		Cannot keep balance 3	NA/30 <b>One Leg Stand</b> NA/30  L R	
	Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken		1st Nine 1 2 3 4 5 6 7 8 9	2nd Nine 2 2 2 2 2 2 2 2 9	L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Nearly fell. Tests stopped
Time Estimation <u>36</u> estimated as 30 seconds	Describe turn Lost balance to the left		Cannot do test (explain) N/A		Type of footwear: Hiking type boots
Finger to Nose (Draw lines to spots touched)  Wrong hands with attempts 5 & 6		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	5.0	6.0	4.0
		Right Eye	5.0	6.0	4.0
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Slow	
		RIGHT ARM 		LEFT ARM 	
Blood Pressure 144 / 94		Temperature 99.0 °F		Nothing observed	
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments: What drugs or medications have you been using? <b>"Dust off and some other stuff"</b>			
Date / Time of arrest: 10/24/22 0100		Time DRE was notified: 0115		Evaluation start time: 0130	
				Evaluation completion time: 0235	
DRE/Officer's Signature: <i>T.W. Chase</i>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
				<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	
				<input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

### Suspect: Poppers, Jack Dunn

- 1. Location:** The evaluation was conducted in the Interview Room at the Fargo Police Department, Fargo, ND. The Interview Room was well illuminated and had a smooth tile floor with no obstructions. The darkroom examinations were conducted in the staffrestroom.
- 2. Witnesses:** Lt. Sid Mann of the Jamestown PD witnessed and recorded the evaluation. The arresting officer, Caleb Korb of the Fargo PD observed the darkroom examinations.
- 3. Breath Alcohol Test:** Officer Korb administered a breath test to the suspect prior to my arrival and obtained a .00 BAC result.
- 4. Notification and Interview of the Arresting Officer:** On 10/24/22 at approximately 0115 hours, I was contacted by dispatch and asked to contact Officer Korb at the Fargo PD who was requesting DRE assistance with DWI arrest. When I contacted Officer Korb he stated he had observed the suspect's vehicle cross the center line numerous times on 45<sup>th</sup> Street. When he attempted to stop the vehicle, the driver was slow to respond. The vehicle travelled approximately three blocks before pulling to the right and finally stopping. During the three block distance, the vehicle continued to drift in and out of its lane. Officer Korb stated that when he contacted the driver, he did not detect an odor of an alcoholic beverage on the driver's breath but did smell a distinct chemical-like odor coming from the vehicle. Officer Korb further stated that the driver was slow to respond to questions and appeared confused and disoriented. Officer Korb administered SFSTs and observed six HGN clues with an early angle of onset. He also observed five clues during the WAT test. The suspect was unable to complete the OLS due to poor balance and the test was stopped for safety reasons. Officer Korb also administered the Finger to Nose test and stated the suspect had a difficult time touching the tip of his nose on each of the attempts. Officer Korb asked the suspect about alcohol and drug consumption and he denied using either. He did tell Officer Korb that he occasionally likes to huff canned air duster to help him relax. Officer Korb subsequently arrested the suspect for DWI and transported him to Fargo PD for processing. After obtaining a 0.00 BAC, Officer Korb requested the assistance of a DRE.
- 5. Initial Observation of the Suspect:** I first observed the suspect at Fargo PD in the Interview Room. His speech was slow and slurred at times. His coordination appeared to be poor and he was unstable on his feet. Several times he staggered and used the wall to steady himself. I also noted that the suspect's eyes were watery and bloodshot. I introduced myself and asked if he would be willing to participate in a DRE evaluation. He agreed to do so and asked about how long it would take. I asked if he had been advised of his Miranda rights and he stated, "Uh-huh. I already know them. But I'm not a criminal." The suspect stated he did not have any injuries or physical defects and that he was not under the care of a doctor or dentist. He stated he had eaten some fried chicken and drank two bottles of water around 6 p.m. When asked if he was taking any medications or drugs, he stated, "Nope, drugs are bad for you dude."
- 6. Medical Problems and Treatment:** The suspect stated he felt light-headed but declined assistance when asked if he needed medical care. He did not report any other medical conditions, and none were observed during the evaluation.
- 7. Psychophysical Indicators of Impairment:** Prior to each test, I explained and demonstrated the test to the suspect. Each time he acknowledged that he understood the instructions. The following psychophysical tests were administered to the suspect:

**Modified Romberg Balance:** The suspect had a 4-inch side-to-side and front-to-back sway. His time estimation was slow, estimating 30 seconds in 36 seconds. When asked how he estimated 30 seconds, he stated, "I counted one-Mississippi, two-Mississippi, but I got a little messed up." The suspect kept his eyes open during the entire test despite being reminded several times to keep them closed.

**Walk & Turn:** The suspect was given an opportunity to remove his boots before beginning the test, but he stated they were okay and wanted to keep them on. The suspect lost his balance during the instruction stage three times. Once he was told to begin, he stopped walking once, missed heel-to-toe twice, and stepped off the line twice on the first nine steps. He also used his arms to balance three times. The suspect also lost his balance while turning, staggering to his left. Once regaining his balance and continuing the test, he stopped while walking twice, missed heel-to-toe twice, and stepped off the line twice. He also used his arms to balance two times.

**One Leg Stand:** While standing on his left foot, the suspect swayed while balancing three times, used his arms for balance three times, and put his foot down at count 1,012 and nearly fell. At that point, the test was stopped for his safety. While standing on his right foot, the suspect swayed while balancing twice, used his arms for balance three times, and put his foot down at counts 1,010 and 1,012 and again nearly fell. This portion of the test was also stopped for safety reasons.

**Finger to Nose:** During this test, the suspect missed touching the tip of his nose with the tip of his index finger on five of the six attempts. He also used his left hand when instructed to use his right hand on attempt #5 and used his right hand when instructed to use his left hand on attempt #6.

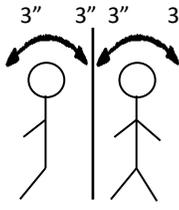
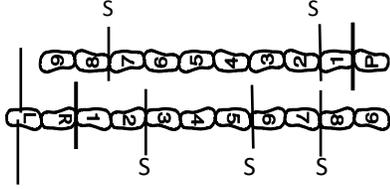
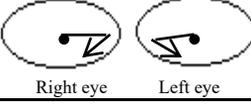
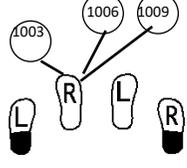
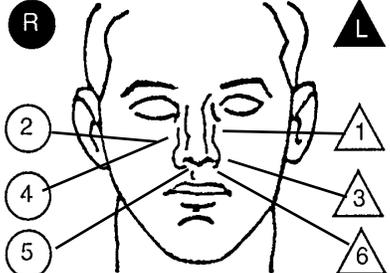
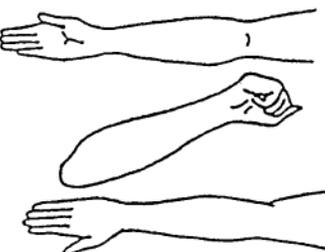
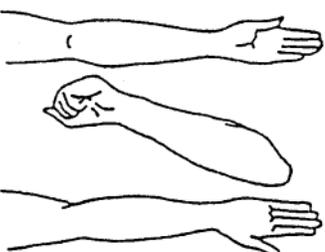
#### 8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect had six clues of HGN with an angle of onset of approximately 35 degrees. He had a lack of convergence with his eyes moving downward then back toward center. The test was conducted twice with the same results. His pupil sizes were estimated in three lighting conditions and were: 5.0 mm in Room Light; 6.0 mm in Near Total Darkness; and 4.0 mm in Direct Light. All were within the DRE average ranges. He had a slow reaction to light. His eyes were bloodshot and watery.

**Vital Signs:** The suspect's pulse rates were checked three times during the evaluation and were measured at 98 beats per minute (bpm), 96 bpm, and 92 bpm. All three were above the DRE average ranges. His blood pressure was measured at 144/94, which was also above the DRE average ranges. The suspect's body temperature was measured at 99.0 degrees, which was within the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** The suspect had a chemical-like odor on his breath and clothes. He also had a redness in his oral cavity. His nasal area was also red, and he had a runny nose.
10. **Suspect's Statements:** I discussed my evaluation results with the suspect and again asked him about drug use. He eventually admitted being with some friends that were using Dust Off and some "other stuff." He first claimed he did not use any of it because it made him light-headed, but then admitted using some at about midnight, but was not sure how much he had used.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of an Inhalant and unable to operate a vehicle safely.
12. **Toxicological Sample:** The suspect provided a urine sample which was sealed in the lab-provided collection kit and placed into evidence pending submission to State Crime Laboratory for analysis.
13. **Miscellaneous:** Refer to Officer Korb's DUI arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Tpr. Nick Schweers</b>		DRE # <b>31358</b>	Rolling Log # <b>22-013-0062</b>	Evaluator's Agency <b>Maryland State Police</b>	Case# <b>(Session XIX - #3)</b>								
Recorder/Witness <b>Cpl. Eric Trumbauer, Anne Arundel CO Police</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Maryland Transportation Authority (MTA)</b>									
Arrestee's Name (Last, First, Middle) <b>Huffer, Ima</b>		Date of Birth <b>06/10/1999</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sr. Officer William Alexander #16454</b>								
Date Examined / Time / Location <b>6/14/22 / 2135 / Anne Arundel CO Police</b>		Breath Test: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>17220</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>								
Miranda Warning Given Given by: <b>Tpr. Schweers</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Pizza</b>	When? <b>About 7 pm</b>	What have you been drinking? How much? <b>Rockstar Energy drink One can</b>	Time of last drink? <b>N/A</b>								
Time now/ Actual <b>Midnight? / 2140</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 8 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I don't do drugs"</b>		Attitude: <b>Cooperative, Indifferent</b>		Coordination: <b>Poor</b>									
Speech: <b>Slurred, Rambling</b>		Breath odor: <b>Chemical-like</b>		Face: <b>Flushed</b>									
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right									
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy		Pulse/Time 1. <u>96</u> / <u>2142</u> 2. <u>94</u> / <u>2158</u> 3. <u>92</u> / <u>2218</u>		HGN Lack of Smooth Pursuit <b>Present</b> Maximum Deviation <b>Present</b> Angle of Onset <b>40</b> <b>40</b>									
Modified Romberg Balance Approx. 3"    Approx. 3"    Approx. 3"    Approx. 3"  <b>Laughing during test</b>		Walk and Turn Test  <b>Reminded to count steps out loud. Laughed several times during test.</b>		Convergence  <b>38/30</b> <b>One Leg Stand</b> <b>NA/30</b>  <b>Cannot keep balance 2</b> <b>Starts too soon 1</b> <table border="1" style="display: inline-table;"><tr><th>1st Nine</th><th>2nd Nine</th></tr><tr><td><b>3</b></td><td><b>2</b></td></tr><tr><td><b>3</b></td><td><b>4</b></td></tr><tr><td><b>9</b></td><td><b>9</b></td></tr></table> <b>L R</b> <input checked="" type="checkbox"/> <input type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input type="checkbox"/> Uses arms for balance <input checked="" type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input type="checkbox"/> Puts foot down <b>Nearly fell. Right foot test not attempted for safety reasons.</b>		1st Nine	2nd Nine	<b>3</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>9</b>	<b>9</b>
1st Nine	2nd Nine												
<b>3</b>	<b>2</b>												
<b>3</b>	<b>4</b>												
<b>9</b>	<b>9</b>												
<b>Time Estimation</b> <b>33</b> estimated as 30 seconds		Describe turn <b>Slow and deliberate</b>		Cannot do test (explain) <b>N/A</b>									
<b>Finger to Nose</b> (Draw lines to spots touched)  <b>Pronounced sway. Used pads of fingers. Laughing.</b>		PUPIL SIZE		Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)								
		Left Eye		5.0	7.5								
		Right Eye		5.0	7.5								
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Slow</b>									
Blood Pressure <b>118 / 62</b>		Temperature <b>98.0 °F</b>		<b>RIGHT ARM</b> 									
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid				<b>LEFT ARM</b> 									
What drugs or medications have you been using? <b>"I did some whippets with friends"</b>		How much? <b>"Don't remember"</b>		Time of use? <b>About 8 pm</b>	Where were the drugs used? (Location) <b>Friend's house</b>								
Date / Time of arrest: <b>06/14/22 2015</b>	Time DRE was notified: <b>2100</b>	Evaluation start time: <b>2135</b>	Evaluation completion time: <b>2230</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation									
DRE/Officer's Signature: <b>Nick Schweers</b>		Reviewed/approved by / date:			DRE#								
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis									

## DRUG INFLUENCE EVALUATION NARRATIVE

**Subject: Huffer, Misty Kay**

- Location:** The evaluation was conducted in the interview area at the Anne Arundel County Police Department. The room has adequate lighting and has a smooth concrete floor with no obstructions. The darkroom room examinations were conducted in the staffrestroom.
- Witnesses:** Corporal Eric Trumbauer of the Anne Arundel County Police witnessed and recorded the entire evaluation.
- Breath Alcohol Test:** The subject's breath test was 0.00%. The test was administered prior to my arrival by the arresting officer, Sr. Officer William Alexander of the MTA Police, at 2050 hours.
- Notification and Interview of the Arresting Officer:** On 6/14/22 at approximately 2100 hours, I was requested to contact Sr. Officer Alexander regarding a drug evaluation at the Anne Arundel County Police Department. Upon contacting Officer Alexander, it was learned that he had observed the suspect's vehicle fail to stop at red light and driving in a hazardous manner which included weaving in and out of its traffic lane and speeding up then slamming on its brakes. When he attempted to stop the suspect's vehicle, she was slow to respond to Officer Alexander's emergency lights and was unable to maintain a single lane of travel. During the personal contact, the suspect did not have an odor of an alcoholic beverage coming from her breath. However, Officer Alexander did detect a chemical-like odor coming from her vehicle. Officer Alexander also observed that she had difficulty locating her driver's license and other documents when asked for them. She was slow to respond to Officer Alexander's questions and requests. She was not sure where she was coming from and stated she did not know what time it was. Upon getting out of her vehicle, she held onto the driver's door for support, and nearly fell into the street. Officer Alexander assisted her to the sidewalk, where she was able to regain her balance. Officer Alexander noted that she had slurred speech and had a flushed face. Officer Alexander reported that she consented to do SFSTs at roadside which included HGN, Walk and Turn (W&T), and the One Leg Stand (OLS) tests. He reported observing six clues on the HGN test, four clues on the W&T, and three clues on the OLS (Refer to Officer Alexander's DWI report). After completing the SFSTs, he arrested the suspect for DWI and transported her for processing. After obtaining a 0.00 BAC, he requested a DRE to assist with the investigation.
- Initial Observation of the Subject:** I first observed the suspect in the interview area at the Anne Arundel County Police Department office. She appeared to be disoriented and was responding very slowly to Officer Alexander's questions. Her speech was slurred and rambling. Her face was flushed, and she had red bloodshot eyes. There was a chemical type of odor coming from her breath and clothing. She was wearing blue cut-off jeans, a light blue blouse, and black lace-up boots. I introduced myself, explained why I been called and asked if she would consent to a drug evaluation. She agreed to the evaluation by stating, "Okay, I guess so" after a delayed pause before answering. I asked if she had been informed of her Miranda rights and after another delayed pause, stated "No, I'm not sure." I then informed her of her Miranda rights at 2137 hours. I asked if she had any injuries or physical defects that might prohibit her from doing the DRE tests. Again, after a pause, she said she did not. She stated that she was not under the care of a doctor or dentist. She told me that she had eaten pizza around 7 pm and had drank a can of Rockstar at that time. When asked if she was taking any medication or drugs, she responded "I don't do drugs." She was otherwise cooperative, but indifferent.
- Medical Problems and Treatment:** The suspect indicated she did not have any injuries or physical problems, and none were observed or mentioned during the evaluation. When asked, she stated she was not epileptic, was not diabetic, did not take insulin and did not have any medical problems.

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to her attempting them. Each time she indicated she understood the test and agreed to attempt the test. The following tests were administered to her:
- Modified Romberg Balance:** For this test, the suspect swayed approximately three inches front to back and three inches side to side. While attempting the test, she would at times begin laughing and would open her eyes. She had to be reminded four times to close her eyes as she attempted the test.
- Walk & Turn:** This test had to be explained and demonstrated to the suspect twice. After the second explanation, she stated she understood the instructions. During this test, she lost her balance twice during the instructions stage. She also started too soon once during the instruction stage. During the walking stage, she raised her arms for balance three times on the first nine steps and four times on the second nine steps. She also stopped while walking three times on the first nine steps at steps 2, 5 and 7 and twice on the second nine steps at steps 1 and 7. On the turn, she was slow and deliberate with her movements, but made the turn by taking a series of small steps as instructed. On both walking portions she was reminded several times to count her steps out loud. She also laughed out loud several times while attempting the test.
- One Leg Stand:** On this test, when she stood on her left foot and raised her right foot, she swayed side to side and front to back approximately three inches. She used her arms for balance during the entire time her foot was up. She put her foot down quickly at counts 1,003, 1,006 and 1,009 and displayed poor balance nearly falling. However, she did complete the test and counted out loud to 38 seconds in the 30 second timed period. When asked if she thought she could do the test while standing on her right foot, she replied, "I'm a little dizzy. Maybe not." Therefore, the remainder of the test was discontinued.
- Finger to Nose:** During this test, she missed the tip of her nose with the tip of her index finger on all six attempts, missing her nose completely. She also had a pronounced sway throughout the test. She exhibited slow arm movements and touched her face with the pad of her fingers each time. She laughed out loud several times when attempting to touch the tip of her nose.
8. **Clinical Indicators of Impairment:**
- Eye Signs:** The eye examinations were conducted in the staff restroom which provided adequate darkness for the examinations. The suspect exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. She exhibited all six clues of HGN with an approximate 40-degree angle of onset. VGN was not observed. She was not able to converge her eyes as instructed. The test was conducted twice, and on both attempts, her eyes would start towards her nose, but then drifted outward and downward. Her pupil sizes were checked in the three lighting levels and were estimated at 5.0 mm in both eyes in Room Light, 7.5 mm in both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. All three were within the DRE average ranges. She exhibited a slow reaction to light and rebound dilation was not observed.
- Vital Signs:** The suspect's pulse rates were checked three times during the evaluation. All three were above the DRE average range, at 96, 94 and 92 beats per minute (bpm). Her blood pressure was measured at 118/62 millimeters of mercury (mmHg), which was below the DRE average ranges. Her body temperature was measured at 98.0 degrees Fahrenheit using a digital oral thermometer and was within the DRE average range. Her muscle tone was flaccid.
9. **Signs of Ingestion:** The suspect's nasal and oral cavities were red and inflamed. She had a chemical-like odor on her breath and clothing. When asked about the odor on her breath and clothing, she indicated that she was hanging out with some friends who were "huffing". When asked what she had been huffing, she stated, "Nitrous. Everybody liked it!"

10. **Subject's Statements:** I explained my observations and the results from the drug evaluation and then asked the suspect about drug use and specifically inhalants. She admitted doing some "whippets" with some friends at about 8 pm. I asked if "whippets" was the same as nitrous oxide. She laughed out loud and said yes. She said she likes to use nitrous because it relaxes her, it is not illegal, and it usually makes her happy and feeling good. When asked about taking medication or drugs, she stated, "I don't do drugs."
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of an Inhalant and was unable to operate a vehicle safely.
12. **Toxicological Sample:** After the evaluation, Officer Alexander advised the suspect of her implied consent rights and she consented to a blood test. The sample was collected by a certified phlebotomist and was submitted as evidence pending delivery to the Crime Lab for analysis.
13. **Miscellaneous:** Refer to Officer Alexander's DUI report for additional details regarding the arrest.

# 20 DRE

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## PRACTICE: EXAMINATION OF VITAL SIGNS

### LEARNING OBJECTIVES

- Conduct examinations of pulse, blood pressure, and temperature
- Describe the vital signs examination procedures
- Document the results of the vital signs examinations

### CONTENTS

A. Procedures for this Session .....	2
B. Pulse Measurements .....	3
C. Blood Pressure Measurements .....	4
D. Temperature .....	4
E. Session Wrap-Up .....	4

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Hands-On Practice
- Instructor-Led Coaching
- Participant-Led Coaching



## Learning Objectives

- Conduct examinations of pulse, blood pressure, and temperature
- Describe vital signs examination procedures
- Document results of vital signs examinations

DRE

20-2

**Slide 2.**



*Briefly review the objectives, content, and activities of this session.*

### A. Procedures for this Session



## Vital Signs Measurement Practice



DRE

20-3

**Slide 3.**



*Refer to Session 7 if there are any questions on vital signs.*

*Team Assignments:* Participants will work in three or four member teams.



*Make team assignments.*

At any given time, one member of the team will be engaged in conducting and recording vital signs examinations of another member. The remaining member(s) will help coach and critique the participant who is conducting the examinations.



***Emphasize participants can help each other learn by pointing out errors of omission or commission.***

Participants will take turns serving as test administrator, test subject, and coach.

Participants will record their measurements using the Vital Signs Examination Data Sheet.

---

## B. Pulse Measurements

*Vital Signs Practice:* Teams initially will practice taking one another's pulse.



***Point out the participant who is “coaching” should simultaneously take the subject’s pulse along with the test administrator. Example: Administrator can take pulse at subject’s left wrist; coach can take it at subject’s right wrist. Then, the administrator and coach can compare the measurements they obtain.***

***Demonstrate this, using a participant-subject and two instructors.***

***Hand out copies of the Vital Signs Examination Data Sheet to each participant. Solicit participants’ questions concerning procedures for this practice session.***

### *Pulse Measurements*



***Monitor teams and coach participants as necessary and appropriate.***

***Terminate this segment after 20 minutes or after each participant has administered a pulse measurement to each of their team members (whichever comes first).***

### C. Blood Pressure Measurements



***Teams subsequently will practice taking one another's blood pressure.  
If specially-designed training stethoscopes are available, the participant coach can "listen in" on the blood pressure measurements being taken by the participant-administrator.***

***Monitor teams and coach participants as necessary and appropriate.***

***Terminate this segment after 25 minutes, or after each participant has measured the blood pressure of each member of their team (whichever comes first).***

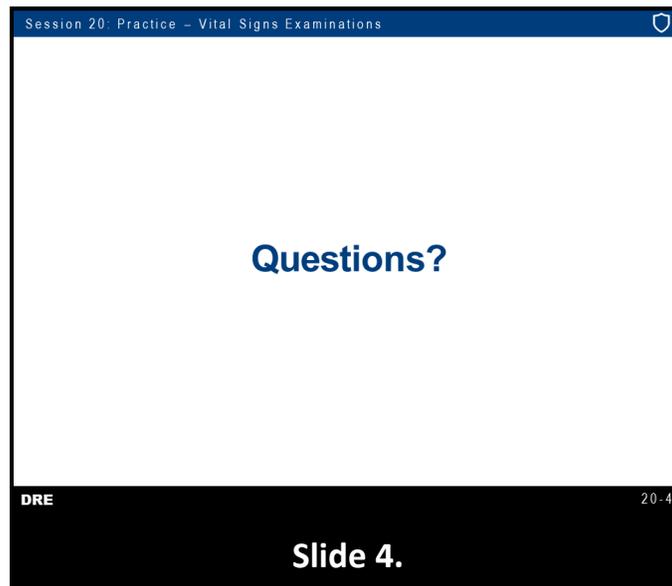
### D. Temperature



***Allow participants to practice taking temperatures***

---

### E. Session Wrap-Up



***Offer appropriate comments and observations about the participants' performance.***

***Solicit participants' comments concerning the practice session.***

---

**VITAL SIGNS EXAMINATIONS DATA SHEET**

EXAMINER'S NAME: \_\_\_\_\_

DATE \_\_\_\_/\_\_\_\_/\_\_\_\_

**PULSE MEASUREMENTS**

**BLOOD PRESSURE MEASUREMENTS**

SUBJECT'S NAME \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_

TIME \_\_\_\_\_

TIME \_\_\_\_\_

PULSE POINT USED \_\_\_\_\_

SYSTOLIC/DIASTOLIC \_\_\_\_\_

BEATS PER MINUTES \_\_\_\_\_

TEMPERATURE \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_

TIME \_\_\_\_\_

TIME \_\_\_\_\_

PULSE POINT USED \_\_\_\_\_

SYSTOLIC/DIASTOLIC \_\_\_\_\_

BEATS PER MINUTES \_\_\_\_\_

TEMPERATURE \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_

SUBJECT'S NAME \_\_\_\_\_

TIME \_\_\_\_\_

TIME \_\_\_\_\_

PULSE POINT USED \_\_\_\_\_

SYSTOLIC/DIASTOLIC \_\_\_\_\_

BEATS PER MINUTES \_\_\_\_\_

TEMPERATURE \_\_\_\_\_

# 21

## DRE

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### CANNABIS

#### LEARNING OBJECTIVES

- Describe a brief overview of Cannabis
- Identify common names and terms associated with Cannabis
- Identify common methods of administration for Cannabis
- Describe the symptoms, observable signs, and other effects associated with this category
- Describe the typical time parameters, i.e., onset and duration of effects associated with Cannabis
- List the indicators likely to emerge when the drug influence evaluation is conducted for a person under the influence of Cannabis

#### CONTENTS

A. Overview of the Category.....	2
B. Possible Effects of Cannabis .....	9
C. Onset and Duration of Effects .....	13
D. Overdose Signs and Symptoms .....	16
E. Expected Results of the Evaluation.....	18
F. Review of the DEC Program Exemplars .....	22

#### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Review of the DEC Program Exemplars
- Reading Assignments
- Video Presentations
- Slide Presentations

Session 21: Cannabis

## Learning Objectives

- Describe a brief overview of Cannabis
- Identify common names and terms
- Identify common methods of administration
- Describe symptoms, observable signs, and other effects
- Describe typical time parameters
- List indicators likely to emerge during drug influence evaluation

DRE 21-2

**Slide 2.**

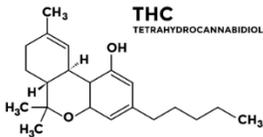


*Briefly review the objectives, content, and activities of this session.*

### A. Overview of the Category

Session 21: Cannabis

## Overview of Cannabis



**THC**  
TETRAHYDROCANNABIDIOL

DRE 21-3

**Slide 3.**



*If available, display slides of Cannabis plants, leaves, flowers, etc.*

Cannabis is a category of drugs derived primarily from various species of plants, such as Cannabis Sativa, which generally grow tall and thin, outdoors and Cannabis Indica plants, which generally grow short and wide and are better grown indoors. Cannabis grows readily throughout the temperate zones of the world.

No matter its form or label, all Cannabis products contain the primary psychoactive (mind-altering) chemical delta-9-tetrahydrocannabinol (THC). Marijuana contains more than 400 other chemicals. THC is the chemical in Marijuana responsible for producing the euphoria or “the high.” In its commercial form, Cannabidiol (CBD), another chemical in Marijuana, is considered non-psychoactive and lacks the intoxicating properties of THC. There is some evidence CBD may hold medicinal value to treat several medical conditions such as neurological disorders (i.e., seizures and epilepsy), psychosis, and anxiety.

Over two decades, the DEA found the potency of illicit cannabis consistently rose from approximately 4% THC in 1995 to approximately 12% in 2014. The CBD content fell on average from approximately 0.28% in 2001 to <0.15% in 2014. Dabs and oils are even more potent cannabis products (up to 90% THC) that can be vaped in e-cigarettes.



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

**Print “ $\Delta$  - 9 THC” on dry erase board or easel/easel pad.**

**Instructors are encouraged to discuss current THC potency in your area. A link to national data can be found at: <https://www.drugabuse.gov/drug-topics/marijuana/marijuana-potency>**

The primary psychoactive ingredient in Cannabis is Delta-9 Tetrahydrocannabinol.

THC is found principally in the leaves and flowers of the plant, rather than in the stem or branches.



**Point out the highest known THC content is 37.2% from a sample of Marijuana analyzed in a DEA lab in California in 2008.**

Different varieties of the Cannabis have different concentrations of THC.

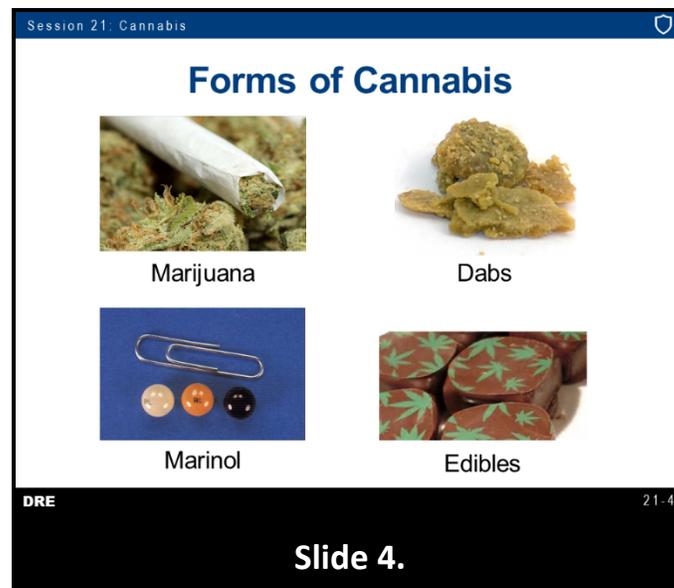


**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

One variety that has a relatively high concentration of THC is Sinsemilla, which is the unfertilized female Cannabis Sativa plant. Explanatory note: “Sinsemilla” in Spanish means “without seeds”.

*Sativa, Indica, and Hybrid Cannabis:* Sativa Cannabis is known for causing an energetic and emotional uplifted high. It is often referred to as a “cerebral high.” Indica Cannabis is better known for having a “body high”. It is reported to cause deep relaxation often leading to a term called “couch-lock”. Hybrids are a combination of the two types.



There are four principal forms of Cannabis. The first is Marijuana which is the dried leaves of the plant. Second is Hashish which is a form of Cannabis made from the dried and pressed resin of a Marijuana plant. The third form is Hash Oil, sometimes referred to as “Marijuana Oil,” it is a highly concentrated syrup-like oil extracted from Marijuana. It is normally produced by soaking Marijuana in a container of solvent, such as acetone or alcohol for several hours until the solvent has evaporated. A thick syrup-like oil is produced with a higher THC content. The average THC content of hash oil seized in the U.S. in 2010 was 30.3%.



**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

Fourth is Dronabinol (Marinol and Syndros), a synthetic form of THC commonly prescribed to treat nausea, vomiting, and certain cancer patients undergoing chemotherapy.

Sources indicate “wax”, “dabs”, and “shatter” are some of the purest forms of Cannabis concentrate. It involves the use of butane or other various chemicals to heat and refine the THC. This process results in product that contains 80% or greater THC, making it much more potent than a Marijuana bud on a Cannabis plant. The concentrate is then heated or put into a vaporizing pen and inhaled. Dabbing is a way to get the quickest, long-lasting high with a single inhale. A single puff from a pipe or vaping pen can give the effect of smoking many joints.



***Mention Wax is also known as Butane Hash Oil and/or Dabs.***

**Cannabis tinctures**, sometimes known as **green dragon**, is an alcohol-based extract of cannabis and sometimes used in the production of specific extracts. The tincture is typically made by soaking the dried flowers of the female hemp plant (marijuana) in ethanol. The tetrahydrocannabinol (THC) and other cannabinoids dissolve into the alcohol. Some preparations also extract some of the water-based plant products such as chlorophyll, resulting in a dark green or brown liquid. Baking or drying the cannabis to decarboxylate prior to the alcohol bath increases the amount of THC in the resulting preparation.

**Topical cannabis**, or topicals, are simply cannabis-infused products for use on the surface of the skin. They can come in the form of balms, lotions, oils, tinctures, or personal lubricants and can be applied directly to the skin.

Edibles are food products infused with Marijuana. Though smoking Marijuana is the most prevalent method of consumption, eating Marijuana is quickly becoming a popular way to consume the drug. In addition to placing Marijuana directly in food, Marijuana-infused cooking oil can be used when frying or searing food and Marijuana-infused butter can be spread directly on prepared food. These Marijuana edibles are more common in States that have legalized Marijuana and also States that permit medical Marijuana use. The amount of THC is very difficult to measure and is often unknown in these food products.

Session 21: Cannabis

## Synthetic Cannabinoid Products

Synthetic cannabinoid products typically include:

- Olive colored herbs
- Combination of herbs
- Plant materials



DRE 21-5

**Slide 5.**

Synthetic Marijuana or synthetic Cannabinoids have quickly become a worldwide concern. They came on the market in the early 2000's and continue to evolve. These products go by many different names or identifiers. Spice, which is sometimes also called K2, herbal incense, or "fake weed," is one of the more popular or more familiar synthetic Cannabinoids.

Spice and similar products consists of shredded dried plant material that has been sprayed with chemicals designed to act on the same brain cell receptors as THC but are often much more powerful and unpredictable. These products are typically labeled "not fit for human consumption," and most are illegal. But their manufacturers are constantly creating new chemical compounds to sidestep legal restrictions.

When smoked, synthetic Cannabinoid products can also produce stimulant and/or hallucinogenic effects.



***Point out there are literally hundreds of different chemical synthetic cannabinoids and hundreds of names for the synthetic cannabinoids. Synthetic cannabinoids will be further discussed in Session 24.***

Common brand names for synthetic Cannabinoids include K2, Spice, Spice Gold, Spice Diamond, Yucatan Fire, Solar Flare, K2 Summit, Genie, PEP Spice, and Fire n Ice, to name a few.

Session 21: Cannabis

## Possible Medical Cannabis Applications

- Lowers intraocular pressure
- Suppresses nausea
- Inhibits seizures
- Appetite enhancer
- Muscle relaxant
- Tumor growth retardant



DRE 21-6

**Slide 6.**

Cannabis may have some limited medical applications however many experts vary in their opinions on them. A possible application may include lowering of intraocular (“Intraocular” – within the eyeball) pressure, which can be helpful for glaucoma patients. Cannabis lowers the intraocular pressure by dilating in size the blood vessels of the eyes (more size – less pressure). This causes red, bloodshot eyes. Another possible application is suppressing nausea and sometimes is recommended for cancer patients to relieve the nausea accompanying chemotherapy. Also, Cannabidiol, a non-psychoactive ingredient found in Cannabis, is used in treating Epilepsy; it helps to inhibit seizures. Other possible applications include appetite enhancer, muscle relaxant, and a tumor growth retardant.

Session 21: Cannabis

## THC Levels

- **Marijuana** – 14.8% (2019)
- **Hash** – 20-60% (2019)
- **Hash Oil** – 51.5% (2019)
- **Concentrates** – Vary

DRE 21-7

**Slide 7.**

*Potency, Purity and Dose:* Average THC concentration in Marijuana: Marijuana – 14.8% (2019); Hash – 30-60% (2019); Hash Oil – 51.5% (2019); Concentrates – Vary.



**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

**THC levels can vary greatly depending upon areas of the country.**

According to the *Drugs and Human Performance Fact Sheets*, “Recreational doses are highly variable and users often titer [titrate] their own dose. A single intake of smoke from a pipe or joint is called a hit (approximately 1/20th of a gram). The lower the potency or THC content, the more hits are needed to achieve the desired effects; 1-3 hits of high potency sinsemilla is typically enough to produce the desired effects. In terms of its psychoactive effect, a drop or two of hash oil on a cigarette is equal to a single “joint” of marijuana.”



**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

Session 21: Cannabis

### Methods of Administration

DRE 21-8

**Slide 8.**

Marijuana usually is smoked.

Marijuana, Hash, and Hash Oil also can be administered orally, for example, baked in cookies or brownies and eaten.

THC can also be absorbed through the skin using transdermal absorption patches or rub-on ointments.

Research related to passive inhalation of Marijuana smoke causing behavioral effects as well as measurable amounts in toxicology samples is mixed and is generally dependent on the amount of smoke inhaled.



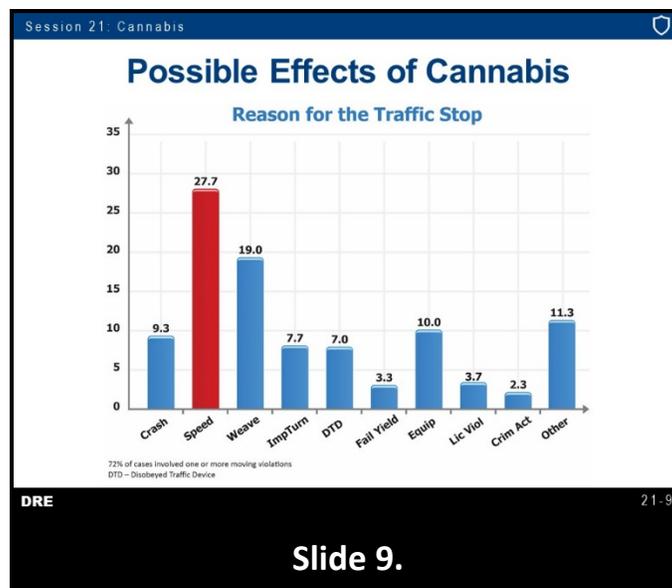
**Source:**

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

***Stress that participants should be familiar with all of the drug names in this category.***

***Solicit participants' comments and questions concerning this overview of Cannabis.***

## B. Possible Effects of Cannabis



Effects of marijuana can vary with the cannabis strain, dose, route of administration, and tolerance of the user. One major effect of Cannabis is it appears to interfere with a person's ability to divide attention. People under the influence of Cannabis have difficulty paying attention. In particular, they have difficulty dividing their attention. **Clarification: They have a difficult time dealing with more than one or two tasks at once.**



**Ask participants: “What are some of the things drivers have to do simultaneously?”**

**Steering, Operating the accelerator, Signaling, Observing other traffic, Recognizing traffic control devices, Shifting**

This can make them unsafe drivers since driving requires the ability to divide attention among many simultaneous tasks. Short attention span could be indicated by varying speeds, failing to maintain a single lane, and difficulty with depth perception. Loss of depth perception could be demonstrated by stopping improperly. Because Cannabis impairs attention, the Standardized Field Sobriety Tests (SFSTs) like Walk and Turn (WAT) and the One Leg Stand (OLS), as well as the Finger to Nose (FTN) are excellent tools for recognizing people under the influence of Cannabis. People under the influence of Cannabis may attend to one or a few of these driving tasks, but simply ignore the other tasks.



**In the “302 Cannabis case study”, one or more moving violations was the reason for the traffic stop in 72.3% of the cases. Moving violations included improper speed (27.7%), weaving (19.0%), crash (9.3%), improper turn (7.7%), disobeying traffic control devices (7.0%), and failure to yield (3.3%).**

**Source:**

Hartman, R. L., Richman, J. E., Hayes, C. E., & Huestis, M. A. (2016). Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. *Accident Analysis and Prevention*, 92, 219-229. Retrieved from <https://doi.org/10.1016/j.aap.2016.04.012>

According to a study by the British Medical Journal, even small amounts of Marijuana can double the chances of a driver’s involvement in a motor vehicle crash and larger doses can more than triple the risk.



**Source:**

BMJ-British Medical Journal. (2012, February 10). Cannabis use doubles chances of vehicle crash, review finds. *ScienceDaily*. Retrieved May 14, 2022, from [www.sciencedaily.com/releases/2012/02/120210111254.htm](http://www.sciencedaily.com/releases/2012/02/120210111254.htm)

According to the Columbia University School of Public Health, the risk of an automobile crash is almost 2.7 time higher among Marijuana users than non-users. The more Marijuana smoked in terms of frequency and potency, the greater likelihood of a crash.



**Source:**  
 Mu-Chen, L., Brady, J. E., DiMaggio, C. J., Lusardi, A. R., Tzong, K. Y., & Guohua, L. (2012, January). Marijuana Use and Motor Vehicle Crashes. *Epidemiologic Reviews*, 34(1), 65-72. Retrieved May 16, 2022, from <https://doi.org/10.1093/epirev/mxr017>

Pharmacological effects of Cannabis will vary with dose, route of administration, experience of user, and other factors. At recreational doses, effects include relaxation, euphoria, relaxed inhibitions, disoriented, altered time and distance perception, lack of concentration, impaired memory, incomplete thought process, drowsiness, sedation, and mood changes.



***Point out that effects can vary depending on the user's experience with the drug.***

Synthetic Cannabinoid products have many adverse effects that include panic attacks, agitation, anxiety, violent behavior, and seizures. Users report effects lasting 2 to 6 hours.



**Source:**  
 Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

***Point out this may become evident during the Modified Romberg Balance (MRB) and Finger to Nose (FTN) tests.***

***Solicit participants' comments or questions concerning possible effects of Cannabis.***

Session 21: Cannabis

## Cannabis Effects on Executive Function

- Attention
- Concentration
- Decision-making
- Impulsivity
- Inhibition



- Reaction Time
- Risk Taking
- Verbal Fluency
- Working Memory



DRE 21-10

## Slide 10.

According to *Julien's Primer of Drug Action*, the “best-known psychoactive effect of [cannabis] is that it produces memory impairment. [...] The ability to focus attention and filter out irrelevant information is disrupted. Marijuana users’ speech and presumably their underlying thought patterns become fragmented. Because of the distracting intrusions of other ideas, users forget what they or others have recently said. This difficulty in concentration impairs

performance on many cognitive tasks. Furthermore, marijuana may also reduce the motivation to perform well.”



**Source:**

Advokat, C. D., Comaty, J. E., & Julien, R. M. (2019). *Julien's Primer of Drug Action* (14th ed.). Macmillan Learning.

According to *An Evidence Based Review of Acute and Long-Term Effects of Cannabis Use on Executive Cognitive Functions*, “THC intoxication has been shown to impair cognitive function on a number of levels—from basic motor coordination to more complex tasks, such as the ability to plan, organize, solve problems, make decisions, remember, and control emotions and behavior. The higher level cognitive functions, termed executive functions, are critically important, particularly when dealing with novel situations in which decisions must be made. This array of higher cognitive functions are vital for overriding and inhibiting responses that otherwise would be automatic or require little thought, such as continued substance abuse.”

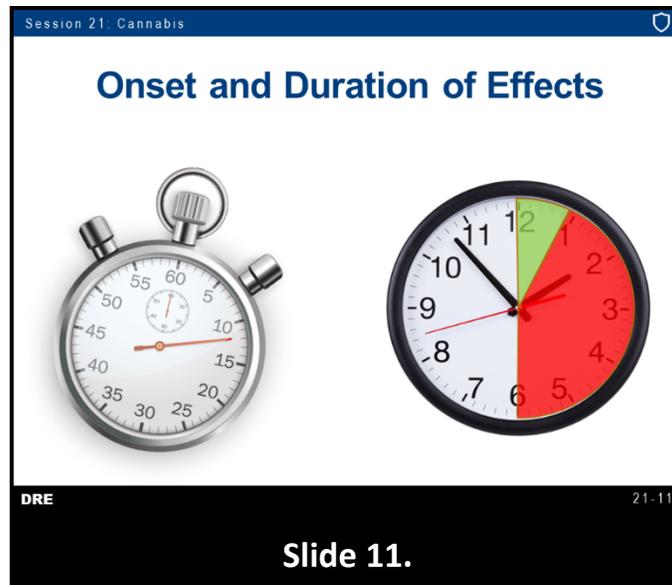
Some examples of executive function include: Attention - Selectively attending to one cue while ignoring others, including divided and sustained attention; Concentration - Intense mental application; Decision-making - Process of selecting a course of action; Impulsivity - Initiation of behavior without adequate forethought; Inhibition - Imposing restraint on behavior or another mental process; Reaction Time - Lapse of time between presentation of a stimulus and a response; Risk Taking - Engaging in behaviors that have the potential to be harmful or dangerous; Verbal Fluency - Generating multiple, verbal responses associated with specified conceptual category; and, Working Memory - Ability to hold and manipulate information and remember it after a short delay.



**Source:**

Crean, R. D., Crane, N. A., & Mason, B. J. (2011, March). An Evidence Based Review of Acute and Long-Term Effects of Cannabis Use on Executive Cognitive Functions. *Journal of Addiction Medicine*, 5(1), 1-8.  
doi:10.1097/ADM.0b013e31820c23fa

## C. Onset and Duration of Effects



Effects from smoking Cannabis are felt within minutes and reach their peak in 10-30 minutes after smoking. Typical Marijuana smokers experience a high that lasts approximately 3 hours. Most behavioral and physiological effects return to baseline within 3-4 hours after drug use, although some residual effects in specific behaviors can last up to 24 hours.



### **Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

A 1985 Stanford University study showed pilots had difficulty in holding patterns and in lining up with runways for up to 24 hours after using Marijuana.

In 1990, a second Stanford University study showed Marijuana-impaired performance at .25, 4, 8, and 24 hours after smoking. While 7 of the 9 pilots showed some degree of impairment at 24 hours after smoking Cannabis, only one reported any awareness of the drug's effects.

Generally, the person will feel "normal" within 3–4 hours after smoking Marijuana. The user may be impaired long after the euphoric feelings have ceased.

Edibles, however, take between 1-3 hours to reach their peak because food is absorbed into the bloodstream. Because it takes longer, the user may end up consuming larger amounts of the drug while thinking the drug isn't working. Edibles can last up to 8 hours.

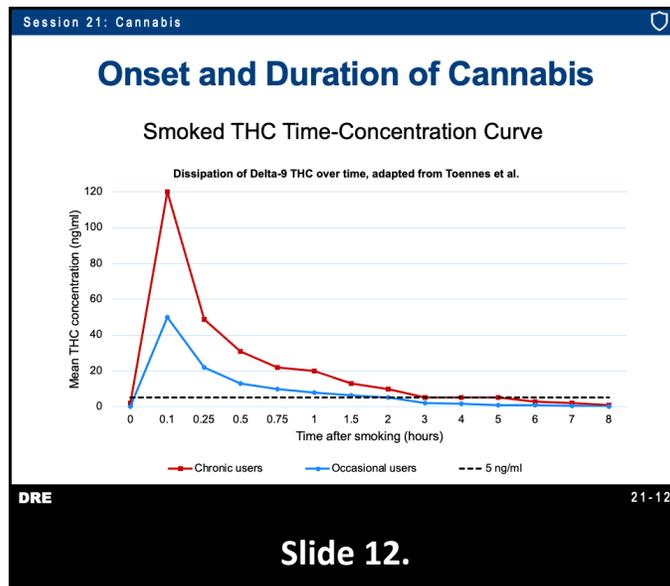


**Source:**

*Drug Alert: Marijuana Edibles.* (n.d.). Retrieved May 16, 2022, from Just Think Twice: <https://www.justthinktwice.gov/article/drug-alert-marijuana-edibles>

Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).

**Solicit participants' comments and questions concerning onset and duration factors.**



**Image Source:**

Toennes, S. W., Ramaekers, J. G., Theunissen, E. L., Moeller, M. R., & Kauert, G. F. (2008, September). Comparison of Cannabinoid Pharmacokinetic Properties in Occasional and Heavy Users Smoking a Marijuana or Placebo Joint. *Journal of Analytical Toxicology*, 32(7), 470-477. doi:10.1093/jat/32.7.470

Generally, THC levels in the blood will decline rapidly within 30 minutes of inhalation. THC concentrations fall to about 60% of their peak within 15 minutes after the end of smoking and to about 20% of their peak 30 minutes after the end of smoking.



**Point out the curve on the slide emphasizing the rapid increase and immediate decline in the THC level in the blood.**

However, blood and urine tests may continue to disclose evidence of the use of Cannabis long after the effects of Cannabis have disappeared. Blood tests may disclose Cannabis use for up to 3 days after smoking. This could vary depending upon the frequency of use.



**Source:**

Toennes, S. W., Ramaekers, J. G., Theunissen, E. L., Moeller, M. R., & Kauert, G. F. (2008, September). Comparison of Cannabinoid Pharmacokinetic Properties in Occasional and Heavy Uses Smoking a Marijuana or Placebo Joint. *Journal of Analytical Toxicology*, 32(7), 470-477. doi:10.1093/jat/32.7.470

Urine tests may indicate the presence of inactive THC metabolites for up to a month. This could vary depending upon the frequency of use.



***Inform participants it can take as long as four hours for THC to appear in the urine at sufficient levels to trigger a positive drug screen following smoking.***

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Session 21: Cannabis

## Metabolites of THC

- **Hydroxy THC**
  - Causes Impairment and Euphoria
- **Carboxy THC**
  - Not psychoactive

DRE 21-13

**Slide 13.**

A screenshot of a presentation slide titled "Metabolites of THC" from "Session 21: Cannabis". The slide lists two metabolites: Hydroxy THC, which causes impairment and euphoria, and Carboxy THC, which is not psychoactive. The slide is identified as "Slide 13" and includes the text "DRE 21-13" in the bottom right corner.

There are two important metabolites, or chemical byproducts, of THC.



***Write "Hydroxy THC: Causes Impairment and Euphoria" on the dry erase board or easel/easel pad.***

Hydroxy-THC (11-Hydroxy-THC) causes the user to feel euphoric. Hydroxy THC is the main psychoactive metabolite of THC formed in the body after Marijuana consumption. Carboxy THC may be found in the blood plasma for several days following Marijuana use. There is no evidence at this time that Carboxy THC is psychoactive. Cannabis is fat soluble (i.e., it dissolves easily into fatty tissue); therefore, it can remain for long periods in the brain tissue, which is about one-third fat. Cannabis principally is eliminated from the body in feces and urine.

## D. Overdose Signs and Symptoms

Session 21: Cannabis

### Overdose Signs and Symptoms

- Anxiety
- Excessive Vomiting
- Possible Psychosis



DRE 21-14

**Slide 14.**



**Ask participants: “Is there danger of death from Cannabis overdose?”**

**Answer: It is not likely there is a direct risk of death from overdose; however, persons impaired by Cannabis may behave in foolishly dangerous ways and become injured or killed as a result.**

Excessive or long-term use of Marijuana can have very undesirable consequences. Marijuana has been observed to produce sharp personality changes, especially in adolescent users.

Overdose signs and symptoms can include anxiety, panic attacks, extreme confusion and memory problems, hallucinations, and possible psychosis. Cannabinoid Hyperemesis Syndrome may include excessive vomiting, compulsive bathing, abdominal pain, nausea, and excessive thirst.



**Source:**

Price, S. L., Fisher, C., Kumar, R., & Hilgerson, A. (2011, March). Cannabinoid Hyperemesis Syndrome as the Underlying Cause of Interactable Nausea and Vomiting. *Journal of Osteopathic Medicine*, 111(3), 166-169. Retrieved May 16, 2022, from <https://doi.org/10.7556/jaoa.2011.111.3.166>

Session 21: Cannabis

## Long Term Effects

- Acute anxiety attacks
- Chronic Bronchitis
- Chronic reduction of attention span
- Lowering of Testosterone
- Lung damage
- Possible birth defects

DRE 21-15

**Slide 15.**

Long term effects include lung damage, chronic Bronchitis, lowering of Testosterone (male sex hormone), possible birth defects, still births and infant deaths, acute anxiety attacks, and chronic reduction of attention span.

Research indicates life threatening overdoses rarely if ever occur.

Withdrawal – is similar to alcohol dependence withdrawal.

Physical dependence can occur with chronic use.



***Solicit participants' questions concerning signs and symptoms of long term Cannabis use.***

## E. Expected Results of the Evaluation

Session 21: Cannabis

### Cannabis Symptomatology Chart

HGN	None
VGN	None
LOC	Present
Pupil Size	Dilated <sup>(6)</sup>
Reaction to Light	Normal
Pulse Rate	Up
Blood Pressure	Up
Temperature	Normal
Muscle Tone	Normal

<sup>(6)</sup> Possibly normal

DRE 21-16

**Slide 16.**

*Observable Evidence of Impairment: Major Indicators:* Neither Horizontal Gaze Nystagmus (HGN) or Vertical Gaze Nystagmus (VGN) will generally be present.



***Remind participants Marijuana users often drink alcohol in conjunction with their smoking and others often lace their Marijuana with PCP. Either combination would cause nystagmus.***

Lack of Convergence (LOC) will generally be present.

Performance on the Modified Romberg Balance (MRB), WAT, OLS, and FTN tests will generally be impaired.



**Source:**

Hartman, R. L., Richman, J. E., Hayes, C. E., & Huestis, M. A. (2016). Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. *Accident Analysis and Prevention*, 92, 219-229. Retrieved from <https://doi.org/10.1016/j.aap.2016.04.012>

***Remind participants to be especially alert for evidence of the subject's distorted perception of time when performing the MRB test.***

***Point out, with subjects under the influence of Cannabis, poor performance on these tests usually will result principally from their inability to divide attention, and less so from impaired coordination or balance.***

*Vital Signs:* Pulse will generally be elevated; Blood pressure will generally be elevated; Body temperature will generally be normal.

Muscle tone will generally be normal.

Pupil size will generally be dilated or possibly normal (within DRE average ranges). The content and potency could affect pupil size.

Pupil reaction to light will generally be normal.

Although “Rebound Dilation” is possible in any drug that causes pupil dilation, DREs frequently report it occurring in subjects under the influence of Cannabis. Clarification: “Rebound Dilation” A period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and the range between minimum and maximum is equal to or greater than 1mm and does not return to its original constricted size. In a study analyzing 302 Cannabis DRE evaluations, Rebound Dilation was present in 204 of the 302 cases (70.9%).



**Source:**

Hartman, R. L., Richman, J. E., Hayes, C. E., & Huestis, M. A. (2016). Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. *Accident Analysis and Prevention*, 92, 219-229. Retrieved from <https://doi.org/10.1016/j.aap.2016.04.012>

***Draw an eye on the balloon and squeeze it to demonstrate Rebound Dilation.***

***Remind participants the final size determination being estimated is at the end of the 15 second time period when the light from the pen-light is directed into the eye.***



***Remind participants the final size determination being estimated is at the end of the 15 second time period when the light from the pen-light is directed into the eye.***



Session 21: Cannabis

## Evaluation of Subjects Under the Influence of Cannabis

**General Indicators:**

- Bloodshot eyes
- Body tremors
- Disoriented
- Dry mouth and throat
- Euphoria



DRE 19-17

**Slide 17.**

*General Indicators:*

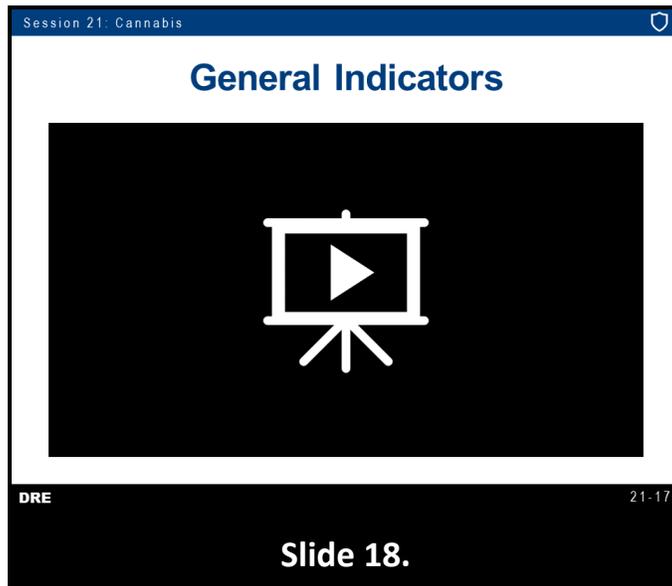
- Bloodshot eyes



***Blood vessels of the sclera (the “white” of the eyes) typically dilate from Cannabis use which results in red, bloodshot eyes in the user. The reddening or bloodshot appearance is typically very pronounced.***

***Point out this should not be confused with conjunctivitis which is a disease of the eye. The vasodilation is the primary cause of the reddening of the eyes not the Cannabis smoke.***

- Body tremors
- Disoriented
- Drowsiness
- Dry mouth and throat
- Euphoria



- Eyelid tremors



**Show video of Eyelid Tremors**

- Greenish coating on the tongue



***Mention occasionally some users of Marijuana have displayed a green coating on their tongue after recent use. However, this does not occur with all users.***

***A greenish coating on the tongue has been documented in two peer-reviewed articles.***

**Sources:**

Kosnoski, E. M., Yolton, R. L., Citek, K., Hayes, C. E., & Evans, R. B. (1998). The Drug Evaluation Classification Program: using ocular and other signs to detect drug intoxication. *Journal of American Optometric Association*, 69(4), 211-227.

Declues, K., Perez, S., & Figueroa, A. (2018). A Two-Year Study of  $\Delta 9$  Tetrahydrocannabinol Concentrations in Drivers; Part 2: Physiological Signs on Drug Recognition Expert (DRE) and non-DRE Examinations. *Journal of forensic sciences*, 63(2), 583-587. Retrieved from <https://doi.org/10.1111/1556-4029.13550>

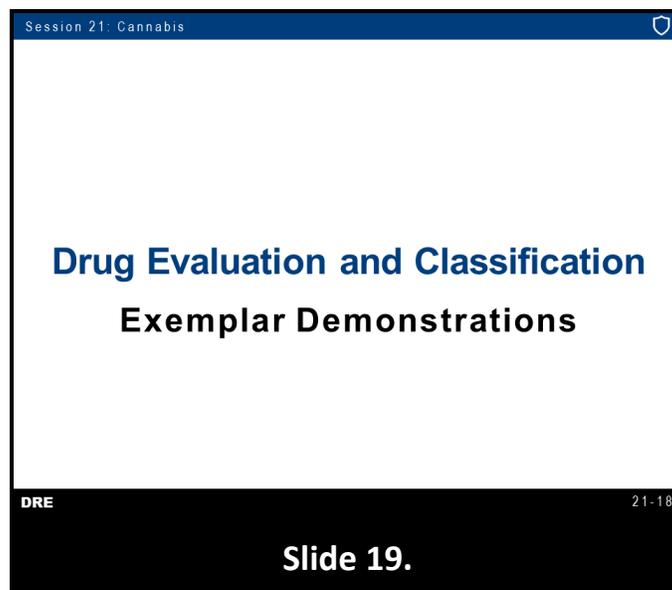
- Impaired memory
- Impaired perception of time and distance
- Incomplete verbal responses
- Increased appetite
- Lack of concentration
- Mood changes
- Odor of Marijuana
- Panic reactions
- Paranoia
- Relaxed inhibitions
- Sedation



***For additional information refer the participants to:***

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

## F. Review of the DEC Program Exemplars



***Refer participants to the exemplars found at the end of Session 21 of their participant guide.***

***Point out the exemplars are examples and serve as a guide.***

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

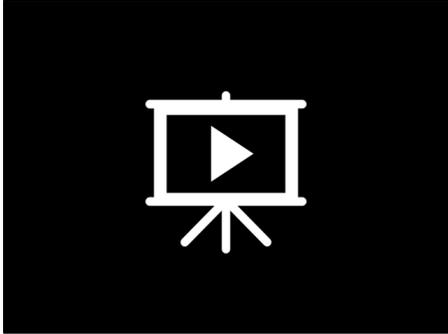


**Relate the items on the exemplars to the Cannabis Symptomatology Chart.**



Session 21: Cannabis

## Cannabis



DRE 21-19

**Slide 20.**



**VIDEO DEMONSTRATION:** *Click video to begin.*

*Point out that some portions of the video were sped up, i.e., the 90 seconds in the darkroom, for time restriction purposes.*

*Show video example of subject under the influence of Cannabis. (Approximately 24 minutes).*

Session 21: Cannabis

## Questions?

DRE 21-20

**Slide 21.**



*Solicit participants' comments and questions concerning expected results of the evaluation.*

Session 21: Cannabis

### Test Your Knowledge

1. What is the active ingredient in Cannabis?
2. Why are the Walk and Turn and the One Leg Stand tests excellent tools for recognizing persons under the influence of Cannabis?
3. What is Marinol?
4. What is Sinsemilla?
5. Name two important metabolites of THC and describe how they affect the duration and perception of the effects of Cannabis.

DRE 21-22

**Slide 22.**

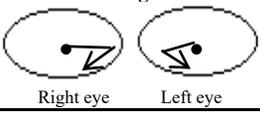
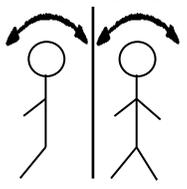
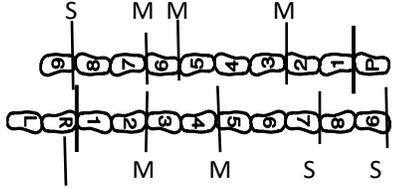
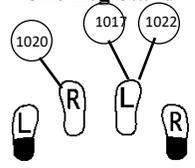
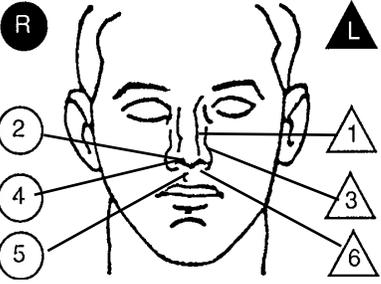
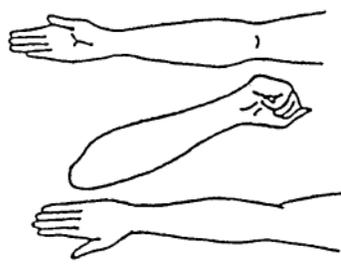
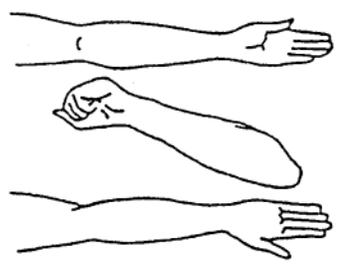
### Test Your Knowledge

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3. What is Marinol?
4. What is Sinsemilla?
5. Name two important metabolites of THC and describe how they affect the duration and perception of the effects of Cannabis.



- 1. Delta 9 THC**
  - 2. Cannabis appears to interfere with a person's ability or willingness to pay attention. People under the influence of Marijuana do not divide their attention very well. Walk and Turn and the One Leg Stand tests are divided attention tests.**
  - 3. A synthetic form of THC not derived from Cannabis plants. It is a prescriptive drug sometimes administered to cancer patients to suppress nausea that may accompany chemotherapy. Also known as Dronabinol.**
  - 4. The unpollinated female Cannabis plant, having a relatively high concentration of THC.**
  - 5. Hydroxy THC – causes the user to feel euphoric so they are aware of the effects. Carboxy THC – there is no evidence at this time this metabolite is psychoactive.**
-

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Chad Streiff</b>		DRE # 27178	Rolling Log # 22-012-0097	Evaluator's Agency Eden Prairie PD	Case# (Session XXI - #1)
Recorder/Witness <b>Sgt. Tyler Milless, Minnesota SP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Minnesota State Patrol</b>	
Arrestee's Name (Last, First, Middle) <b>Blunt, Mary Jane</b>		Date of Birth 10/20/1990	Sex F	Race W	Arresting Officer (Name, ID#) <b>Trooper Jennifer Barron #30946</b>
Date Examined / Time / Location <b>04/20/22 / 1753 / Hennepin CO Jail</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>159305</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Tpr. Bormann</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Potato chips &amp; Funyuns</b>	When? <b>About 5 pm</b>	What have you been drinking? How much? <b>Nothing</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>7 PM / 1755</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 6 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Just marijuana"</b>		Attitude: <b>Cooperative, Carefree</b>		Coordination: <b>Unsteady</b>	
Speech: <b>Slow, Thick</b>		Breath odor: <b>Marijuana</b>		Face: <b>Normal</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy			
Pulse/Time 1. <u>104</u> / <u>1805</u> 2. <u>102</u> / <u>1818</u> 3. <u>102</u> / <u>1832</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye <b>None</b>	Right Eye <b>None</b>	Convergence  Right eye    Left eye	
<b>Modified Romberg Balance</b> Approx. 3" 3"    Approx. 3" 3"  Circular sway. Eyelid tremors	<b>Walk and Turn Test</b>  Laughing out loud. Swaying. Leg tremors throughout.		Cannot keep balance Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken	25/30 <b>One Leg Stand</b> 26/30  L    R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down  Laughing. Leg tremors	
<b>Time Estimation</b> <u>39</u> estimated as 30 seconds	Describe turn <b>Stopped. Asked what to do.</b>		Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Open toe sandals</b>
<b>Finger to Nose</b> (Draw lines to spots touched)  Used pad of finger on 5 & 6. Eyelid tremors. Laughing during test		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>
		Left Eye	5.5	9.0	5.0 - 6.5
		Right Eye	5.5	9.0	5.0 - 6.5
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Reaction to Light: <b>Normal</b>
		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 	
		<b>Nothing observed</b>			
Muscle Tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		What drugs or medications have you been using? <b>"I smoked a little marijuana. What's the big deal?"</b>		How much? <b>"Shared a baggie with friends"</b>	Time of use? <b>Around 3 pm</b>
Date / Time of arrest: <b>04/20/22 1620</b>		Time DRE was notified: <b>1720</b>		Evaluation start time: <b>1753</b>	Evaluation completion time: <b>1855</b>
DRE/Officer's Signature: <b>Chad Streiff</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input checked="" type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Blunt, Mary Jane**

1. **Location:** The evaluation was conducted in the booking area at the Hennepin County Jail. The area is well illuminated and has a smooth concrete floor with no obstructions. The darkroom examinations were conducted in the adjacent staff restroom.
2. **Witnesses:** Sergeant Tyler Millness with the Minnesota SP was present and recorded the evaluation. The arresting officer, Trooper Jennifer Barron of the Minnesota SP observed the darkroom examinations only.
3. **Breath Alcohol Test:** A breath test had been requested and was administered to the suspect by Trooper Barron prior to my arrival. The result was a 0.00 BAC.
4. **Notification and Interview of the Arresting Officer:** I was on-duty and participating in a special "4/20" impaired driving emphasis patrol. At approximately 1720 hours, I was requested to assist Trooper Barron with a drug influence evaluation at the Hennepin County Jail. Once I contacted Trooper Barron, she advised me that she had arrested the suspect for DUI and had obtained a .00 breath test result. The breath test was inconsistent with the suspect's level of impairment and she was showing indicators of possible cannabis impairment. According to Trooper Barron, she observed the suspect's vehicle traveling westbound on SR 55 near Penn Avenue and her vehicle was drifting in and out of the outside traffic lane. In addition, she was traveling 20 mph over the posted speed limit. After contacting the suspect, Trooper Barron observed that she seemed unconcerned about her driving and told her she was "a little tired, but everything is cool." Trooper Barron noted that she had bloodshot eyes and droopy eyelids. She also detected an odor of burnt marijuana coming from inside the suspect's vehicle. After determining the suspect did not have any medical issues or injuries, Trooper Barron requested her to perform SFST's, which she agreed to do but several times pointed out to Trooper Barron that she was not drunk. Trooper Barron administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests to the suspect. According to Trooper Barron, she did not observe any clues of HGN, but noted that on the W&T test the suspect had difficulty maintaining her balance. On the OLS test, she again had difficulty with her balance and several times started laughing while attempting the test. Trooper Barron also administered the Modified Romberg Balance (MRB) and Finger-to-Nose (FTN) tests and the suspect had difficulty maintaining her balance and was not able to touch her nose as directed. Trooper Barron also observed eyelid and body tremors when the suspect was attempting the MRB and FTN tests. After placing the suspect under arrest for DUI and securing her vehicle, Trooper Barron observed a glass pipe between the front seats of her vehicle. The pipe was warm to the touch and smelled of marijuana. After advising the suspect of her Miranda warnings, she was asked about the pipe, and she indicated it was hers. She told Trooper Barron that she had been driving a long way, coming from the White Bear Lake area where she was celebrating the day with friends. When asked what she and her friends were celebrating, the suspect stated, "Come on, you know, 4/20". Trooper Barron is a DRE and through her training and suspecting possible Cannabis impairment and having received training regarding the rapid dissipation of THC in a person's blood, she arranged for a phlebotomist to meet her at the Hennepin County Jail. After arriving at the jail and obtaining a 0.00 BAC breath test result, a blood sample was obtained prior to the start of my evaluation.
5. **Initial Observation of the Suspect:** I first observed the suspect in the booking area at the Hennepin County Jail. I confirmed that she had been advised of her Miranda warnings and acknowledged that she understood them. I requested that she participate in a drug evaluation to which she replied, "Okay, but they already took my blood" and pointed to her arm. After some discussion about the observations made by Trooper Barron, and the drug evaluation process, she agreed to participate in the evaluation. She was asked a few initial questions and preliminary observations were made.

She stated the present time was 7:00 pm and the actual time was 5:55 pm (1755 hours). She stated she last slept last night for about 6 hours. When asked about drinking any alcoholic beverages she replied, "Only water". When asked about taking any medication or drugs, she replied, "Just marijuana". Her attitude was cooperative and carefree. At times, she was laughing and seemed unconcerned about her circumstances. I observed that she had red bloodshot eyes and droopy eyelids. Her pupils were equal in size but appeared dilated. An initial check for HGN did not show any clues of nystagmus. She was wearing cut-off blue jean shorts, a green tee-shirt, and sandals.

6. **Medical Problems and Treatment:** The suspect indicated she was not sick or injured and claimed to be an avid hiker. She stated she is not diabetic, not epileptic and does not take insulin. She also advised that she was not under the care of a doctor or dentist and did not have any injuries or other physical conditions that would prevent her from doing the tests.
7. **Psychophysical Indicators of Impairment:** During the evaluation, the suspect was requested to perform four psychophysical tests. Each of the tests were explained and demonstrated to her prior to attempting them. After each demonstration, she confirmed that she understood the instructions. She was given the opportunity to remove her sandals for the tests, but she elected to keep them on. The following psychophysical tests were administered to the suspect:

**Modified Romberg Balance:** The suspect was able to remain in the instructional position while the instructions for the test were given. During this test, she had an approximate three-inch circular sway. Pronounced eyelid tremors were present. Her time estimation was slow, estimating 30 seconds in 39 seconds. When asked how she estimated the 30 seconds, she stated, "I was just counting in my head and kinda lost track" and then she laughed out loud.

**Walk and Turn:** For this test, a line in the concrete floor was used. During the instructions stage, she lost her balance moving her right foot off the line to regain her balance. She attempted to start the test twice before being instructed to do so. During the walking stage, she missed touching heel to toe twice at steps 3 and 5. She stopped while walking at steps 7 and 9. She also used her arms to balance once during the first nine steps. At the end of the first nine steps, she stopped and asked what to do, claiming she had forgot. I instructed her again on how to make the turn and she continued with the test. On the second nine steps she missed touching heel to toe three times at steps 3, 6 and 7. She also stopped while walking once at step 8 and used her arms to balance twice. While attempting the test, several times she laughed out loud. Leg tremors were present as she attempted the test.

**One Leg Stand:** This test was performed in two parts. While raising her right foot and standing on her left foot, she swayed noticeably and used her arms for balance. She lost her balance and put her foot down at her count of 1,020. She began laughing during the test and leg tremors were observed. She counted to 1,025 when 30 seconds had elapsed.

When raising her left foot and standing on her right foot, she again swayed noticeably and used her arms for balance three times. She put her foot down at her counts of 1,017 and 1,022. She counted to 1,026 when 30 seconds had elapsed. When asked about her laughing during the test, she stated, "These tests are stupid, they make me laugh."

**Finger to Nose:** For this test, the suspect missed touching the tip of her nose with the tip of her index finger as instructed on four of the six attempts. On attempt #1 she touched the left side of her nose below her left eye. On attempt #2, she touched the tip of her nose as directed. On attempt #3, she touched the side of her nose. On attempt #4, she touched the tip of her nose as directed. She touched below her nose on attempts #5 and #6 using the pads of her fingers. She was slow to react to which hand to use on all the commands. She again laughed several times while completing the test. Eyelid tremors were present during the test.

**8. Clinical Indicators of Impairment:**

Eye Signs: Neither HGN nor VGN were observed. The suspect's pupil sizes were estimated in three lighting conditions. In Room Light, her pupils were estimated at 5.5 mm in both eyes and 9.0 mm in both eyes in Near Total Darkness. In Direct Light, she exhibited Rebound Dilation with her pupil sizes ranging from 5.0 mm and then expanding to 6.5 mm in each eye. All three estimates were above the DRE average ranges for the lighting conditions. Her pupil reaction to light was normal. She was not able to converge her eyes as directed with both eyes moving in towards the center and then moving downward and back toward the center. The test was conducted twice, and the same results occurred both times.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation. All three were above the DRE average range at 104, 102, and 102 beats per minute. Her systolic and diastolic blood pressures were also above the DRE average ranges, measured at 154/96 mm/hg. Her body temperature was checked at 98.2 degrees Fahrenheit, which was within the DRE average range. Her muscle tone was normal.

9. **Signs of Ingestion:** The suspect's nasal area was checked and appeared normal. Her oral cavity was checked and showed a greenish colored coating on the back of her tongue. When asked about the greenish color on her tongue, she replied, "I don't know. You tell me." She was checked for injection sites and none were found.
10. **Suspect's Statements:** When first asked about what drugs she had used, she stated, "Just marijuana". She later freely described smoking marijuana with friends as they celebrated "4/20" while at White Bear Lake. When asked how much marijuana she had smoked, she stated, "I smoked a little marijuana. What's the big deal." Several times she stated that it was okay to drive after smoking marijuana. The suspect did not report any other type of drug use.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of Cannabis and unable to operate a vehicle safely.
12. **Toxicological Sample:** As previously described, Trooper Barron suspected cannabis impairment and applied for a search warrant for the suspect's blood soon after her arrest. After obtaining the search warrant, Sergeant Tyler Millness of the Minnesota State Patrol, who is a certified phlebotomist, drew a blood sample from the suspect at 1725 hours. The blood sample was entered into evidence by Trooper Barron and will be forwarded to the Crime Lab for analysis.
13. **Miscellaneous:** Refer to Trooper Barron's arrest report for additional details regarding the arrest and blood draw.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Deputy Jason Moser</b>		DRE # <b>19172</b>	Rolling Log # <b>22-011-0077</b>	Evaluator's Agency <b>Washington County S.O.</b>	Case# <b>(Session XXI - #2)</b>	
Recorder/Witness <b>Sr. Tpr. Ryan Clarke, Oregon State Police</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Oregon State Police</b>		
Arrestee's Name (Last, First, Middle) <b>Toker, Bud A.</b>		Date of Birth <b>02/21/1988</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sr. Trooper Dessa DeForest #17865</b>	
Date Examined / Time / Location <b>09/07/22 / 1752 / Portland OSP Office</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>87014</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by: Sr. Tpr. DeForest	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Burger &amp; chips</b>	When? <b>Around noon</b>	What have you been drinking? How much? <b>Big Gulp A couple</b>	Time of last drink? <b>15 min ago</b>	
Time now/ Actual <b>About 5 pm / 1758</b>	When did you last sleep? <b>Last night</b>	How long? <b>7 or 8 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"I just smoke pot"</b>			Attitude: <b>Cooperative, Care-free</b>		Coordination: <b>Slow, Swaying, Unsteady</b>	
Speech: <b>Slow, Thick, Slurred</b>		Breath odor: <b>Marijuana</b>		Face: <b>Normal</b>		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy				
Pulse/Time 1. <u>94</u> / <u>1812</u> 2. <u>94</u> / <u>1828</u> 3. <u>92</u> / <u>1840</u>	HGN Lack of Smooth Pursuit: <b>None</b> Maximum Deviation: <b>None</b> Angle of Onset: <b>None</b>	Left Eye <b>None</b>	Right Eye <b>None</b>	Convergence  Right eye: <b>None</b> Left eye: <b>None</b>	24/30 <b>One Leg Stand</b> 25/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down  <b>Leg tremors</b>	
Modified Romberg Balance Approx. 2" 2" 2" 2"  Circular sway & Eyelid tremors	Walk and Turn Test  Leg tremors. Walked slowly. Failed to count steps out loud.	Cannot keep balance: <b>1</b> Starts too soon: _____ Stops walking: _____ Misses heel-toe: <b>2</b> <b>1</b> Steps off line: <b>1</b> <b>1</b> Uses arms: _____ Actual steps taken: <b>9</b> <b>9</b>				
Time Estimation <b>24</b> estimated as 30 seconds	Describe turn <b>Stopped. Walked in a circle.</b>	Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Slip-on boots</b>		
Finger to Nose (Draw lines to spots touched)  Eyelid tremors. Pads of fingers on 2, 4 & 5		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area: <b>Clear</b>
		Left Eye	7.0	9.0	5.5 - 7.0	Oral cavity: <b>Green coating on tongue &amp; Dry mouth</b>
		Right Eye	7.0	9.0	5.5 - 7.0	Reaction to Light: <b>Normal</b>
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
		RIGHT ARM 		LEFT ARM 		
		Nothing observed				
Muscle Tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Blood Pressure <b>168 / 92</b>		Temperature <b>98.4 °F</b>		
What drugs or medications have you been using? <b>"I smoke pot. I'm not going to lie to you."</b>		How much? <b>"A good-sized bowl"</b>		Time of use? <b>"About 3 pm"</b>	Where were the drugs used? (Location) <b>"Rest area south of Portland"</b>	
Date / Time of arrest: <b>09/07/22 1622</b>	Time DRE was notified: <b>1720</b>	Evaluation start time: <b>1752</b>	Evaluation completion time: <b>1850</b>		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>Jason Moser</b>		Reviewed/approved by / date:			DRE#	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Toker, Bud A.**

- 1. Location:** The drug evaluation was conducted in the DUI processing area at the Portland Oregon State Police Area Command office. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting for conducting a drug evaluation and both have a smooth tile floor.
- 2. Witnesses:** The evaluation was witnessed and recorded by Sr. Trooper Ryan Clarke of the Oregon State Police. The arresting officer, Sr. Trooper Dessa DeForest of the Oregon State Police witnessed the psychophysical tests.
- 3. Breath Alcohol Concentration:** Sr. Trooper DeForest had administered the breath test to the suspect prior to my arriving at the Portland OSP Area Command Office. Using the Intoxilyzer 8000, Serial #87104, she obtained a 0.00% BAC result.
- 4. Notification and Interview of the Arresting Officer:** I was on-duty and requested to contact Sr. Trooper DeForest at the Portland Area Command office for a drug evaluation. When contacted, it was determined that the suspect had been reported as a possible impaired driver traveling northbound on I-205. It was reported that the suspect's vehicle could not maintain a single lane of travel and was driving over the speed limit. Senior Trooper DeForest who was working a Labor Day holiday enforcement saturation patrol, located the suspect's vehicle on I-205 near the Oregon City exit. She observed the suspect's vehicle cross over the painted fog line two times and then drift into the middle lane of I-205. She activated her overhead lights and stopped the suspect's vehicle as it turned onto the Oregon City exit. When contacted, Sr. Trooper DeForest noted that the suspect appeared relaxed and seemed unconcerned about being stopped. She also noted that the suspect had difficulty retrieving his operator's license, vehicle registration and proof of insurance. According to Sr. Trooper DeForest, the suspect had red, bloodshot eyes, and his pupils appeared to be dilated. He also had difficulty with his balance and used the side of his vehicle for support when he exited his vehicle. After determining that the suspect was not injured and had no physical problems, Sr. Trooper DeForest administered SFSTs. According to Sr. Trooper DeForest, who is a certified DRE, the suspect had difficulty performing and completing the SFSTs as directed. No clues of Horizontal Gaze Nystagmus (HGN) were observed. However, four clues on the Walk and Turn (W&T) test and two clues on the One Leg Stand (OLS) test were observed. Sr. Trooper DeForest also had the suspect complete several other tests which also revealed poor balance and coordination. She arrested the suspect for DUII and transported him to the Portland Area Command Office for processing. After obtaining a 0.00 BAC, she requested the assistance of a DRE to continue the investigation so that she could respond to a crash on U.S. Highway 26.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the processing area at the Portland Area Command Office. He appeared to be calm, relaxed, and carefree acting. His eyes were bloodshot and watery, and his pupils appeared to be dilated. When he stood, his movements were slow and deliberate. Several times he used the interview table to steady himself. I noted that he was wearing brown pants, a black Bob Marley tee-shirt and slip-on brown boots. He was also wearing a cap with the words "Wacky Weed Dispensary" on the front. I introduced myself and advised him that I had been requested to conduct a drug influence evaluation. The suspect seemed unconcerned and said, "Sure, whatever dude."
- 6. Medical Problems and Treatment:** The suspect indicated he was not sick or injured and had no conditions that would interfere with his ability to do the evaluation. He told me he was not under the care of a doctor or dentist. When asked if he was taking any medication or drugs, he replied, "I just smoke pot". He further stated that he was not taking any other medication or drugs and had not been consuming any alcoholic beverages.
- 7. Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, I gave the suspect verbal instructions and demonstrated each test. I confirmed he understood the instructions prior to him attempting each test. The following psychophysical tests were administered:

**Modified Romberg Balance:** During this test, the suspect had an approximate two-inch circular sway. His time estimation was fast, estimating 30 seconds in 24 seconds. When asked how he estimated the 30 seconds, he stated, "I started out one Mississippi, two Mississippi, but I lost my concentration." Eyelid tremors were present during the entire test.

**Walk and Turn:** For this test, a line in the tile floor was used. The suspect lost his balance once during the instructions stage stepping out of position with his right foot. After starting the walking stage, the suspect missed heel to toe between steps two and three. He stepped off the line to his right on step four and then stopped while walking at step six. He also missed touching heel to toe between steps eight and nine. When he reached step nine, he stopped and appeared to be confused on what to do next. When reminded, he walked around in a circle instead of making the turn as instructed. During the second nine steps the suspect stopped after step one and asked, "How many steps?". When reminded to take nine steps and count his steps out loud, he continued walking and stepped off the line at step 5 and missed touching heel to toe between steps seven and eight. Even after reminding him to count his steps out loud, he failed to count as directed during the second nine steps. Leg tremors were observed as he attempted the test.

**One Leg Stand:** While standing on his left foot and extending his right foot, the suspect swayed, used his arms for balance, and put his foot down at his count of 1,006. He counted slowly counting to 1,024 in the 30 second time-period. While standing on his right foot and extending his left foot, he swayed while balancing, used his arms for balance three times, and put his foot down at his counts of 1,009 and 1,022. He again counted slowly, counting to 1,025 in 30 seconds. Leg tremors were observed during the test.

**Finger to Nose:** During this test, the suspect did not touch the tip of his nose with the tip of his index finger on all six attempts, touching in the following manner: #1 - bridge of the nose; #2 - side of the nose; #3 - bridge of the nose; #4 - right side of the nose; #5 - outside edge of the right nostril; #6 - bridge of the nose. He also used the pads of his fingers on attempts 2, 4 and 5. Eyelid tremors were present during the test.

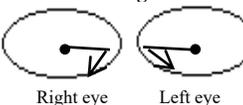
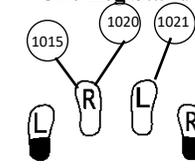
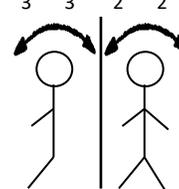
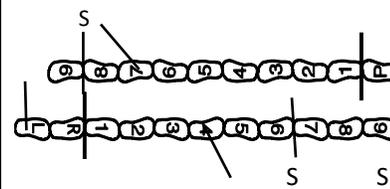
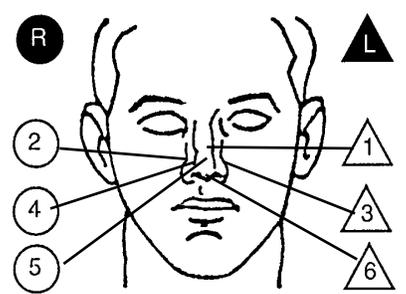
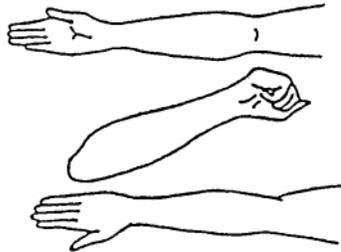
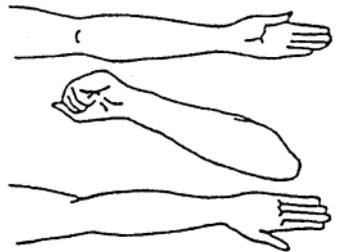
## **8. Clinical Indicators of Impairment:**

Eye Signs: Neither HGN nor VGN were present. The suspect had watery, bloodshot eyes. A lack of convergence (LOC) was present. The LOC test was conducted twice with the same results. His pupils were dilated in all three lighting conditions estimated at 7.0 mm in both eyes in Room Light and 9.0 mm in both eyes in Near Total Darkness. Rebound Dilation was present in Direct Light, with his pupil size dilating from 5.5 mm to 7.0 mm in both eyes. His pupil reaction to light was normal and he had droopy eyelids.

Vital Signs: The suspect's pulse rates were checked three times and were 94 beats per minute (bpm), 94 bpm, and 92 bpm. All were above the DRE average ranges. His B/P of 168/92 mm Hg was above the DRE average ranges. His body temperature of 98.4 was within DRE average ranges. His muscle tone was normal.

9. **Signs of Ingestion:** The suspect had a greenish coating on his tongue. When asked about it, he stated, "Probably from the pot I smoked" then laughed out loud. No injection indicators were observed.
10. **Suspect's Statements:** The suspect admitted smoking marijuana about 3 pm. When asked how much he had smoked, he stated, "A good-sized bowl." When asked if he felt the effects of the marijuana, he said, "It relaxed me. It was good weed." When asked how often he smokes marijuana, he replied, "Anytime I can dude."
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of Cannabis and is unable to operate a vehicle safely.
12. **Toxicological Sample:** A urine sample was collected from the suspect and will be forwarded to the Oregon State Police Crime Laboratory for analysis.
13. **Miscellaneous:** Refer to Sr. Trooper DeForest's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluators <b>Deputy Scott Newell</b>		DRE # <b>17789</b>	Rolling Log # <b>22-010-0048</b>	Evaluator's Agency <b>Yellowstone County S.O.</b>	Case# <b>(Session XX1 - #3)</b>
Recorder/Witness <b>Lt. Robert Lester Yellowstone Co. S.O.</b>		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency <b>Yellowstone National Park Police</b>	
Arrestee's Name (Last, First, Middle) <b>Duby, Sharon A.</b>		Date of Birth <b>12/20/1995</b>	Sex <b>F</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Ranger Arrah LaBolle #33188</b>
Date Examined / Time / Location <b>07/18/22 / 1820 / Red Lodge PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>313305</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Ranger LaBolle</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Sandwich &amp; chips</b>	When? <b>About 6 pm</b>	What have you been drinking? How much? <b>Energy drink ( 1 can ) 4 pm</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>About 5 pm / 1824</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 7 or 8 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"Just medical marijuana"</b>		Attitude: <b>Cooperative, Relaxed</b>		Coordination: <b>Slow, Unsteady</b>	
Speech: <b>Slow, Thick</b>		Breath odor: <b>Marijuana</b>		Face: <b>Normal</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy			
Pulse/Time 1. <u>96</u> / <u>1830</u> 2. <u>96</u> / <u>1846</u> 3. <u>94</u> / <u>1915</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye Left eye	25/30 <b>One Leg Stand</b> 24/30 
<b>Modified Romberg Balance</b> Approx. 3" 3" 2" 2"  Eyelid Tremors	<b>Walk and Turn Test</b>  Slow movements. Laughing at times. Leg tremors.		Cannot keep balance <u>1</u> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Uses arms _____ Actual steps taken <u>9</u>	1st Nine 2 2 2 2 2 2 2 2	2nd Nine 1 1 1 1 1 1 1 1
<b>Time Estimation</b> <u>41</u> estimated as 30 seconds	Describe turn - Stopped. Walked around in circle		Cannot do test (explain) N/A		Type of footwear: <b>Lace-up hiking boots</b>
<b>Finger to Nose</b> (Draw lines to spots touched)  Eyelid tremors. Used pads of fingers on 1, 2, 4 & 5		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>
		Left Eye	6.0	8.5	6.0 - 7.5
		Right Eye	6.0	8.5	6.0 - 7.5
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Reaction to Light: <b>Normal</b>
		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 	
		Nothing observed			
Blood Pressure <b>170 / 94</b>	Temperature <b>98.0 °F</b>		Muscle Tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		
Comments: What drugs or medications have you been using? <b>"I use medical marijuana"</b>		How much? <b>"About 2 or 3 grams today"</b>	Time of use? <b>About 2 hours ago</b>	Where were the drugs used? (Location) <b>In car while in the park</b>	
Date / Time of arrest: <b>07/18/22 1725</b>	Time DRE was notified: <b>1750</b>	Evaluation start time: <b>1820</b>	Evaluation completion time: <b>1930</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>Scott Newell</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Inhalant <input checked="" type="checkbox"/> Cannabis

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Duby, Sharon A.**

- Location:** The drug evaluation was conducted in the interview room at the Red Lodge Police Department, Red Lodge, Montana. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting and have a smooth tile flooring with no obstructions.
- Witnesses:** The evaluation was witnessed and recorded by Lt. Robert Lester from the Yellowstone County S.O.
- Breath Alcohol Test:** Duby provided a breath sample to NPS Ranger LaBolle prior to my arrival and she obtained a 0.00 BAC result.
- Notification and Interview of the Arresting Officer:** I was on duty and requested to contact Ranger LaBolle regarding a drug evaluation at the Red Lodge PD. When contacted, Ranger LaBolle reported that Duby's vehicle had driven off the roadway on Highway 212 near the entrance to Yellowstone Park and struck a road sign. Duby was not injured and did not require medical treatment. While investigating the incident, Ranger LaBolle detected an odor of marijuana coming from the interior of Duby's vehicle. Duby claimed to be a Montana medical marijuana permittee and admitted smoking marijuana a short time prior to driving. Ranger LaBolle, who is a certified DRE, observed that Duby's eyes were red and bloodshot, and her speech was slow and thick. After confirming that Duby was not injured, Ranger LaBolle administered SFSTs to her. No HGN clues were observed. Three clues were observed on the W&T and three clues on the OLS test. Ranger LaBolle also administered the Finger to Nose (FTN) and Modified Romberg Balance (MRB) tests. On the FTN test, Duby had difficulty maintaining her balance when she tilted her head backwards and was not able to touch her nose as directed. Duby had a noticeable circular sway during the MRB test, and her time estimation was slow. According to Ranger LaBolle, Duby had distinct eyelid tremors while performing the FTN and MRB tests. Ranger LaBolle arrested Duby for DUI and transported her to the Red Lodge PD and administered a breath test. After obtaining a .00 BAC, she requested the assistance of a DRE to conduct a drug evaluation and allowing her to return to Park. Being a DRE trained in the rapid dissipation of THC in blood, Ranger LaBolle applied for a search warrant for the Duby's blood. After obtaining the search warrant, Ranger LaBolle, who is a certified phlebotomist, obtained a blood sample from Duby prior to my evaluation.
- Initial Observation of the Suspect:** My first contact with Duby was upon entering the interview room at the PD where Ranger LaBolle had just completed the blood draw. Duby appeared to be relaxed and had a dazed-like appearance. Her eyes were red and bloodshot, and her pupils appeared dilated. She also had droopy eyelids. When she stood, she had unsteady balance and several times leaned against a chair to steady herself. Her speech was slow and thick. I introduced myself and explained why I had been called to assist Ranger LaBolle. I requested that Duby complete a drug evaluation which she agreed to do by stating, "Okay, but I'm not drunk, I'm just tired." I noted that she was wearing blue jeans, a blue sweatshirt, and brown hiking boots.
- Medical Problems and Treatment:** Duby indicated she occasionally gets migraine headaches and uses marijuana for them. She indicated she was not diabetic and had no injuries or physical defects. She also advised that she was not injured from the earlier collision. She was not under the care of a doctor or dentist. When asked if she was taking any medication or drugs, she indicated she only uses "medical marijuana."
- Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to Duby prior to her attempting them. After each demonstration, she confirmed that she understood the instructions. The following tests were administered to Duby:

**Modified Romberg Balance:** During this test, Duby had an approximate three-inch front to back and an approximate two-inch side to side sway. While doing the test, she exhibited eyelid tremors. Her time estimation was slow, estimating the passage of 30 seconds in 41 seconds according to my timing device. I asked how she estimated the 30 seconds and she stated, "I started counting in my head, but I think I lost track."

**Walk and Turn:** For this test, a line in the tile floor was used. During the instruction stage, Duby lost her balance and stepped off the line to her left with her left foot. During the walking stage on the first nine steps, she used her arms for balance twice. She stepped off the line to the right on step four and stopped while walking at steps six and nine. After taking her ninth step, she seemed unsure of what to do next and stopped walking. She then made an incorrect turn by taking slow, small steps using both feet turning in a circle. On the second nine steps she started laughing and used her arms to balance twice and stepped off the line to her right on step seven. She also stopped walking at step 8 and appeared confused on what to do. When she completed the test, she began laughing and stated, "Wow, that was really weird." She was given the opportunity to remove her boots for this test and she requested to keep them on.

**One Leg Stand:** During this test and while standing on her left foot and raising her right foot, Duby swayed and used her arms for balance three times. She put her foot down at count 1,015 and 1,020. Her count was slow, reaching 1,025 in 30 seconds. When standing on her right foot and raising her left foot, she swayed and used her arms for balance two times. She put her foot down at 1,021. Her counting was again slow, counting to 1,024 in 30 seconds. Several times she laughed out loud and leg tremors were present.

**Finger to Nose:** Duby exhibited eyelid tremors during this test. She did not touch the tip of her nose with the tip of her index finger as instructed on five of the six attempts. On the first attempt, she touched the left side of her nose with the pad of her finger. She touched the right side of her nose with the pad of her finger on the second attempt. She used the pad of her finger on attempts four and five, touching the side of her right nostril. She did touch the tip of her nose with the tip of her index finger on the sixth attempt.

#### **8. Clinical Indicators of Impairment:**

**Eye Signs:** Duby's eyes were bloodshot, and she had droopy eyelids. Neither HGN nor VGN were observed. She had a lack of convergence in both eyes. Her eyes moved inward and then both moved downward when the stimulus was moved inward to the bridge of her nose. This test was conducted twice with the same results. Her pupils were dilated in all three lighting levels, estimated at 6.0 mm in both eyes in Room Light, and estimated at 8.5 mm in both eyes in Near Total Darkness. Rebound dilation was present in Direct Light with her pupils dilating from 6.0 mm to 7.5 mm in both eyes. Her reaction to light was normal.

**Vital Signs:** All three of Duby's pulse rates were above the DRE average ranges and were measured at 96, 96 and 94 beats per minute (bpm). Her blood pressure was also above the DRE average range for both the Systolic and Diastolic ranges at 170/94 mm Hg. Her temperature was measured at 98.0 degrees and was within the DRE average range. Her muscle tone was normal.

9. **Signs of Ingestion:** Duby had a greenish coating on her tongue. When asked about the green coating, she replied, "Could be from the marijuana I smoked." No other signs of ingestion or injection were observed.
10. **Suspect's Statements:** When asked about her self-medicating with marijuana, she admitted smoking "about 2-3 grams" of marijuana on her way to the Park. She stated she smokes marijuana almost every day and did not think the marijuana had affected her. She admitted smoking marijuana for the past 5 to 6 years and prefers Indica because of the relaxing effects.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Duby was under the influence of Cannabis and unable to operate a vehicle safely.
12. **Toxicological Sample:** Ranger LaBolle obtained a blood sample from Duby prior to my evaluation. The sample will be submitted to Montana State Crime Laboratory for analysis.

# 22 DRE

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## OVERVIEW OF SIGNS AND SYMPTOMS

### LEARNING OBJECTIVES

- Describe the possible effects that may be observed in each Major indicator of drug impairment
- Identify the effects that will most likely be observed with subjects under the influence of each drug category

### CONTENTS

A. The Major and General Indicators and their Possible Effects Associated with the Drug Categories.....	3
B. Effects Associated with the Drug Categories and Developing a Drug Symptomatology Matrix .....	7

### LEARNING ACTIVITIES

- Interactive Discussion
- Participant Activity



***This exercise will be an interactive activity involving all the participants. This will be used to lead the participants in listing the impairment indicators and completing the form in their participant guides. This will be done for both Major and General Indicators.***

Session 22: Overview of Signs and Symptoms

## Learning Objectives

- Describe possible effects that may be observed in each indicator of drug impairment
- Identify effects most likely to be observed with subjects under the influence of each drug category

DRE 22-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

## A. The Major and General Indicators and their Possible Effects Associated with the Drug Categories



For DRE purposes, Major Indicators are physiological signs specifically addressed and are, for the most part, involuntary, reflecting the status of the Central Nervous System (CNS) homeostasis. For DRE purposes, General Indicators are behaviors or observations of the subject observed and not specifically tested for. Both are of equal value in making a decision in the totality of the evaluation.

The Major Indicators of drug impairment are:

- Horizontal Gaze Nystagmus (HGN)
- Vertical Gaze Nystagmus (VGN)
- Lack of Convergence (LOC)
- Pupil Size
- Reaction to Light
- Pulse Rate
- Blood Pressure
- Body Temperature
- Muscle Tone



***Point out the first five Major Indicators concern the eyes and three of the last four Major Indicators concern the vital signs.***

***Announce to the participants: "We will now review all of the possible effects we might observe with each Major Indicator."***



**Possible Effects – HGN:** Possible effects that might be observed with **nystagmus**. With HGN, there are only two possible effects that might be observed. Either HGN will be **present**. Or it will be **none (meaning it is not present)**. There is no drug that stops HGN. Some drugs cause HGN to be present, others do not; but there is no drug that “cures” HGN.

**Possible Effects – VGN:**



**Ask participants: “What are the possible effects we might observe with VGN?”**

With VGN, there are also only two possible effects. Either it will be **present**. Or it will be **none (meaning it is not present)**.

**Possible Effects – LOC:**



**Ask participants: “What effects might we observe with LOC?”**

For LOC, there are also only two possible effects. Either LOC will be **present**. Or it will be **none (meaning it is not present)**.



**Point out, when we say “Lack of Convergence is present,” we mean the eyes are unable to converge or cross properly.**

Just as with nystagmus, there is no drug that “cures” LOC.

**Possible Effects – Pupil Size**



**Ask participants: “What effects might we observe with Pupil Size?”**

For **Pupil Size**, there are three possible effects that might be seen. The pupils might be **normal** (within the DRE average ranges). Or, the pupils might be **dilated**. Or, they might be **constricted**.

#### Possible Effects – Reaction to Light:



*Ask participants: “What effects might we observe with the pupils’ Reaction to Light?”*

There are a number of effects that might be observed in the pupils’ **Reaction to Light**. The pupils might react in a **normal** manner, i.e., by constricting somewhat in one second or less. Or, the pupils might react **slow**, i.e., by constricting somewhat, but requiring more than one second to do so. Or, little to no reaction visible.



*Inform participants we should not report the “pupils did not react at all,” but rather we should report “no visible reaction.”*

Session 22. Overview of Signs and Symptoms

## Vital Signs

**Pulse Rate, or Blood Pressure, or Body Temperature could be:**

- Normal
- Up
- Down



DRE 22-5

**Slide 5.**

For each of the **Vital Signs**, there are three possible effects. The pulse rate, or blood pressure, or body temperature could be **NORMAL** (within the DRE average ranges). Or, it could be **UP**, or it could be **DOWN**.

Session 22: Overview of Signs and Symptoms

## Muscle Tone

- Normal
- Flaccid
- Rigid



DRE 22-6

**Slide 6.**



***Ask participants: What effects might we observe with Muscle Tone?***

For **Muscle Tone**, there are three possible effects that might be seen: Normal (meaning nothing unusual); Flaccid; Rigid.



***Solicit participants' comments and questions about the possible effects of the nine Major Indicators.***

## B. Effects Associated with the Drug Categories and Developing a Drug Symptomatology Matrix

Session 22: Overview of Signs and Symptoms

	CNS DEPRESS	CNS STIM	HALLUC	DISS ANESTHETIC	NARC ANALGESIC	INHALANT	CANNABIS
HGN	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	NONE
VGN	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	NONE
LOC	PRESENT	NONE	NONE	PRESENT	NONE	PRESENT	PRESENT
PUPIL SIZE	NORMAL	DILATED	DILATED	NORMAL	CONSTRICTED	NORMAL	DILATED OR POSSIBLY NORMAL
REACTION TO LIGHT	SLOW	SLOW	NORMAL	NORMAL	LITTLE OR NONE VISIBLE	SLOW	NORMAL
PULSE RATE	DOWN	UP	UP	UP	DOWN	UP	UP
BLOOD PRESSURE	DOWN	UP	UP	UP	DOWN	UP/DOWN	UP
BODY TEMPERATURE	NORMAL	UP	UP	UP	DOWN	UP/DOWN/NORMAL	NORMAL
MUSCLE TONE	FLACCID	RIGID	RIGID	RIGID	FLACCID	NORMAL OR FLACCID	NORMAL

DRE 22-7

**Slide 7.**



*Ask for a participant to volunteer to state the effects that usually will be seen in a subject under the influence of a CNS Depressant.*

*Correct the participants' responses as necessary and write the correct effects on the matrix under the CNS Depressant column.*

- HGN: **present**
- VGN: **present** (i.e., at high dose for that individual)
- LOC: **present**
- Pupil Size: **normal** (within the average DRE ranges) except Soma, Quaaludes (Methaqualone), and some antidepressants usually **dilate** pupils
- Reaction to Light: **slow**
- Pulse Rate: down **except** Quaaludes (Methaqualone), ETOH, and some antidepressants may **elevate**
- Blood Pressure: **down**
- Body Temperature: **normal** (within the average DRE ranges)
- Muscle Tone: **flaccid**



*Emphasize these are the usual effects that will be observed with CNS Depressants, but we cannot always be certain all of these effects will be seen. Thank the "volunteer" participant for his or her help.*



**Select another volunteer to help with the CNS Stimulant category effects.**  
**Correct the participant's responses as necessary and write the correct effects under the "Stimulant" column.**

- HGN: **none** (Not present)
- VGN: **none** (Not present)
- LOC: **none** (Not present)
- Pupil Size: **dilated**
- Reaction to Light: **slow**
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **up**
- Muscle Tone: **rigid**



**Emphasize these are the effects usually seen with CNS Stimulants but we can't guarantee all of these effects will be observed in each and every case.**  
**Thank the "volunteer" participant for his or her help.**



**Select another volunteer to help with the Hallucinogen category effects.**  
**Correct the participant's responses as necessary and write the correct effects under the "Hallucinogens" column.**

- HGN: **none** (Not present)
- VGN: **none** (Not present)
- LOC: **none** (Not present)
- Pupil Size: **dilated**
- Reaction to Light: **normal**, certain psychedelic amphetamines may cause slowing
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **up**
- Muscle Tone: **rigid**



**Point out "Reaction to Light" is the only major indicator that distinguishes Hallucinogens from CNS Stimulants and "Reaction to Light" is a relatively subtle clue. For this reason, it can be very difficult to differentiate between these two categories. Thank the "volunteer" participant for his or her help.**



*Select another volunteer to help with the **Dissociative Anesthetic** category effects.*

*Correct the participant's responses as necessary and write the correct effects under the "Dissociative Anesthetic" column.*

- HGN: **present**
- VGN: **present** (i.e., at high doses; however, it is more common to see VGN in someone under the influence of a **Dissociative Anesthetic**)
- LOC: **present**
- Pupil Size: **normal** (within the DRE average ranges)
- Reaction to Light: **normal**
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **up**
- Muscle Tone: **rigid**



*Thank the "volunteer" participant for his or her help.*



*Select another volunteer to help with the **Narcotic Analgesic** category effects.*

*Correct the participant's responses as necessary and write the correct effects under the "Narcotic Analgesics" column.*

- HGN: **none** (Not present)
- VGN: **none** (Not present)
- LOC: **none** (Not present)
- Pupil Size: **constricted**
- Reaction to Light: **little or none visible**
- Pulse Rate: **down**
- Blood Pressure: **down**
- Body Temperature: **down**
- Muscle Tone: **flaccid**



*Thank the "volunteer" participant for his or her help.*



*Select another volunteer to help with the **Inhalant** category effects. Remind volunteer, with Inhalants, many of the effects noted on the Major Indicators will depend upon the specific substance inhaled.*

*Correct the participant's responses as necessary and write the correct effects under the "Inhalants" column.*

- HGN: **present**
- VGN: **present** (high dose for that individual)
- LOC: **present**
- Pupil Size: **normal** (within the DRE average ranges) but may be dilated
- Reaction to Light: **slow**
- Pulse Rate: **up**
- Blood Pressure: **up/down** (the Volatile Solvents and the Aerosols usually cause blood pressure to be **above the average ranges**; but the Anesthetic Gases can cause blood pressure to be **below the average ranges**, even though they **elevate** the pulse rate)
- Body Temperature: **up/down/normal**
- Muscle Tone: **normal or flaccid**



*Thank the “volunteer” participant for his or her help.*

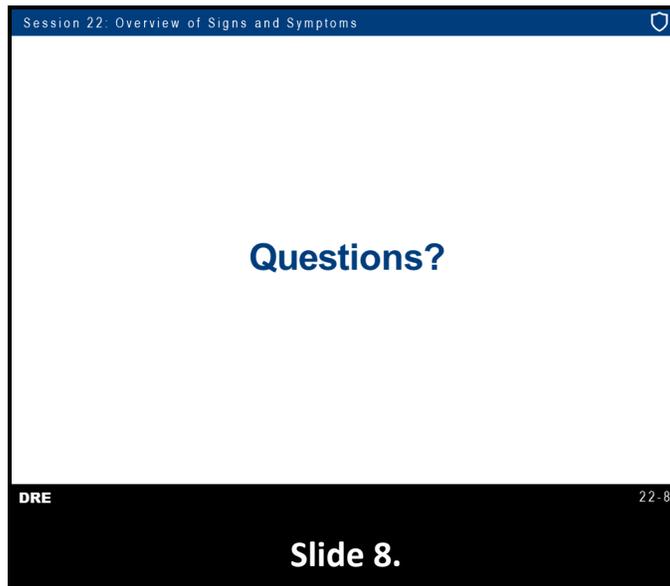
*Select another volunteer to help with the Cannabis category effects.*

*Correct the participant’s responses as necessary and write the correct effects under the “Cannabis” column.*

- HGN: **none** (not present)
- VGN: **none** (not present)
- LOC: **present**
- Pupil Size: **dilated or possibly normal** (within the DRE average ranges)
- Reaction to Light: **normal**
- Pulse Rate: **up**
- Blood Pressure: **up**
- Body Temperature: **normal** (within the DRE average ranges)
- Muscle Tone: **normal**



*Thank the “volunteer” participant for his or her help.*



***Solicit participants' comments or questions about the drug categories.***

*Drug Symptomatology Sources:* Not all signs and symptoms associated with a drug category will be observed in all subjects in all cases. The excerpts from the references are consistent with DRE instruction and experience.



***Stress the above paragraph.***

***Refer participants to the addendum at the end of Session 13 describing some available scientific literature dealing with drug influence symptomatology. The sources are considered to be reliable sources of drug symptomatology.***

### Indicators Consistent with Drug Categories

	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	DISSOCIATIVE ANESTHETICS	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
HGN	Present	None	None	Present	None	Present	None
VGN	Present (High Dose)	None	None	Present	None	Present (High Dose)	None
LOC	Present	None	None	Present	None	Present	Present
Pupil Size	Normal (1)	Dilated	Dilated	Normal	Constricted	Normal (4)	Dilated (6)
Reaction to Light	Slow	Slow	Normal (3)	Normal	Little or None Visible	Slow	Normal
Pulse Rate	Down (2)	Up	Up	Up	Down	Up	Up
Blood Pressure	Down	Up	Up	Up	Down	Up/Down (5)	Up
Body Temperature	Normal	Up	Up	Up	Down	Up/Down/Normal	Normal
Muscle Tone	Flaccid	Rigid	Rigid	Rigid	Flaccid	Normal or Flaccid	Normal
General Indicators	Disoriented Droopy eyelids Drowsiness Drunk-like behavior Impaired judgment Relaxed inhibitions Slow, sluggish reactions Thick, slurred speech Uncoordinated Unsteady walk Variety of emotional effects	Anxiety Body tremors Dry mouth Euphoria Exaggerated reflexes Excited Eyelid tremors Grinding teeth (Bruxism) Hyperactivity Increased alertness Insomnia Irritability Redness to the nasal area Restlessness Runny nose Talkative	Body tremors Dazed appearance Difficulty with speech Disoriented Hallucinations Impaired perception of time and distance Memory loss Nausea Paranoia Perspiring Piloerection Synesthesia Uncoordinated	Blank stare Chemical odor (PCP) Confused Cyclic behavior Disoriented Hallucinations Incomplete verbal Increased pain threshold Non-communicative Perspiring Possibly violent Sensory distortions Slow, slurred speech Slowed responses	Depressed Reflexes Difficulty concentrating Droopy eyelids Drowsiness Dry mouth Euphoria Itching Nausea "On the nod" Puncture marks Slow, low, raspy speech Slowed breathing Slow deliberate movements	Bloodshot eyes Confused Disoriented Flushed face Intense headaches Muscle weakness Non-communicative Odor of substance Possible nausea Residue of substance Slow, thick, slurred speech Watery eyes	Bloodshot eyes Body tremors Disoriented Drowsiness Euphoria Eyelid tremors Greenish coating on the tongue Impaired memory Impaired perception of time and distance Incomplete verbal responses Increased appetite Lack of concentration Mood changes Paranoia Rebound dilation Relaxed inhibitions Sedation
Duration of Effects	Ambien: 4-5 hours Klonopin: 6-12 hours Xanax: 6-8 hours Others: Vary	Cocaine: Up to 2 hours Methamphetamine: Up to 12 hours	LSD: 6-8 hours MDMA: 1-3 hours Psilocybin: Up to 5 hours	PCP: 4-6 hours DXM: 3-6 hours Ketamine: Up to 2 hours	Fentanyl: 2-3 hours Heroin: 3-5 hours Methadone: 6-8 hours Others: Vary	Several hours for most volatile solvents Anesthetic gases and aerosols – very short duration	Smoked: 3-4 hours Edibles: Up to 8 hours
Usual Methods of Administration	Injected Insufflation Oral	Injected Insufflation Oral Smoked	Insufflation Oral Smoked Transdermal	Injected Insufflation Oral Smoked Transdermal	Injected Insufflation Oral Smoked Transdermal	Inhalation	Oral Smoked Transdermal
Overdose Signs	Clammy skin Coma Rapid, weak pulse Shallow breathing	Hallucinations Psychosis Violent behavior	Condition similar to heat stroke Convulsions Intense bad "trip"	Coma Seizures	Cold, clammy skin Coma Convulsions Slow and shallow breathing	Cardiac arrhythmia Respiration ceases Nausea/vomiting Risk of death	Acute anxiety attacks Excessive vomiting Possible psychosis

OOTNOTE: These indicators are the most consistent with the category. There may be variations due to individual reaction, dose taken, and drug interactions.

- 1) Soma, Quaaludes, and some anti-depressants usually dilate
- 2) ETOH, Quaaludes, and some anti-depressants may elevate
- 3) Certain psychedelic amphetamines may cause slowing

- 4) Possibly dilated
- 5) Down with anesthetic gases, up with volatile solvents and aerosols
- 6) Possibly normal

# 23

## DRE

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### CURRICULUM VITAE PREPARATION & MAINTENANCE

#### LEARNING OBJECTIVES

- Describe and discuss the purpose of a Curriculum Vitae (CV)
- Identify the elements of a Curriculum Vitae
- Prepare a basic Curriculum Vitae summarizing relevant training, education, experience, and accomplishments to date
- Update and maintain the Curriculum Vitae

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B. Purpose of the Curriculum Vitae (CV).....	3
C. Curriculum Vitae Content.....	5
D. Guidelines for Curriculum Vitae Preparation and Maintenance .....	7

#### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Group Work Session
- Reading Assignments



## Learning Objectives

- Describe and discuss purpose of a curriculum vitae
- Identify elements of a curriculum vitae
- Prepare basic curriculum vitae
- Update and maintain curriculum vitae

DRE

23-2

**Slide 2.**

*Briefly review the objectives, content, and activities of this session.*

### A. Preparation for Court Qualification



## Preparation for Court Qualification



DRE

23-3

**Slide 3.**

Prior to testifying and being qualified as an expert witness, there are certain tasks a DRE should perform prior to trial. Being qualified as an expert may be as simple as stating your occupation or take several hours of exhausting questioning by both the prosecutor and defense attorney.

Although knowledge only greater than what the public has is required to qualify you as an expert, your testimony will carry much more “weight” if you have good credentials. Accurate, up-to-date information is essential for an officer who is called upon to give his or her qualification as an expert in any field.

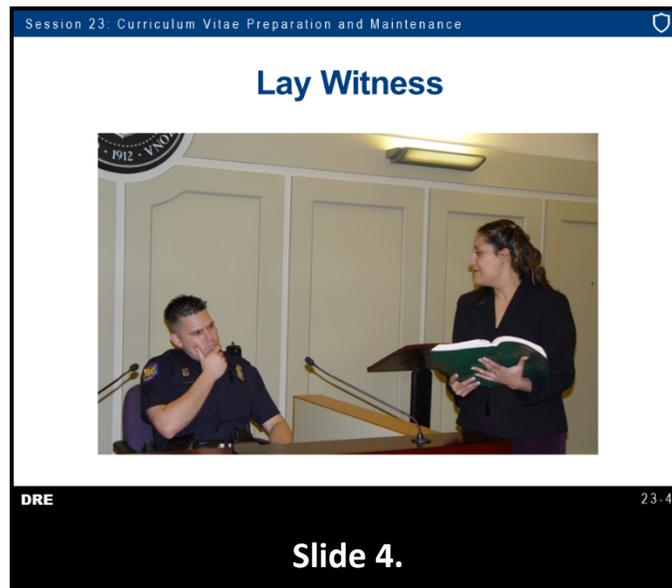


***Point out it is imperative each officer maintain an ongoing CV to establish their credentials as an expert.***

DREs will base their expertise on the following areas:

- Formal education and training
- Relevant experience
- Outside readings and studies

## B. Purpose of the Curriculum Vitae (CV)



The basic purpose of the CV is to record education, training, skills and experience in one document. A CV may be used to establish expert qualifications. Generally, a lay witness can testify to personal knowledge only.

Prior to becoming certified as a DRE, a candidate must prepare a CV.



***Point out this generally consists of facts which they observed or witnessed.  
Witness cannot give an opinion on a matter.  
Point out opinions are allowed only if the witness is qualified as an expert.***



## Expert Witness



DRE

23-5

### Slide 5.

A person skilled in some art, trade, science, or profession, having a knowledge of matters not within the knowledge of persons of average education, learning, and experience may assist a judge or jury by expressing an opinion on a state of facts shown by the evidence and based upon his or her special knowledge.

**Source:**

People v. Willis, 70 Cal.App. 465, 233 P. 812 (Cal. Ct. App 1924).

A witness is not qualified as an expert witness unless it is shown he or she is familiar with the subject upon which he or she is asked to give an opinion.

**Source:**

People v. McLean, 16 Cal.Rptr. 347, 56 Cal.2d 660, 365 P.2d 403 (1961).

An expert witness' qualification is achieved through Voir Dire Examination. In a law or court context, this is used to question a witness to assess his or her qualifications to be considered an expert in some matter pending before the court. Only the court can determine whether a witness is qualified to testify as an expert. Where a witness is qualified to give expert testimony, any question as to degree of knowledge goes to weight rather than admissibility.

**Source:**

People v. Perry, 7 Cal.3d 756, 789-790, 103 Cal.Rptr. 161, 499 P.2d 129 (1972).

## C. Curriculum Vitae Content

Session 23: Curriculum Vitae Preparation and Maintenance

### Curriculum Vitae Content

- Formal Education
- Formal Training
- Experience
- Prior Testimony
- Outside Reading Studies
- Training or Research Conducted
- Published Works



DRE 23-6

**Slide 6.**

Formal Education: Provide a list of formal education, beginning with the most recent:

- Specialized college
  - List dates, length, major topics covered, etc.
  - Highlight classes which provided knowledge or skills in the area of drugs
- University-level courses
  - List dates, instructor, subject(s) covered, credits, etc.
- Colleges and universities attended
  - List dates, instructor, subject(s) covered, credits, etc.
- High school(s) attended
  - List dates – highlight classes which provided knowledge in the area of drugs

Formal Training: Provide a list of formal training, beginning with the most recent:

- Lectures and seminars
  - List dates, length, instructor(s), subject(s) covered, etc.
  - Highlight training which provided knowledge or skills in the area of drugs
- Specialized police training or in-service training
  - List dates, length, instructor(s), subject(s) covered, etc. beginning with the most recent
  - Highlight training which provided knowledge or skills in the area of drugs
- Other specialized training
- Police academy (recruit training)
- Military training

Experience: Provide a list of job experience, beginning with the most recent position/assignment:

- Job experience – years
  - List dates, division, duties, etc., include loans to specialized units
- Assignments
  - List agencies, dates, responsibilities, etc.
- Prior law enforcement experience
  - List employer, dates, duties, assignments, etc.
- Other job related experience



***Point out the importance of maintaining accurate records for your CV as these records may be discoverable.***

Prior Testimony: For bulleted items below, list dates, courts, jurisdiction, judges, charges, case number, case name, areas qualified, etc.

- Municipal court
- Superior court
- Number of times qualified as an expert in drug cases
- Number of times qualified as an expert in other cases

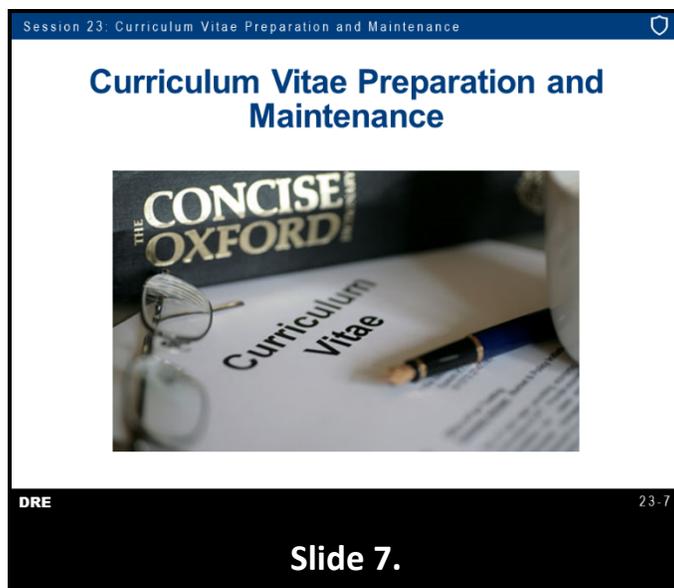
Outside Reading and Studies:

- Drug-related texts read
- List title(s), author(s), subject(s), citation(s), etc.
- Departmental training bulletins
- Journals
- Research papers
- Drug-related videos viewed

Training or Research Conducted (if applicable): List classes, briefings, training officer assignments, etc. where you served as an instructor or coach, etc. or conducted or participated in research, e.g., Alcohol Workshop.

Published Works (if applicable): List all relevant writings you authored or co-authored, including departmental briefing papers, training manuals/bulletins, magazine articles, books, etc.

## D. Guidelines for Curriculum Vitae Preparation and Maintenance



***Refer participants to CV examples in their manuals and review steps for preparing the CV and keeping it up-to-date.***

List information in chronological order. Formal education should be normal chronological order. Training should be in reverse chronological order (most recent training first). Review and update CV frequently and record date in footer.



***Review the CV examples with the participants.***

***Note: There are two versions of the CV examples. Chose the version to best serve the local presentation.***



Questions?

DRE

23-8

Slide 8.



*Solicit participants' comments or questions about Curriculum Vitae Preparation and Maintenance.*



**Officer Brian Cooper**

Drug Recognition Expert

Golden Police Department  
Patrol Division  
District 2  
351 Wichita Road  
Golden, CA 80517  
BCooper@Golden.gov  
(555) 303-4318

## **INTRODUCTION**

Before starting my career in law enforcement, I attended the University of Texas at Arlington where I earned a degree in Criminology and Criminal Justice. I am in the University of California's leadership in policing master's program and expect to graduate May 2021.

My first job in law enforcement was as a police agent with the Woodland Park Police Department. While serving as a police agent, I helped the Department re-establish its Drug Recognition Expert (DRE) unit and create an honor guard team.

Now, at the Golden Police Department, I specialize in the prevention and enforcement of impaired driving offenses as member of the Golden Police Department Special Operations Division, Traffic Operations Section, DUI/DRE Enforcement Unit. I am an advisor for Golden's Impaired Driving Enforcement Steering Committee and a member of the Governor's Standing Committee on First Responder Safety.

## **EDUCATION**

09/2006 - 06/2010

**University of Texas-** Arlington, TX  
Bachelor of Arts in Criminal Justice; Minor: Spanish  
Dean's List: Fall 2007, Spring 2008

## **LAW ENFORCEMENT EXPERIENCE**

01/2017 - Present

**Golden Police Department-** Golden, CA

Work with community members on impaired driving prevention projects, enforce impaired driving laws, train new officers on impaired driving matters, organize and supervise DUI checkpoints, execute search warrants, conduct drug influence evaluations, investigate crashes and testify for legal tribunals.

06/2010 - 01/2017

**Woodland Park Police Department-** Woodland Park, CA

Police agent for 586 square mile municipality comprised of urban, suburban, and farming areas where I responded to calls for service, detected impaired drivers, conducted investigations, performed drug influence evaluations, and taught in-service courses related to traffic enforcement.

## **TRAINING**

06/15-23/2014

**Drug Recognition Expert Course**

**(56 Hrs.)-** California Highway Patrol (CHP) Sacramento, CA

Included an overview of the drug evaluation procedures, expanded sessions on each drug category, drug combinations, examination of vital signs, case preparation, courtroom testimony, curriculum vitae preparation, and written examination.

06/13-14/2014

**Drug Evaluation and Classification (Preliminary School)  
(16 Hrs.)- CHP Sacramento, CA**

Overview of the drug recognition expert (DRE) evaluation procedures, the seven drug categories, eye examinations, and proficiency in conducting the Standardized Field Sobriety Tests (SFSTs).

05/15-16/2013

**Advanced Roadside Impaired Driving Enforcement  
(ARIDE) (16 Hrs.)- Jackson County Sherriff's Office Walden, CA**

The SFST curriculum trains officers to identify and assess drivers suspected of being under the influence of alcohol while the Drug Evaluation and Classification (DEC) Program provides more advanced training to evaluate suspected drug impairment. ARIDE is intended to bridge the gap between these two programs by providing officers with enhanced knowledge related to drug impairment and by promoting the use of DREs in states that have the DEC Program. One of the more significant aspects of ARIDE is its review and required student demonstration of the SFST proficiency requirements.

08/01-04/2012

**DWI Detection & SFST Instructor Development Course  
(32 Hrs.)- CHP Sacramento, CA**

Learned techniques for instructing adults and how to apply those to the SFST training program.

11/01-03/2010

**DWI Detection and Standardized Field Sobriety Testing  
(SFST) (24 Hrs.)- CHP Sacramento, CA**

Since its inception in the early 1980s (developed under the auspices and direction of the National Highway Traffic Safety Administration and the International Association of Chiefs of Police), this training curriculum prepares police officers to conduct the SFSTs for use in DUI investigations.

**SFST Accreditation Status:**

Accredited from 11/03/2010 to Present  
Expiration: 01/03/2020

**INSTRUCTION**

12/14-17/2018

**DWI Detection and SFST (24 Hrs.)- LEAD Impairment  
Training Breckenridge, CA**

Taught Sessions 1: Introduction and Overview, 8: Concepts and Principles of the SFSTs, and 16: Program Conclusion.

**EXPERT TESTIMONY**

10/15/2019

**Drug Recognition Expert**  
*People v. Maria Edwards*, 19T3409 (DUI)  
21st Judicial District Mesa County Court- Grand Mesa, CA  
Judge Christina Smith

01/27/2018

**Expert in the administration and interpretation of the Horizontal Gaze Nystagmus Test**

*People v. Johnny Gifford*, 17M4507 (DUI & Careless Driving)  
11th Judicial District Custer County Court- Westcliffe, CA  
Magistrate Thomas Dublin

02/09/2017

**Expert in phencyclidine impairment**

*People v. Curtis Matthews*, 17CR1018 (Vehicular Homicide)  
18th Judicial District Douglas County District Court- Fireside, CA  
Judge Lucas Baranovic

**OUTSIDE READINGS AND STUDIES**

Citek, K., Ball, B., Rutledge, D.A., 2003. Nystagmus testing in intoxicated individuals. *Optometry* 74 (11).

Blencowe, T. et al. An analytical evaluation of eight on-site oral fluid drug screening devices using laboratory confirmation results from oral fluid. *Forensic Science International*. 2011; 20; 208(1):173-9.

Hartman, R.L., Huestis, M.A., et al., Effect of Blood Collection Time on Measured  $\Delta^9$  Tetrahydrocannabinol Concentrations: Implications for Driving Interpretation and Drug Policy, *Clinical Chemistry*, 62:2, 367-377, doi:10.1373/clinchem.2015.248492 (2016).

**PUBLICATIONS/RESEARCH**

Cooper, Brian H., "The Impact of In-Car Mobile Video System On Policing;" Michigan Digital Library. August 2016.



**Deputy Casey R. Martin**

Drug Recognition Expert Instructor

Broomfield Sheriff's Office

Sector A

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Broomfield, CO 80002

[cmartin@email.gov](mailto:cmartin@email.gov)

(555) 123-4567



10/24-11/01/2014 **Drug Recognition Expert Course (56 Hrs.)-** Michigan Office of Highway Safety Planning Auburn Hills, MI

Included an overview of the drug evaluation procedures, expanded sessions on each drug category, drug combinations, examination of vital signs, case preparation, courtroom testimony, curriculum vitae preparation, and written examination.

10/21-23/2014 **Drug Evaluation and Classification (Preliminary School) (16 Hrs.)-** Michigan Office of Highway Safety Planning Auburn Hills, MI

Overview of the drug recognition expert (DRE) evaluation procedures, the seven drug categories, eye examinations and proficiency in conducting the Standardized Field Sobriety Tests (SFSTs).

03/20-25/2014 **DWI Detection & SFST Instructor Development Course (32 Hrs.)-** Michigan Department of Transportation Jackson, MI

Learned techniques for instructing adults and how to apply those to the SFST training program.

04/16-17/2012 **Advanced Roadside Impaired Driving Enforcement (ARIDE) (16 Hrs.)-** Michigan State Police Cadillac, MI

The SFST curriculum trains officers to identify and assess drivers suspected of being under the influence of alcohol while the Drug Evaluation and Classification (DEC) Program provides more advanced training to evaluate suspected drug impairment. ARIDE is intended to bridge the gap between these two programs by providing officers with enhanced knowledge related to drug impairment and by promoting the use of DREs in states that have the DEC Program. One of the more significant aspects of ARIDE is its review and required student demonstration of the SFST proficiency requirements.

06/12-17/2010 **DWI Detection and Standardized Field Sobriety Testing (SFST) (24 Hrs.)-** Michigan State Police Lansing, MI

Since its inception in the early 1980s (developed under the auspices and direction of the National Highway Traffic Safety Administration and the International Association of Chiefs of Police), this

training curriculum prepares police officers to conduct the SFSTs for use in DUI investigations.

**SFST Accreditation Status:** Accredited from 06/17/2010 to Present  
Expiration:03/12/2020

## **INSTRUCTION**

10/21-31/2019 **Drug Recognition Expert Course (56 Hrs.)-** Colorado Department of Transportation Aurora, CO

Sessions 7: Examination of Vital Signs and 11: Practice: Eye Examinations

06 /11-15/2018

**DWI Detection and SFST (24 Hrs.)-** Golden Police  
Department Golden, CO

Sessions 1: Introduction and Overview, 8: Concepts and Principles of the SFSTs, and 16:  
Program

Conclusion.

### **EXPERT TESTIMONY**

04/19/2019

**Drug Recognition Expert**

*People v. Michael Jon*, 18T3409 (DUI)

10th Judicial District Pueblo County Court- Pueblo, CO

Judge Dana Murray

10/07/2014

**Expert in DUI, SFSTs, and DRE Investigations**

*People v. Renee Plum*, 17M4507 (DUI & Reckless Driving)

1st Judicial District Gilpin County Court- Black Hawk, CO

Judge Robert Clark

03/04/2009

**Expert in Central Nervous System Depressants**

*People v. Davis Chancellor*, 16T3633 (DUI)

2nd Judicial District County Court- Denver, CO

Judge Jared Castor

### **OUTSIDE READINGS AND STUDIES**

Citek, K., Ball, B., Rutledge, D.A., 2003. Nystagmus testing in intoxicated individuals.  
Optometry 74 (11).

### **PUBLICATIONS**

**Correlation Between SFSTs and Impairment** The Colorado DRE. Issue 2, October 2016.

# 24 DRE

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## DRUG COMBINATIONS

### LEARNING OBJECTIVES

- Explain the prevalence of polydrug impairment among drug-impaired subjects and identify common combinations of drugs abused by those subjects
- Describe the possible effects combinations of drugs can produce on the clinical indicators of drug impairment
- Define the terms “Null,” “Overlapping,” “Additive,” and “Antagonistic” as they relate to polydrug effects
- Identify the specific effects most likely to be observed in persons under the influence of particular drug combinations
- Describe novel psychoactive substances and their effects

### CONTENTS

A. The Prevalence of Polydrug and Polycategory Impairment .....	2
B. Possible Effects of Drug Combinations .....	4
C. Identifying Expected Indicators of Specific Combinations.....	21
D. Novel Psychoactive Substances.....	22

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Interactive Discussions
- Worksheet Exercise

Session 24: Drug Combinations

## Learning Objectives

- Explain prevalence of polydrug impairment
- Describe possible combinations of drug effects
- Define terms “Null”, “Overlapping”, “Additive” and “Antagonistic”
- Identify specific effects most likely to be observed
- Describe novel psychoactive substances and their effects

DRE 24-2

**Slide 2.**



*Briefly review the objectives, content, and activities of this session.*

### A. The Prevalence of Polydrug and Polycategory Impairment

Session 24: Drug Combinations

## What is Polydrug Impairment?

A photograph showing two white, oval-shaped pills. The first pill has 'XANAX' embossed on it, and the second has 'OZON' embossed on it. To the right of the pills is a plus sign, followed by a pile of green, dried marijuana buds.

DRE 24-3

**Slide 3.**

Polydrug impairment means being under the combined influence of two or more different drugs, which may be in the **same or different categories**. In many cases, one substance is used as a base or primary drug with additional drugs to achieve the desired effect(s).

Prevalence of Polydrug Impairment: It is common for a DRE to encounter polydrug users. In the Los Angeles Field Study (1985), 72% of the suspects had two or more drugs in them. If we discount alcohol, nearly half (45%) of the Field Study suspects had two or more other drugs in them.



**Point out 81 of the 173 suspects (47%) in the Los Angeles Field Study had alcohol in combination with one or more other drugs.**

When polydrug impairment involves drugs from **two or more drug categories**, it may be referred to as **polycategory impairment**. Polycategory can produce any of the four drug combination effects (Null, Overlapping, Additive, or Antagonistic).



**Polydrug impairment means being under the combined influence of two or more drugs regardless of drug category(s).**

**For example, a person under the influence of alcohol and Xanax would exhibit polydrug impairment. In this instance, predominantly additive effects would be observed.**

**Polycategory impairment is defined as being under the combined influence of two or more drugs from different drug categories.**

**For example, a person under the influence of alcohol and Cannabis would exhibit polycategory impairment. Polycategory can produce any of four drug combination effects (Null, Overlapping, Additive, or Antagonistic).**

A common type of polydrug mix is marijuana and alcohol. The combination of alcohol and cannabis produce significantly higher THC levels in the blood than cannabis use alone.



**Source:**

*Research Shows That Any Dose of Alcohol Combined With Cannabis Significantly Increases Levels of THC in the Blood.* (2015, May 27). Retrieved May 16, 2022, from AACC: <https://www.aacc.org/media/press-release-archive/2015/alcohol-combined-with-cannabis-significantly-increases-levels-of-thc-in-the-blood>

***If available, present local data to demonstrate polydrug use in your area/State.***

Alcohol is often found in combination with one or more drugs. The NHTSA DRE Data System indicates more than a third of all DRE-reported cases revealed two or more drug categories detected.



**Source:** NHTSA DRE Data System

***Solicit participants' comments and questions about the prevalence of polydrug impairment.***

## B. Possible Effects of Drug Combinations

Session 24: Drug Combinations

### Drug Combinations

- Cocaine and Heroin – “Speedball”
- PCP and Heroin – “Fireball”
- Crack and PCP – “Space base”
- Crack and Marijuana – “Primo”
- Xanax and Methamphetamine

DRE 24-4

**Slide 4.**

Let us examine the possible ways in which two or more drug categories might interact.

Some common combinations of drug categories and their street names include:

- Cocaine and Heroin – “Speedball”
- PCP and Heroin – “Fireball”
- Crack and PCP – “Space base”
- Crack and Marijuana – “Primo”
- Xanax and Methamphetamine



Instructor  
Note



Website  
Resource

***Point out there are hundreds of street names for drug combinations and the combinations vary and are always evolving.***

***Solicit drug combination street names from participants.***

***For additional information about slang terms, drug street names refer the participants to: <https://www.dea.gov/sites/default/files/2018-07/DIR-022-18.pdf>***

Session 24: Drug Combinations

## Effects of Drug Combinations on Indicators of Impairment

- Null Effect
- Overlapping Effect
- Additive Effect
- Antagonistic Effect

DRE 24-5

**Slide 5.**

There are four effects of drug combinations on indicators of impairment: Null Effect; Overlapping Effect; Additive Effect; Antagonistic Effect.

Session 24: Drug Combinations

## Null Effect

No action + No action = No action

DRE 24-6

**Slide 6.**

The first effect is called the Null Effect. This occurs when neither drug affects a particular indicator of impairment, and their combination also will not affect that indicator. This could be described as “No action plus no action equals no action.”



**Clarify: “Null Effect” is the combination of no action plus no action equals no action.**

Session 24: Drug Combinations

## Null Effect

**Example #1:**  
HGN  
*Narcotic Analgesic and Cannabis*

**Example #2:**  
Reaction to Light  
*Dissociative Anesthetics and Cannabis*

DRE 24-7

**Slide 7.**

Example #1: Horizontal Gaze Nystagmus (HGN) – Narcotic Analgesic and Cannabis: An example of the Null Effect: Neither drug affects HGN; The combination would not result in HGN being present.



***Point out a general principle: if neither drug affects a major indicator, the combination of those two drugs also will not affect that indicator.***

***Clarification of “Null Effect” – the combination of no action plus no action equals no action.***

Example #2: Reaction to Light - Dissociative Anesthetics and Cannabis: Another example of the Null Effect: Neither drug affects reaction to light.



***Ask participants to suggest a specific combination of drugs that will exhibit the Null Effect on Pupil Size.***

Session 24: Drug Combinations

## Overlapping Effect

**Slide 8.**

DRE 24-8

The second effect is called the Overlapping Effect. This occurs when one drug causes an affect and the other does not. This could be described as “action plus no action equals action.”



**Clarify: “Overlapping Effect” - action plus no action equals action.**

Session 24: Drug Combinations

## Overlapping Effect

**Example #1:**  
Pupil Size  
*CNS Stimulants and Dissociative Anesthetics*

**Example #2:**  
HGN  
*CNS Depressants and Narcotic Analgesics*

**Slide 9.**

DRE 24-9

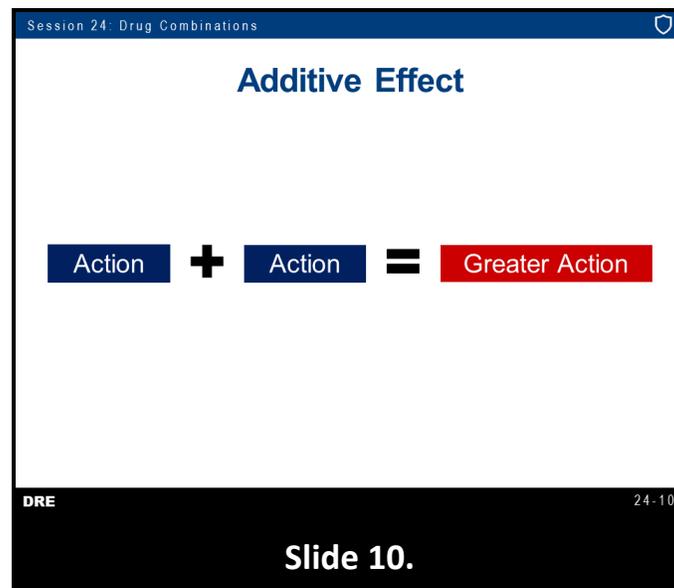
Example #1: Pupil Size - CNS Stimulants and Dissociative Anesthetics: One drug affects pupil size, but the other does not. CNS Stimulants dilate pupils, Dissociative Anesthetics do not affect pupil size. Therefore, pupils should be dilated.



**(Prior to showing Example 2 on slide) Ask a participant to give an example of a specific combination of drugs that will produce an “Overlapping Effect” on HGN.**

Example #2: HGN - CNS Depressants and Narcotic Analgesics: A CNS Depressant will cause HGN, but a Narcotic Analgesic will not cause HGN; a person under the combined influence of a CNS Depressant and a Narcotic Analgesic will usually have HGN.

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Session 24: Drug Combinations

### Additive Effect

Action + Action = Greater Action

DRE 24-10

Slide 10.

The third effect is called the Additive Effect. This occurs when the drugs independently affect some indicator in the same way and their use in combination will also affect the indicator and the effect may be reinforced. This could be described as “action plus the same action produces reinforced action.”



***Clarification of the “Additive Effect” – action plus the same action produces reinforced action.***

Session 24: Drug Combinations

## Additive Effect

**Example #1:**  
Pulse Rate  
*Cannabis and Inhalants*

**Example #2:**  
Pupil Size  
*CNS Stimulants and Hallucinogens*

DRE 24-11

**Slide 11.**

Example #1: Pulse Rate - Cannabis and Inhalants: Cannabis and Inhalants both elevate pulse rate. Therefore, pulse rate should be elevated, or up.

Example #2: Pupil Size - CNS Stimulants and Hallucinogens: CNS Stimulants and Hallucinogens both dilate the pupils. Therefore, pupils should be dilated.

Session 24: Drug Combinations

## Antagonistic Effect

Action + Opposite Action = Unpredictable

DRE 24-12

**Slide 12.**

The fourth effect is called the Antagonistic Effect. This occurs when a drug causes an action and another causes an opposite action, the effect cannot be predicted. This can be described as “action versus opposite action – an unpredictable outcome.”



**Clarification of “Antagonistic Effect” – action versus opposite action: an unpredictable outcome.**

When two drugs produce an “Antagonistic Effect,” they tend to try to override or compete with the effect of the other drug(s).



***Point out a common example is when a person takes a “speedball” (Heroin plus Cocaine), the two drugs try to compete with their effects on the pupil size.***

Whichever drug is more psychoactive at the time determines what likely will be observed. This is based upon the potency of the drug, the quantity administered, the time of administration, and the onset and duration of effects.

There is not an Antagonistic Effect for: HGN; Vertical Gaze Nystagmus (VGN); LOC; Reaction to Light.



***Question participants as to why this would be the case.***

Session 24 Drug Combinations

## Antagonistic Effect

**Example #1:**  
Pulse Rate  
*CNS Stimulants and CNS Depressants*

**Example #2:**  
Pupil Size  
*CNS Stimulants and Narcotic Analgesics*

DRE 24-13

**Slide 13.**

Example #1: Pulse Rate - CNS Stimulants and CNS Depressants: CNS Stimulants elevate pulse rate; CNS Depressants depress pulse rate. Therefore, pulse rate will be up, down or within the DRE average ranges.

Example #2: Pupil Size - CNS Stimulants and Narcotic Analgesics: Pupil Size. CNS Stimulants dilate pupils, Narcotic Analgesics constrict pupils. Pupil size will be dilated, constricted or within the DRE average ranges.

Session 24: Drug Combinations

## Antagonistic Effect

**Example #3:**  
Blood Pressure  
*Hallucinogens and Narcotic Analgesics*

**Slide 14.**

Example #3: Blood Pressure- Hallucinogens and Narcotic Analgesics: Hallucinogens elevate blood pressure; Narcotic Analgesics lowers blood pressure. Blood pressure will be up, down or within the DRE average ranges

With an “Antagonistic Effect,” we just can’t predict what we will see. In summary, when drugs from two or more drug categories are taken together, they tend to produce a combination of Null Effects, Overlapping Effects, Additive Effects and Antagonistic Effects.



***Solicit participants’ questions about the Null, Overlapping, Additive and Antagonistic Effects.***

***Proceed to the following slides of drug combinations involving the input from the participants.***

Session 24: Drug Combinations

## Cannabis and CNS Stimulant

Impairment Indicator	Cannabis	CNS Stimulant	Type of Effect	What Should We See?

**Slide 15.**

HGN: A specific example: consider a person who is under the influence of a combination of Cannabis and a CNS Stimulant.



***Ask participants: “Will you see HGN with this particular combination?”***

Neither Cannabis nor a CNS Stimulant causes HGN.



***Point out the combination of Cannabis and CNS Stimulant produces a Null Effect on HGN.***

This is a case of no action plus no action equals no action. This is an example of the Null Effect. We will not see HGN with this combination.



***Ask participants: “Will we see VGN?”***

VGN: Neither Cannabis nor a CNS Stimulant causes VGN. This is another Null Effect. We won't see VGN.



***Ask participants “What will we see when we examine LOC?”***

LOC: Cannabis causes LOC; a CNS Stimulant does not.



***Point out the combination of Cannabis and CNS Stimulant produces an Overlapping Effect on LOC.***

This is a case of action plus no action equal's action. We will see LOC with this combination.



***Ask participants: “What will we see when we examine pupil size?”***

Pupil Size: CNS Stimulants dilate pupils; Cannabis either dilates pupils or has no effect on them.



***Point out the combination of Cannabis and CNS Stimulant produces either an Additive Effect or an Overlapping Effect on pupil size.***

This may be a case of action plus no action equal's action. Or it may be a case of action plus same action reinforces action. In either case, we should see dilated pupils with this combination.



**Point out the term “normal” in Exception 6 refers to a pupil size within the DRE average ranges.**

**Ask participants: “What should we see when we examine the pupils’ reaction to light?”**

Reaction to Light: CNS Stimulants slow the pupils’ Reaction to Light; Cannabis usually doesn’t affect the pupils’ reaction. Here we have another Overlapping Effect. We should observe a slowed reaction of the pupils.

Session 24 Drug Combinations

### Cannabis and CNS Stimulant

Impairment Indicator	Cannabis	CNS Stimulant	Type of Effect	What Should We See?

**Slide 16.**



**Ask participants: “What should we see when we measure this person’s pulse rate?”**

Pulse Rate: Both Cannabis and CNS Stimulants usually elevate pulse rate. This is an Additive Effect. We should see a pulse rate that is up or elevated.



**Ask participants: “What should we see when we measure this person’s blood pressure?”**

Blood Pressure: Cannabis usually causes blood pressure to be up or elevated; so, does a CNS Stimulant. This is another Additive Effect. We should see a blood pressure that is up or elevated.



**Ask participants: “What can we expect to find when we check this person’s temperature?”**

Body Temperature: Cannabis usually does not affect body temperature. But CNS Stimulants usually elevate temperature.



**Point out Cannabis in combination with CNS Stimulant produces an Overlapping Effect on body temperature.**

This is another case of action plus no action equals action. We can expect to see an elevated temperature with this combination.

Muscle Tone: Cannabis usually does not affect muscle tone. CNS Stimulants cause muscle tone to be rigid. This is another case of action plus no action equals action. We can expect to see rigid muscle tone with this combination.



**Point out this particular combination produces no Antagonistic Effects.**

Session 24: Drug Combinations

### Dissociative Anesthetic and Narcotic Analgesic

Impairment Indicator	Dissociative Anesthetic	Narcotic Analgesic	Type of Effect	What Should We See?

DRE 24-18

**Slide 17.**

Another specific example: consider a person under the influence of a combination of a Dissociative Anesthetic and a Narcotic Analgesic.



**Ask participants: “What will we see when we examine this person for HGN?”**

HGN: A Dissociative Anesthetic causes HGN, Narcotic Analgesics do not. This is an Overlapping Effect. We can expect to see HGN with this subject.



**Ask participants: “What will we see when we examine this person for VGN?”**

VGN: A Dissociative Anesthetic should cause VGN. A Narcotic Analgesic will not cause VGN. This is another Overlapping Effect. We should see VGN in this subject.



**Ask participants: “Can we expect to see a LOC?”**

LOC: A Dissociative Anesthetic causes LOC; Narcotic Analgesics do not. Another Overlapping Effect. We can expect to see LOC.



**Ask participants: “What are we likely to see when we check the size of this subject’s pupils?”**

Pupil Size: A Dissociative Anesthetic doesn’t affect pupil size, but a Narcotic Analgesic constricts pupils. This is another Overlapping Effect. We can expect to see constricted pupils with this subject.



**Remind participants the term “Normal” refers to the DRE average ranges or “expected ranges” for the pupil sizes.**

Session 24: Drug Combinations

### Dissociative Anesthetic and Narcotic Analgesic

Impairment Indicator	Dissociative Anesthetic	Narcotic Analgesic	Type of Effect	What Should We See?

DRE 24-19

## Slide 18.



***Ask participants: “What are we likely to observe when we check the reaction of this subject’s pupils to light?”***

Reaction to Light: A Dissociative Anesthetic doesn’t affect pupil’s Reaction to Light; but a Narcotic Analgesic usually produces a “little or nonvisible” reaction.



***Point out the combination of Dissociative Anesthetics and a Narcotic Analgesic produces Overlapping Effects on all major eye indicators of drug impairment.***

This, too, is an Overlapping Effect. We can expect a “little or nonvisible” reaction in this subject’s pupils.



***Ask participants: “What can we expect to find when we check this subject’s pulse rate?”***

Pulse Rate: A Dissociative Anesthetic usually causes pulse rate to be elevated; a Narcotic Analgesic usually produces a depressed or lower pulse rate. This is our first Antagonistic Effect. We cannot predict what this subject’s pulse rate will be. The pulse rate could be elevated, or depressed, or within the DRE average ranges. This subject’s pulse rate will depend on many factors, including: How much of each drug was taken; How and when each drug was taken; How tolerant the subject is of each drug.



***Ask participants: “What are we likely to find when we check this subject’s blood pressure?”***

Blood Pressure: A Dissociative Anesthetic usually elevates blood pressure; a Narcotic Analgesic usually lowers blood pressure. This is another Antagonistic Effect. We can’t predict what the blood pressure will be. It could be above DRE average ranges, below DRE average ranges, or within the DRE average ranges.

Session 24: Drug Combinations

## Dissociative Anesthetic and Narcotic Analgesic

Impairment Indicator	Dissociative Anesthetic	Narcotic Analgesic	Type of Effect	What Should We See?

**Slide 19.**



**Ask participants: “What are we likely to find when we check this subject’s temperature?”**

Temperature: A Dissociative Anesthetic usually elevates temperature; a Narcotic Analgesic usually lowers it. This, too, is an Antagonistic Effect. The temperature could be elevated (up), or depressed (down) or within the DRE average range.



**Point out the combination of a Dissociative Anesthetic and Narcotic Analgesics produce Antagonistic Effects on all three vital signs.**

**Point out the term “Normal” refers to the DRE average range for body temperature which is 98.6 degrees plus or minus 1 degree.**

**Ask the participants: What are we likely to find when we check this subject’s muscle tone?**

Muscle Tone: A Dissociative Anesthetic usually causes rigid muscle tone. A Narcotic Analgesic usually causes flaccid muscle tone. This is an Antagonistic Effect. Muscle tone could be normal, rigid, or flaccid.



**Solicit participants’ comments and questions about the combination of a Dissociative Anesthetic and a Narcotic Analgesic.**

Session 24: Drug Combinations

## Cannabis, CNS Stimulant, and Hallucinogen

Impairment Indicator	Cannabis	CNS Stimulant	Hallucinogen	Type of Effect	What Should We See?

**Slide 20.**

Another specific example: consider a person under the influence of Cannabis, a CNS Stimulant, and a Hallucinogen.

HGN: None of the three categories causes HGN. This is an example of the Null Effect.

VGN: None of the three drug categories cause VGN, another example of the Null Effect.

LOC: Cannabis causes a LOC while CNS Stimulants and Hallucinogens do not. This is an example of an Overlapping Effect and LOC should be present.

Pupil Size: Cannabis usually dilates pupils. CNS Stimulants and Hallucinogens also dilate the pupils. This is an example of an Additive or Overlapping Effect.



***Ask participants: What effect will take place and the result?***

The pupils should be dilated.



***Remind participants the term “Normal” refers to pupil sizes within the DRE average ranges or “expected ranges” for a healthy, non-impaired person.***

Session 24: Drug Combinations

## Cannabis, CNS Stimulant, and Hallucinogen

Impairment Indicator	Cannabis	CNS Stimulant	Hallucinogen	Type of Effect	What Should We See?

**Slide 21.**

Reaction to Light: Cannabis does not affect the Reaction to Light. CNS Stimulants will slow down the reaction. Most Hallucinogens, with some exceptions, will cause a normal Reaction to Light. This is an example of either an Overlapping or Additive Effect.



***Ask participants: What effect would take place and the result.***

We could probably see a slow Reaction to Light.



***Remind participants certain psychedelic amphetamines may cause a slowed reaction to light. (Exception #3).***

Pulse Rate: Cannabis will normally elevate the pulse rate as will CNS Stimulants and Hallucinogens. This is an example of an Additive Effect.



***Ask participants: What effect would take place and the result.***

The result would be an elevated pulse rate.

Blood Pressure: All three drug categories will elevate blood pressure. This is an example of an Additive Effect.



***Ask participants: What effect would take place and the result.***

Blood pressure should be elevated with this combination.

Session 24 Drug Combinations

## Cannabis, CNS Stimulant, and Hallucinogen

Impairment Indicator	Cannabis	CNS Stimulant	Hallucinogen	Type of Effect	What Should We See?

DRE 24-23

**Slide 22.**

Body Temperature: Cannabis usually causes a body temperature in the average range. CNS Stimulants and Hallucinogens elevate body temperature. This would be an example of an Additive or Overlapping Effect.



**Ask participants: What effect would take place and the result?**

The body temperature should be elevated with this combination.

Muscle Tone: Cannabis causes a normal muscle tone, while CNS Stimulants and Hallucinogens will cause rigid muscle tone. This would be an example of an Additive or an Overlapping Effect.



**Ask participants: What effect would take place and the result?**

The muscle tone should be rigid with this combination.

## C. Identifying Expected Indicators of Specific Combinations

Session 24: Drug Combinations

### Identifying Expected Indicators of Specific Combinations

The *Drug Symptomatology Matrix* outlines the expected results of the drug influence evaluation for each drug category.

DRE 24-24

**Slide 23.**



***Direct the participants' attention to the Drug Symptomatology Matrix found in their participant guide. A copy also appears for your reference in your instructor guide.***

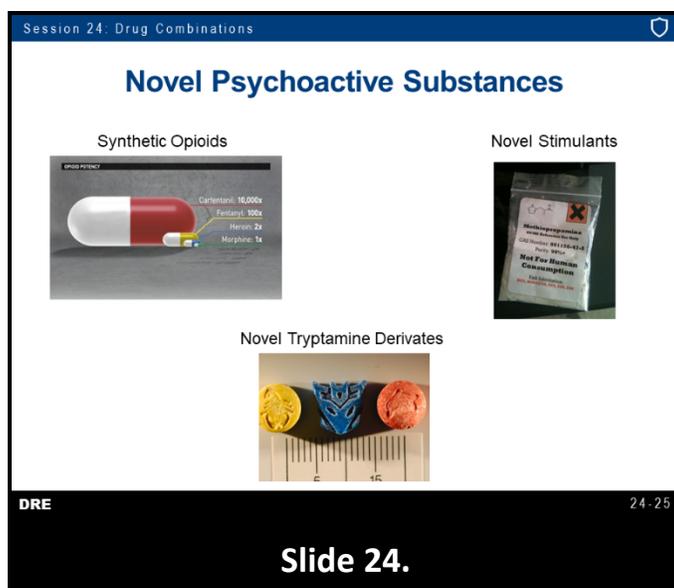
*Drug Symptomatology Matrix:* The Matrix outlines the expected results of the drug influence evaluation for each drug category.



***We will refer to the drug matrix to help us interpret what we are likely to see when we examine drug combinations.***

***Remind participants we “never say never” and we “always avoid saying always” when it comes to signs and symptoms of drugs. The Matrix summarizes what we usually see but doesn't guarantee we will always see exactly that, or every indicator.***

## D. Novel Psychoactive Substances



Novel Psychoactive Substances (NPS) include Synthetic Cannabinoids, Cathinone Derivatives, Psychedelic Phenethylamines, novel Stimulants, novel Synthetic Opioids, Tryptamine Derivatives, psychoactive plants/herbs, and many more. The ever-increasing number of NPS emerging and the parallel changes in drug scenarios represent a challenge for DREs. Subjects under the influence of an NPS may exhibit effects of a drug combination.

Users are typically attracted by these substances due to their intense psychoactive effects and unlikely detection in routine drug screenings. These drugs act on a range of neurotransmitter receptors including Dopamine, Cannabinoid, and Opioid receptors, resulting in effects from multiple drug categories.

Following are examples of Novel Psychoactive Substances.

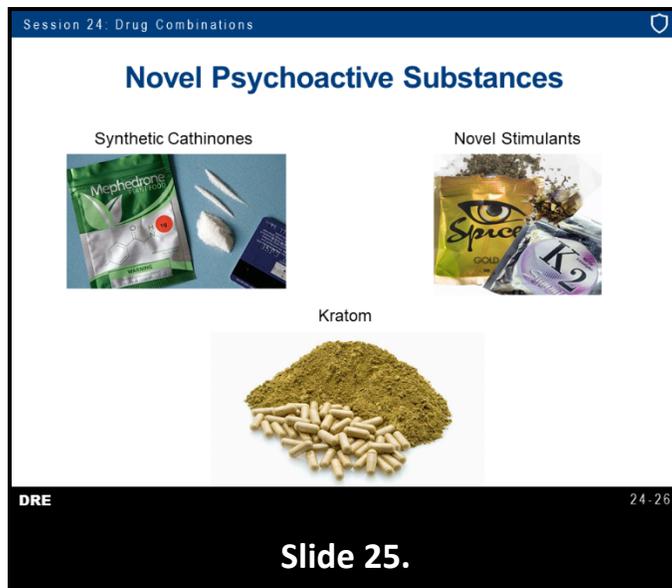
**Synthetic Cannabinoids** – Generally dried plant base sprayed with a mixture of synthetic Cannabimimetics compounds. Within any given package, there may be a range of different psychoactive compounds. Batches of the same brand may also possess highly variable concentrations. The popularity of these drugs in recent years has been driven by the lack of legal restrictions in many States. Hundreds of different Synthetic Cannabinoids have been synthesized with effects sometimes over 100 times greater than THC – leading to drastically varying effects. Examples of Synthetic Cannabinoids include JWH-018, JWH-133, and HU-210 and are sold under product names such as Spice, K-2, Kronic, and others.



Instructor  
Note

***Note: A “Cannabimimetic compound” is a substance that has similar pharmacological effects to Cannabis.***

***Drugs such as JWH-018, JWH-133, and HU-210 are named based upon the researcher or the research facility. The “JWH” compounds were identified by John W. Huffman and “HU” compounds were researched at Hebrew University.***



Synthetic Cathinones are structurally similar to amphetamines and chemically related to cathinone, with subtle variations that alter their chemical properties, potency, pharmacokinetics and pharmacodynamics. Their popularity was driven by the lack of legal restrictions and difficulties detecting the drug in routine drug screens. Each synthetic cathinone has variable effects and potency levels. Examples of synthetic cathinones include MDPV, methcathinone, mephedrone, and methylene.

Novel Stimulants include substances similar to amphetamine-type stimulants, methamphetamine analogs, and cocaine substitutes. Stimulants prevent the transport of dopamine or they can induce or enhance the release of Serotonin. Examples of Novel Stimulants include “Bath Salts,” “Flakka,” “Cloud Nine,” and others.

Synthetic Opioids share with Morphine most of their clinical pharmacological effects, including analgesia, sedation, euphoria and risk of respiratory depression. Examples of Synthetic Opioids include U-47700, AH-7921, and the Fentanyl analogs.

Novel Tryptamine Derivatives can cause visual hallucinations, alterations in sensory perception, distortion of body image, depersonalization, anxiety, and panic. Examples of tryptamine derivatives are 4-HO-MET, 5-MeO-DET, and NMT.

Kratom (*Mitragyna Speciosa*) is produced from the leaves of tropical trees native to Indonesia, Malaysia, Thailand, and other areas of Southeast Asia. Kratom is often used for its stimulant and analgesic effects including feelings of euphoria, relief of chronic pain, treatment of depression and anxiety, and to fight fatigue. At low doses, it has a stimulant effect, increasing alertness, talkativeness, and outward behaviors. At high doses, it delivers Opioid-like effects, inhibits smooth muscle control, and reduces pain. In the U.S., it is easily obtained and is most likely to be consumed in tea or chewed. It is not a federally controlled substance in the U.S. but is illegal in some States and several countries.

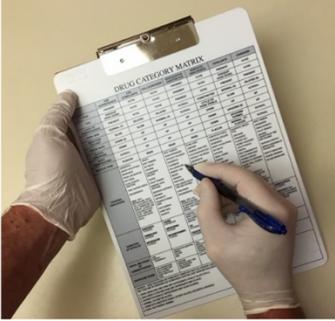


**Source:**

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

Session 24: Drug Combinations

### Novel Psychoactive Substances Call What You See!



DRE 24-27

**Slide 26.**

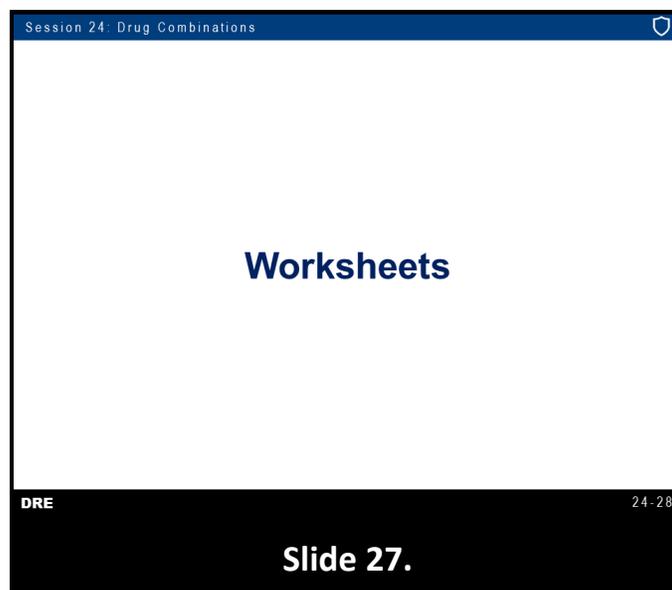
The slide features a central photograph of a person's hands, wearing white gloves, holding a clipboard. The clipboard has a document titled "DRUG CATEGORY MATRIX" which is a grid with various drug names and categories. The person is using a blue pen to mark or check items on the form. The slide has a blue header with the text "Session 24: Drug Combinations" and a shield icon. The main title "Novel Psychoactive Substances Call What You See!" is in bold blue text. At the bottom, there is a black bar with "DRE" on the left and "24-27" on the right, and the text "Slide 26." in white.

NPS may appear to a DRE similar to a polycategory case, though the effects in this case are actually only caused by the NPS drug. “Polycategory” refers to administering drugs from two or more drug categories simultaneously. DREs are reminded that their opinion should be based upon the evidence they collect during the evaluation, and there will be occasions when the symptomatology of NPS impairment could mimic multiple drug categories. If the DRE observes impairment that appears as multiple drug categories, he/she should include the relevant drug categories in their opinion. For example, Spice is considered to be a synthetic cannabinoid. The unique drug effects of some synthetic cannabinoids may include symptomatology associated with more than one category of drugs. Likewise, synthetic cathinones are considered to be a CNS Stimulant, yet the variations in the chemicals may similarly cause a user to exhibit the signs of multiple drug categories.

Although NPS drugs are presented within the category the drug was intended to mimic, it is possible the indicators observed by a DRE may not always fit within that category. A DRE should render an opinion based upon the unique evidence observed during the drug influence evaluation, and, if the observations are consistent with more than one drug category, should include them in the final opinion. A DRE should call the category(ies) based upon the indicators exhibited. For example, if a DRE opines Hallucinogens, and is clearly able to articulate the observed signs and symptoms of this category, then the DRE should call Hallucinogens. Toxicology may fail to confirm the presence of Hallucinogens; however, the DRE should be able to articulate the basis for opining Hallucinogens. Remember: toxicology supports the DRE's opinion, it does not confirm it.



***Encourage participants to “call what you see” during the evaluation. NPS drugs can be considered correct opinions in more than one DRE drug category.***





**Assign participants to work in three-member teams. Direct participants' attention to the three worksheets located at the end of Session 24 in their Participant Guide.**

**Remind participants to consider the matrix exceptions while completing all the worksheets.**

**Instruct the teams they have only 15 minutes to fill out all three worksheets (5 minutes per worksheet).**

**Solicit participants' questions about this assignment.**

**Tell the teams to start working. Terminate their work after 15 minutes.**

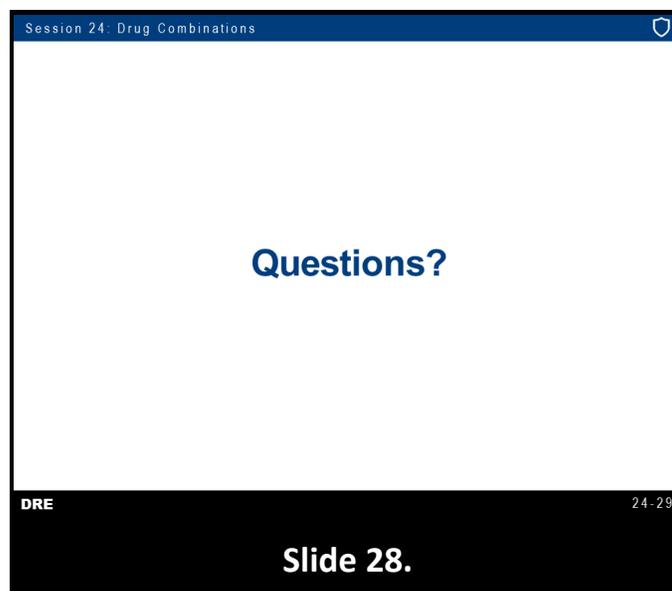
Worksheet #1: Alcohol (BAC 0.06) and Cannabis

Worksheet #2: Cannabis and CNS Depressant

Worksheet #3: CNS Depressant and CNS Stimulant



**Discussion of Worksheets: For each worksheet, select a team member to lead the discussion. Critique and correct the participants' analyses of the drug combinations, as appropriate.**



**Solicit participants' comments and questions about Drug Combinations.**

### **Specific Examples of Drug Combinations: An Exercise for the Participant**

On the final five pages of this session, you will find examples of specific drug combinations. The expected results for the first two of these combinations (Cannabis and Stimulants, and Dissociative Anesthetic and Narcotic Analgesic) have been worked out for you. Study those examples, then complete the work sheets for the three remaining combinations.

**CANNABIS AND CNS STIMULANT  
IN COMBINATION**

<b>Impairment Indicator</b>	<b>Effect Due to Cannabis</b>	<b>Effect Due to CNS Stimulant</b>	<b>Type of Combined Effect</b>	<b>Expected Result</b>
<b>Horizontal Gaze Nystagmus</b>	None	None	Null	None
<b>Vertical Gaze Nystagmus</b>	None	None	Null	None
<b>Lack of Convergence</b>	Present	None	Overlapping	Present
<b>Pupil Size</b>	Dilated or Normal	Dilated	Overlapping or Additive	Dilated
<b>Reaction to Light</b>	Normal	Slow	Overlapping	Slow
<b>Pulse Rate</b>	Up	Up	Additive	Up
<b>Blood Pressure</b>	Up	Up	Additive	Up
<b>Body Temperature</b>	Normal	Up	Overlapping	Up
<b>Muscle Tone</b>	Normal	Rigid	Overlapping	Rigid

**DISSOCIATIVE ANESTHETIC AND NARCOTIC ANALGESIC  
IN COMBINATION**

<b>Impairment Indicator</b>	<b>Effect Due to Dissociative Anesthetic</b>	<b>Effect Due to Narcotic Analgesic</b>	<b>Type of Combined Effect</b>	<b>Expected Result</b>
<b>Horizontal Gaze Nystagmus</b>	Present	None	Overlapping	Present
<b>Vertical Gaze Nystagmus</b>	Present	None	Overlapping	Present
<b>Lack of Convergence</b>	Present	None	Overlapping	Present
<b>Pupil Size</b>	Normal	Constricted	Overlapping	Constricted
<b>Reaction to Light</b>	Normal	Little or None Visible	Overlapping	Little or None Visible
<b>Pulse Rate</b>	Up	Down	Antagonistic	Down/Normal/Up
<b>Blood Pressure</b>	Up	Down	Antagonistic	Down/Normal/Up
<b>Body Temperature</b>	Up	Down	Antagonistic	Down/Normal/Up
<b>Muscle Tone</b>	Rigid	Flaccid	Antagonistic	Rigid/Flaccid/ Normal

**WORKSHEET #1**  
**INSTRUCTOR: ALCOHOL (BAC 0.06) AND CANNABIS**

<b>Impairment Indicator</b>	<b>Effect Due to Alcohol</b>	<b>Effect Due to Cannabis</b>	<b>Type of Combined Effect*</b>	<b>Expected Result</b>
<b>Horizontal Gaze Nystagmus</b>	Present	None	Overlapping	Present
<b>Vertical Gaze Nystagmus</b>	Present (High Doses)	None	Null/Overlapping	None/Present
<b>Lack of Convergence</b>	Present	Present	Additive	Present
<b>Pupil Size</b>	Normal	Dilated (6)	Overlapping/Null	Dilated/Normal
<b>Reaction to Light</b>	Slow	Normal	Overlapping	Slow
<b>Pulse Rate</b>	Up/Down (ETOH may elevate)	Up	Additive/ Antagonistic	Up/Normal/Down
<b>Blood Pressure</b>	Down	Up	Antagonistic	Up/Normal/Down
<b>Body Temperature</b>	Normal	Normal	Null	Normal
<b>Muscle Tone</b>	Flaccid	Normal	Overlapping	Flaccid

\*Null; Overlapping; Additive; or, Antagonistic

**WORKSHEET #2**  
**INSTRUCTOR: CANNABIS AND CNS DEPRESSANT**

<b>Impairment Indicator</b>	<b>Effect Due to Cannabis</b>	<b>Effect Due to CNS Depressant</b>	<b>Type of Combined Effect*</b>	<b>Expected Result</b>
<b>Horizontal Gaze Nystagmus</b>	None	Present	Overlapping	Present
<b>Vertical Gaze Nystagmus</b>	None	Present (High Dose)	Overlapping/Null	Present/None
<b>Lack of Convergence</b>	Present	Present	Additive	Present
<b>Pupil Size</b>	Dilated (6)	Normal (1)	Overlapping/Null/Additive	Dilated/Normal
<b>Reaction to Light</b>	Normal	Slow	Overlapping	Slow
<b>Pulse Rate</b>	Up	Down (2)	Antagonistic/Additive	Up/Down/Normal
<b>Blood Pressure</b>	Up	Down	Antagonistic	Up/Down/Normal
<b>Body Temperature</b>	Normal	Normal	Null	Normal
<b>Muscle Tone</b>	Normal	Flaccid	Overlapping	Flaccid

\*Null; Overlapping; Additive; or, Antagonistic

**WORKSHEET #3**  
**INSTRUCTOR: CNS STIMULANT AND CNS DEPRESSANT**

<b>Impairment Indicator</b>	<b>Effect Due to CNS Stimulant</b>	<b>Effect Due to CNS Depressant</b>	<b>Type of Combined Effect*</b>	<b>Expected Result</b>
<b>Horizontal Gaze Nystagmus</b>	None	Present	Overlapping	Present
<b>Vertical Gaze Nystagmus</b>	None	Present (High Dose)	Overlapping/Null	Present/None
<b>Lack of Convergence</b>	None	Present	Overlapping	Present
<b>Pupil Size</b>	Dilated	Normal (1)	Overlapping/Additive	Dilated
<b>Reaction to Light</b>	Slow	Slow	Additive	Slow
<b>Pulse Rate</b>	Up	Down (2)	Antagonistic/Additive	Up/Down/Normal
<b>Blood Pressure</b>	Up	Down	Antagonistic	Up/Down/Normal
<b>Body Temperature</b>	Up	Normal	Overlapping	Up
<b>Muscle Tone</b>	Rigid	Flaccid	Antagonistic	Rigid/Flaccid/Normal

\*Null; Overlapping; Additive; or, Antagonistic

# 25

# DRE

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## PRACTICE: TEST INTERPRETATION

### LEARNING OBJECTIVES

- Analyze results of a drug influence evaluation
- Articulate basis for the opinion

### CONTENTS

A. Interpretation Practice .....2

### LEARNING ACTIVITIES

- Small-Group Practice
- Participant-Led Presentations



## Learning Objectives

- Analyze results of a drug influence evaluation
- Articulate basis for opinion

DRE

25-2

**Slide 2.**Instructor  
Note

*Briefly review the objectives, content, and activities of this session.*

### A. Interpretation Practice

Instructor  
Note

Activity

#### ***Instructions***

- 1. Assign participants to work in teams of three to four members.***
- 2. Each participant will review all five exemplars (Cases 1-5 Allen, Brown, Cole, Davis, and Elliott).***
- 3. The groups are to discuss the evidence among themselves and reach a conclusion concerning the category of drugs, if any.***
- 4. Each group will present their conclusions to the class.***

Session 25: Practice – Test Interpretation

**Case One:  
Allen**

DRE 25-3

**Slide 3.**



**Preliminary Examination:** Review the results of the Preliminary Examination of Subject Allen. Ask participants: “What category or categories of drugs would produce preliminary examination results consistent with this exemplar?” Probe to draw out the basis for participants’ responses.

**Eye Examinations:** Review the results of the Eye Examinations of Subject Allen. Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

**Psychophysical Tests:** Review the results of the Psychophysical Tests of Subject Allen. Ask participants to discuss the category or categories of drugs that would produce these psychophysical results.

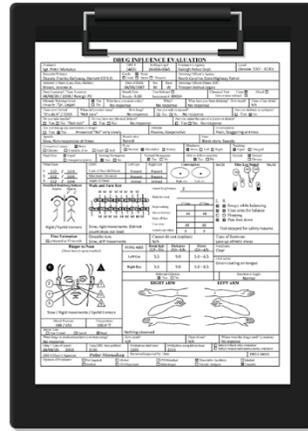
**Vital Signs Examinations:** Review the results of the Vital Signs Examinations of Subject Allen. Ask participants to discuss the category or categories of drugs that would produce these results.

**Dark Room Examinations:** Review the results of the Dark Room Examinations of Subject Allen. Ask participants to discuss the category or categories of drugs that would produce these results.

**Other Evidence:** Review the results of the examinations for injection sites and muscle tone and of the final interview of Subject Allen.

1. Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
2. **Opinions of Evaluator:** Point out the evidence indicates Subject Allen is under the influence of Cannabis.
3. Solicit participants’ questions concerning this demonstration.

## Case Two: Brown



DRE

25-4

### Slide 4.



Instructor  
Note

**Preliminary Examination:** Review the results of the Preliminary Examination of Subject Brown. Ask participants: “What category or categories of drugs would produce preliminary examination results consistent with this exemplar?” Probe to draw out the basis for participants’ responses.

**Eye Examinations:** Review the results of the Eye Examinations of Subject Brown. Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

**Psychophysical Tests:** Review the results of the Psychophysical Tests of Subject Brown. Ask participants to discuss the category or categories of drugs that would produce these psychophysical results.

**Vital Signs Examinations:** Review the results of the Vital Signs Examinations of Subject Brown. Ask participants to discuss the category or categories of drugs that would produce these results.

**Dark Room Examinations:** Review the results of the Dark Room Examinations of Subject Brown. Ask participants to discuss the category or categories of drugs that would produce these results.

**Other Evidence:** Review the results of the examinations for injection sites and muscle tone, and of the final interview of Subject Brown.

1. Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
2. Opinions of Evaluator: Point out the evidence indicates Subject Brown is under the influence of a Dissociative Anesthetic and Cannabis.
3. Solicit participants’ questions concerning this demonstration.

**Case Three:**

Cole



DRE

25-5

**Slide 5.**Instructor  
Note

***Preliminary Examination:*** Review the results of the Preliminary Examination of Subject Cole. Ask participants: “What category or categories of drugs would produce preliminary examination results consistent with this exemplar?” Probe to draw out the basis for participants’ responses.

***Eye Examinations:*** Review the results of the Eye Examinations of Subject Cole. Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

***Psychophysical Tests:*** Review the results of the Psychophysical Tests of Subject Cole. Ask participants to discuss the category or categories of drugs that would produce these psychophysical results.

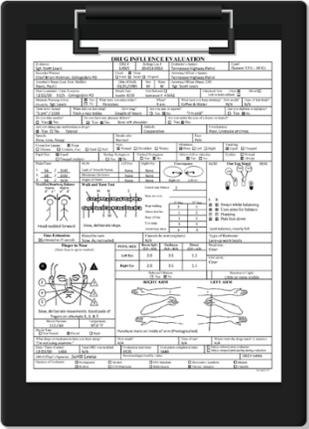
***Vital Signs Examinations:*** Review the results of the Vital Signs Examinations of Subject Cole. Ask participants to discuss the category or categories of drugs that would produce these results.

***Dark Room Examinations:*** Review the results of the Dark Room Examinations of Subject Cole. Ask participants to discuss the category or categories of drugs that would produce these results.

***Other Evidence:*** Review the results of the examinations for injection sites and muscle tone, and of the final interview of Subject Cole.

1. Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
2. ***Opinions of Evaluator:*** Point out the evidence indicates Subject Cole is under the influence of an Inhalant.
3. Solicit participants’ questions concerning this demonstration.

**Case Four:  
Davis**



**Slide 6.**



***Preliminary Examination: Review the results of the Preliminary Examination of Subject Davis. Ask participants: “What category or categories of drugs would produce preliminary examination results consistent with this exemplar?” Probe to draw out the basis for participants’ responses.***

***Eye Examinations: Review the results of the Eye Examinations of Subject Davis. Ask participants to discuss the category or categories of drugs that would cause these eye examination results.***

***Psychophysical Tests: Review the results of the Psychophysical Tests of Subject Davis. Ask participants to discuss the category or categories of drugs that would produce these psychophysical results.***

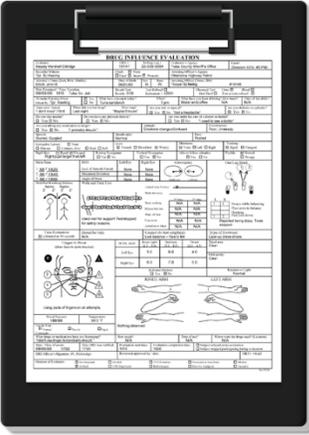
***Vital Signs Examinations: Review the results of the Vital Signs Examinations of Subject Davis. Ask participants to discuss the category or categories of drugs that would produce these results.***

***Dark Room Examinations: Review the results of the Dark Room Examinations of Subject Davis. Ask participants to discuss the category or categories of drugs that would produce these results.***

***Other Evidence: Review the results of the examinations for injection sites and muscle tone, and of the final interview of Subject Davis.***

- 1. Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.***
- 2. Opinions of Evaluator: Point out the evidence indicates Subject Davis is under the influence of a Narcotic Analgesic.***
- 3. Solicit participants’ questions concerning this demonstration.***

**Case Five:  
Elliott**



**Slide 7.**



***Preliminary Examination:*** Review the results of the Preliminary Examination of Subject Elliott. Ask participants: “What category or categories of drugs would produce preliminary examination results consistent with this exemplar?” Probe to draw out the basis for participants’ responses.

***Eye Examinations:*** Review the results of the Eye Examinations of Subject Elliott. Ask participants to discuss the category or categories of drugs that would cause these eye examination results.

***Psychophysical Tests:*** Review the results of the Psychophysical Tests of Subject Elliott. Ask participants to discuss the category or categories of drugs that would produce these psychophysical results.

***Vital Signs Examinations:*** Review the results of the Vital Signs Examinations of Subject Elliott. Ask participants to discuss the category or categories of drugs that would produce these results.

***Dark Room Examinations:*** Review the results of the Dark Room Examinations of Subject Elliott. Ask participants to discuss the category or categories of drugs that would produce these results.

***Other Evidence:*** Review the results of the examinations for injection sites and muscle tone, and of the final interview of Subject Elliott.

1. Ask participants to comment on the category or categories of drugs that would be consistent with all of the evidence on this exemplar.
2. Opinions of Evaluator: Point out the evidence indicates Subject Elliott is under the influence of a medical impairment.
3. Solicit participants’ questions concerning this demonstration.

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Session 18: Practice - Test Interpretation

Questions?

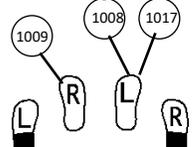
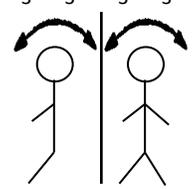
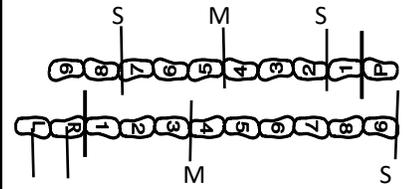
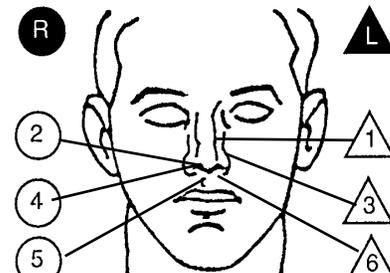
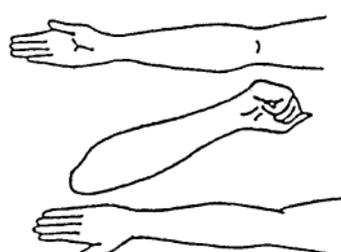
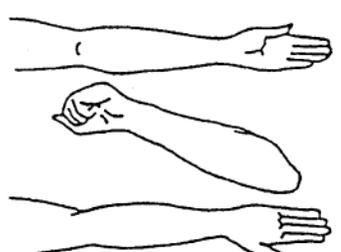
DRE 18-8

**Slide 8.**



*Solicit participants' comments and questions concerning this practice session.*

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Aaron Turcotte</b>		DRE # <b>12459</b>	Rolling Log # <b>22-017-0087</b>	Evaluator's Agency <b>Maine State Police</b>	Case# <b>(Session XXV - #1 IG)</b>																										
Recorder/Witness <b>Officer Rachael Horning, Westbrook PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Bangor PD</b>																											
Arrestee's Name (Last, First, Middle) <b>Allen, Thomas G.</b>		Date of Birth <b>09/03/1988</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Steve Pelletier #12459</b>																										
Date Examined / Time / Location <b>10/30/22 / 9:40 PM / Bangor PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>99305</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>																											
Miranda Warning Given Given by: <b>Ofc. Pelletier</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Taco Bell</b>	When? <b>About 4 PM</b>	What have you been drinking? How much? <b>Beer &amp; water One bottle of each</b>	Time of last drink? <b>7 pm</b>																										
Time now/ Actual <b>8 PM? / 9:45 PM</b>	When did you last sleep? <b>This morning</b>	How long? <b>About 5 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																										
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Sore right wrist</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																											
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>(Long pause before answering no)</b>			Attitude: <b>Cooperative</b>	Coordination: <b>Poor, Slow</b>																											
Speech: <b>Slow, Thick</b>		Breath odor: <b>Normal</b>		Face: <b>Normal</b>																											
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right																											
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy																										
Pulse/Time 1. <u>102</u> / <u>9:48</u> 2. <u>100</u> / <u>10:09</u> 3. <u>100</u> / <u>10:30</u>	HGN Lack of Smooth Pursuit <b>None</b> Maximum Deviation <b>None</b> Angle of Onset <b>None</b>	Left Eye <b>None</b>	Right Eye <b>None</b>	Convergence  Right eye    Left eye	26/30 <b>One Leg Stand</b> 23/30 																										
<b>Modified Romberg Balance</b> Approx. 3" 3"    Approx. 3" 3"  Circular sway. Eyelid tremors	<b>Walk and Turn Test</b>  Leg tremors throughout. Reminded to count steps out loud		Cannot keep balance <b>2</b> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken	<table border="1" style="display: inline-table;"><tr><th>1st Nine</th><th>2nd Nine</th></tr><tr><td>1</td><td>2</td></tr><tr><td>1</td><td>1</td></tr><tr><td>2</td><td>3</td></tr><tr><td>9</td><td>9</td></tr></table>	1st Nine	2nd Nine	1	2	1	1	2	3	9	9	<table border="1" style="display: inline-table;"><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></table> Slow count. Leg tremors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											
1st Nine	2nd Nine																														
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<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																												
<b>Time Estimation</b> <u>38</u> estimated as 30 seconds	Describe turn <b>Stopped and then walking turn</b>	Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Lace-up work boots</b>																											
<b>Finger to Nose</b> (Draw lines to spots touched)  Slow movements. Eyelid tremors		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>																										
		<b>Left Eye</b>	6.0	9.0	5.0 - 7.0																										
		<b>Right Eye</b>	6.0	9.0	5.0 - 7.0																										
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light: <b>Normal</b>																											
		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 																											
		Nothing observed																													
Blood Pressure <b>164 / 92</b>	Temperature <b>98.4 °F</b>	Muscle Tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid																													
What drugs or medications have you been using? <b>"Just some vitamins"</b>		How much? <b>N/A</b>	Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>																											
Date / Time of arrest: <b>10/30/22 8:20 PM</b>	Time DRE was notified: <b>9:00 PM</b>	Evaluation start time: <b>9:40 PM</b>	Evaluation completion time: <b>10:45 PM</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																											
DRE/Officer's Signature: <b>Sgt. Aaron Turcotte</b>		Reviewed/approved by / date:			DRE#																										
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Inhalant <input checked="" type="checkbox"/> Cannabis																										

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Allen, Thomas G.**

1. **Location:** The evaluation was conducted in the Bangor Police Department interview room. The room had adequate lighting with a smooth tile floor with no obstructions. The darkroom examinations were conducted in an adjacent interview room where the lighting level could be adequately darkened.
2. **Witnesses:** Officer Rachael Horning of the Westbrook Police Department witnessed the entire evaluation.
3. **Breath Alcohol Test:** Arresting officer, Steve Pelletier of the Bangor Police Department administered a breath test to the suspect at 8:45 pm obtaining a 0.00% BAC.
4. **Notification and Interview of the Arresting Officer:** At approximately 9:00 pm, I was contacted by dispatch requesting a drug evaluation at the Bangor Police Department. I met Officer Pelletier at the PD, where it was determined he had arrested the suspect for DUI after observing his vehicle being operated without headlights and drifting over the center divider line on State Street. Upon contacting the driver, Officer Pelletier observed he was disoriented and had slow, lethargic movements. The suspect was slow to respond to Officer Pelletier's questions, and when he did reply, his responses were thick and slurred. When the suspect exited his vehicle, he had poor balance and coordination. Suspecting possible impairment, Officer Pelletier administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and One Leg Stand (OLS) tests to the suspect. No clues of HGN were observed, but he did observe impairment clues on the W&T and OLS tests. Officer Pelletier also observed that the suspect had red, bloodshot, watery eyes, and his pupils were dilated. After arresting the suspect, a .00 BAC breath test was obtained, and Officer Pelletier requested the assistance of a DRE.
5. **Initial Observations of the Suspect:** I first observed the suspect sitting in a chair in the interview room at the Bangor PD. He seemed disinterested and unconcerned about his circumstances. When he stood, he was unstable on his feet and appeared disoriented. Numerous times he asked Officer Pelletier why he had been arrested and what he was being charged with. His speech was slow and thick. His eyes were bloodshot and watery, and his pupils appeared to be dilated. I introduced myself and asked the suspect if he would complete a drug influence evaluation, which he agreed to do, but again asked what he had been arrested for.
6. **Medical Problems and Treatment:** The suspect advised that he had a sore wrist from some yard work he had done about 2 or 3 weeks ago. When questioned about the injury, he said he did not require medical assistance and that it would not affect his ability to do the drug evaluation. No other medical conditions were mentioned by the suspect and none were observed during the evaluation.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, he confirmed understanding the instructions. The following psychophysical tests were administered to the suspect:

**Modified Romberg Balance:** During this test, the suspect exhibited an approximate three-inch circular sway. He had a slowed time estimation, estimating the passage of 30 seconds in 38 seconds. When asked how he had estimated the 30 seconds, he stated, "I was just counting in my head". Eyelid tremors were present throughout the test.

**Walk and Turn:** During this test, the suspect lost his balance to the right two times during the instruction stage. Once starting the walking stage, he missed touching heel to toe once on the first nine steps and once on the second nine steps. He also stopped while walking at step 4 on the first nine steps and twice on the second nine steps at steps 5 and 8. He used his arms to balance two times on first nine steps and three times on the second nine steps. He made an improper turn by walking around slowly in a circular manner instead of the turn he was instructed to do. Leg tremors were present throughout and he had to be reminded three times to count his steps out loud.

**One Leg Stand:** Per DRE protocol, this test was conducted once while standing on his left foot and once standing on his right foot. When standing on his left foot and raising his right foot off the floor, the suspect swayed while balancing, used his arms for balance twice, and put his foot down once at count 1,009. While standing on his right foot and raising his left foot off the floor, he again swayed while balancing, used his arms for balance once and put his foot down at counts 1,008 and 1,017. His count was slow on each part of the test counting to 1,026 while standing on his left foot and 1,023 when standing on his right foot. Leg tremors were observed throughout the test.

**Finger to Nose:** During this test, the suspect's arm and hand movements towards his nose were slow and deliberate. He did not touch the tip of his nose with the tip of his index finger as instructed on any of the six attempts. Eyelid tremors were present throughout the test.

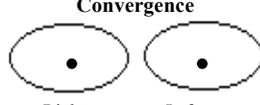
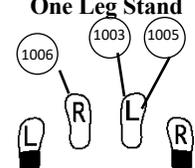
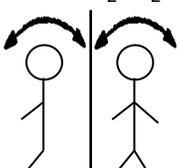
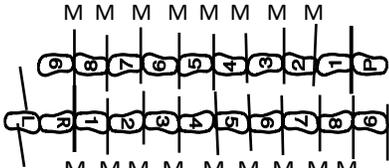
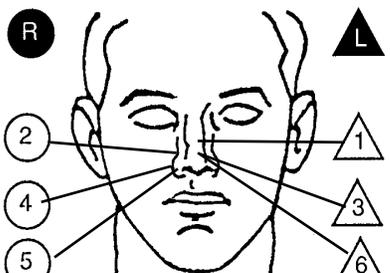
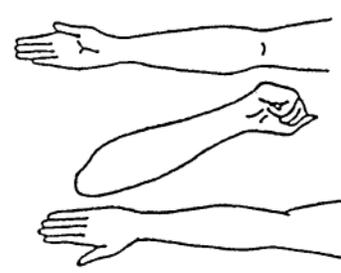
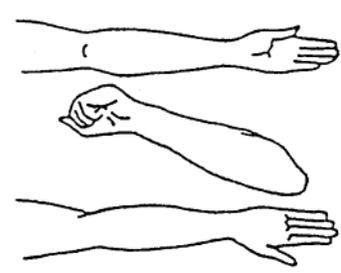
**8. Clinical Indicators of Impairment:**

**Eye Signs:** The eye examinations were conducted in one of the BPD interview rooms, which could be darkened for the examinations. No clues of HGN were observed. The suspect's pupils were dilated in all three lighting conditions. They were estimated at 6.0 mm in both eyes in Room Light and 9.0 mm in both eyes in Near Total Darkness. In Direct Light, rebound dilation was present with his pupils ranging from 5.0 mm to 7.0 mm in both eyes. A lack of convergence was also present in both eyes. The test was conducted twice with the same results where his eyes moved inward towards his nose then moved back out and down. The suspect's eyes were watery and bloodshot, and he had droopy eyelids.

**Vital Signs:** The suspect's pulse rates were checked three times per DRE protocol and were measured at 102, 100 and 100 beats per minute (bpm). All three results were above the DRE average range. His blood pressure was checked at 164/92 mmHg, which were above the DRE averages for the systolic and diastolic ranges. His body temperature was 98.4 degrees, which was within the DRE average range. The suspect was asked about his elevated pulse rates and blood pressure, and he indicated he was not aware of why they would be elevated. He also indicated he did not have a history of high blood pressure.

- 9. Signs of Ingestion:** The suspect's nasal area was clear. However, he did have a brownish-green coating on the back of his tongue, which can be an indicator of someone who has recently smoked marijuana. When questioned about the coating on his tongue, he had no explanation. No indicators of injection sites were located on his arms and hands.
- 10. Suspect's Statements:** The suspect denied using any drugs. When I described the findings of my evaluation and asked about possible drug use, he stated, "Just some vitamins." At no time during the evaluation did he indicate he had used drugs. Additional questions about drug use were ignored by the suspect.
- 11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that, at the time of my evaluation, the suspect was under the influence of Cannabis and unable to operate a vehicle safely.
- 12. Toxicological Sample:** After completing the drug influence evaluation, the suspect was transported to the Saint Joseph Hospital by Officer Pelletier where a blood sample was collected.
- 13. Miscellaneous:** Refer to Officer Pelletier's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Sgt. Peter Manukus</b>		DRE # <b>14031</b>	Rolling Log # <b>22-006-0045</b>	Evaluator's Agency <b>Raleigh Police Dept.</b>	Case# <b>(Session XXV - #2 IG)</b>						
Recorder/Witness <b>Charles Galloway, NC Forensic Testing</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>North Carolina State Highway Patrol</b>							
Arrestee's Name (Last, First, Middle) <b>Brown, Jerome A.</b>		Date of Birth <b>04/06/1987</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Trooper Joshua Legan</b>						
Date Examined / Time / Location <b>08/08/22 / 2208 / Raleigh PD</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>							
Miranda Warning Given Given by: Tpr. Legan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>No response</b>	When? <b>No response</b>	What have you been drinking? How much? <b>No response</b>	Time of last drink? <b>N/A</b>						
Time now/ Actual <b>"It's dark" / 2210</b>	When did you last sleep? <b>"Not sure"</b>	How long? <b>No response</b>	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No response</b>		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>"Not sick"</b>	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No response</b>	Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>No response</b>									
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Answered "No" very slowly</b>		Attitude: <b>Passive, Cooperative</b>		Coordination: <b>Poor, Staggering at times</b>							
Speech: <b>Slow, Non-responsive at times</b>		Breath odor: <b>Rancid</b>		Face: <b>Blank stare, Sweaty</b>							
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right							
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy									
Pulse/Time 1. <u>110</u> / <u>2219</u> 2. <u>112</u> / <u>2236</u> 3. <u>112</u> / <u>2248</u>	HGN Lack of Smooth Pursuit <b>Present</b> Maximum Deviation <b>Present</b> Angle of Onset <b>Immed</b>	Left Eye <b>Present</b>	Right Eye <b>Present</b>	Convergence  Right eye      Left eye	NA/30 <b>One Leg Stand</b> NA/30 						
Modified Romberg Balance Approx. 2" 2"  <b>Rigid / Eyelid tremors</b>	Walk and Turn Test  <b>Slow, rigid movements. Did not count steps out loud.</b>	Cannot keep balance <b>2</b> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken		1st Nine      2nd Nine <table border="1" style="width: 100%;"><tr><td>All</td><td>All</td></tr><tr><td>All</td><td>All</td></tr><tr><td>9</td><td>9</td></tr></table>		All	All	All	All	9	9
All	All										
All	All										
9	9										
Time Estimation <u>55</u> estimated as 30 seconds	Describe turn <b>Slow, stiff movements</b>	Cannot do test (explain) <b>N/A</b>		Type of footwear: <b>Lace up athletic shoes</b>							
Finger to Nose (Draw lines to spots touched)  <b>Slow / Rigid movements / Eyelid tremors</b>	PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area: <b>Clear</b>						
	Left Eye	5.5	9.0	5.0 - 6.5	Oral cavity: <b>Green coating on tongue</b>						
	Right Eye	5.5	9.0	5.0 - 6.5	Reaction to Light: <b>Normal</b>						
Blood Pressure <b>188 / 102</b>	Temperature <b>100.4 °F</b>	Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
Muscle Tone: <input type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid	RIGHT ARM 		LEFT ARM 								
What drugs or medications have you been using? <b>No response</b>		How much? <b>N/A</b>		Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>No response</b>						
Date / Time of arrest: <b>08/08/22 2050</b>	Time DRE was notified: <b>2135</b>	Evaluation start time: <b>2205</b>	Evaluation completion time: <b>2315</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation							
DRE/Officer's Signature: <b>Peter Manukus</b>		Reviewed/approved by / date:			DRE#						
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen <input checked="" type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Inhalant <input checked="" type="checkbox"/> Cannabis											

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Brown, Jerome A.**

1. **Location:** The evaluation was conducted in Raleigh Police Department Interview Room, Raleigh, NC. The room was well illuminated and had short pile carpeting and no obstructions. The darkroom examinations were conducted in a separate interview room adjacent to the main interview room.
2. **Witnesses:** Charles Galloway of the NC Forensic Testing for Alcohol witnessed and recorded the evaluation.
3. **Breath Alcohol Test:** The arresting officer, Trooper Joshua Legan of the North Carolina State HP administered a breath test to the suspect at 2130 hours obtaining a 0.00% BAC result.
4. **Notification and Interview of the Arresting Officer:** On 08/08/22 at approximately 2135 hours I was contacted by Trooper Legan requesting a DRE evaluation at the Raleigh Police Department. Upon my arrival, I met Trooper Legan and Deputy Galloway, and it was determined the suspect had nearly hit a North Carolina trooper while on a traffic stop on SR 55. The suspect was later found parked in the Burger Shack parking lot. When contacted by Trooper Legan, the suspect appeared dazed and confused. He was non-responsive, had a blank stare, and was sweating profusely. When asked for his operator's license, vehicle registration and proof of insurance, he handed Trooper Legan a traffic ticket he had received several weeks prior for disobeying a stop sign. Suspecting that the suspect might be impaired, Trooper Legan requested that he perform SFSTs. According to Trooper Legan, the suspect had difficulty understanding the test instructions and completing them as instructed. However, six clues of Horizontal Gaze Nystagmus (HGN) were observed as was Vertical Gaze Nystagmus (VGN). According to Trooper Legan, the suspect's balance and coordination were extremely poor and the Walk and Turn (W&T) and One Leg Stand (OLS) tests had to be stopped for safety purposes. The suspect was subsequently arrested for DUI and transported to RPD for processing. After obtaining a .00 BAC, I was requested to assist with the investigation.
5. **Initial Observation of the Suspect:** I first observed the suspect in the main interview room at RPD. He was looking straight ahead with a blank stare. When asked questions, he responded slowly, and at times did not respond at all. His speech was slow and thick, and several times he repeated his responses. When he stood, he was unstable on his feet and staggered to the side. Several times he reached out to use the interview table to brace himself. The suspect was perspiring heavily even though the room was being cooled by the air conditioning. I also noted that his eyes were red and bloodshot. I introduced myself to the suspect and asked if he would participate in a drug evaluation. He was slow to respond, but stated, "Okay. I will try it". He was wearing jeans with holes in both knees, a white tee-shirt, and lace-up athletic shoes.
6. **Medical Problems and Treatment:** When questioned about any medical conditions the suspect may be suffering from, he was again slow to respond and I had to repeat the question several times. He eventually responded, "Not sick." I asked if there was anything that would prevent him from participating in the evaluation and he again replied, "I'm not sick." He did not report any medical conditions during the evaluation, and none were observed or detected during the evaluation.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, he confirmed understanding the instructions sometimes verbally and other times with a head nod. However, I did have to repeat the instructions for the W&T test multiple times. The following psychophysical tests were administered to the suspect:

**Modified Romberg Balance:** The suspect had an approximate two-inch side to side sway and had a slow time estimation, estimating the passage of 30 seconds in 55 seconds. I asked how he had estimated the passage of 30 seconds and he looked straight ahead and did not answer. He was rigid throughout the test, and eyelid tremors were present.

**Walk & Turn:** For this test, a line on the flooring was used. The suspect had difficulty understanding the test and I had to repeat my instructions to him multiple times. Once he started the test, he was very rigid and lost his balance twice during the instructions stage. Once he began the walking stage, he walked slowly with rigid movements. He missed touching heel to toe on every step on the first nine steps and the second nine steps. He also extended his arms out to his sides using his arms for balance during the entire test. His turn was slow and deliberate with stiff-like movements but was completed as instructed.

**One Leg Stand:** The suspect displayed balance problems while attempting this test. When attempting to stand on his left foot and raise his right foot off the floor, he swayed while balancing multiple times, used his arms for balance three times and nearly fell putting his foot down at 1,006. The test was stopped at that point for safety reasons. While attempting to stand on his right foot and raise his left foot off the floor, he again swayed while balancing, used his arms for balance and put his left foot down at his counts of 1,003 and 1,005, and the test was stopped for safety reasons.

**Finger to Nose:** On this test, the suspect missed the tip of his nose with the tip of his index finger as directed on all six attempts. He also kept his finger in contact with his face on each attempt and had to be reminded multiple times to return his arm back at his side after each attempt. His arm movements were slow and rigid. Eyelid tremors were observed throughout the test.

**8. Clinical Indicators of Impairment:**

**Eye Signs:** The eye examinations were conducted in the BPD interview room which was adequately darkened for the dark room examinations. Six clues of HGN were present with an immediate angle of onset. VGN was also present. The suspect's pupils were dilated in all three lighting conditions. They were estimated at 5.5 mm in both eyes in Room Light and 9.0 mm in both eyes in Near Total Darkness. Rebound dilation was present in Direct Light with his pupils ranging from 5.0 mm to 6.5 mm in both eyes. He was unable to converge his eyes and looked straight ahead during the test. The test was conducted twice with the same results.

**Vital Signs:** The suspect's pulse rates were checked three times and were 110, 112 and 112 beats per minute. All three results were above the DRE average range for pulse rate. His blood pressure was checked at 188/102, which was also above the DRE average range. His body temperature was measured at 100.4 degrees, which was above the DRE average range. He was asked about his elevated pulse rates and blood pressure and he had a long blank stare and indicated he was not aware of why they would be elevated. His muscle tone was rigid.

**9. Signs of Ingestion:** The suspect's nasal area was clear, and his breath was rancid smelling. He had a greenish coating on the back of his tongue. When questioned about the green coating, he had no explanation and shrugged his shoulders. No indicators of injection sites were located on his arms and hands.

**10. Suspect's Statements:** The suspect did not respond when asked about drug use. Each time I asked the question, he would look straight ahead without a response.

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of a Dissociative Anesthetic and Cannabis and unable to operate a vehicle safely.

**12. Toxicological Sample:** After completing the evaluation, the suspect was requested to provide a urine sample, which he provided. The sample was collected at 2310 hours and was placed into evidence pending delivery to the state laboratory for analysis.

**13. Miscellaneous:** Due the suspect's elevated pulse and B/P, he was transported to UNC REX Hospital and examined by ER staff. Refer to Trooper Legan's arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluators <b>Officer Robert Steiner</b>		DRE # <b>10984</b>	Rolling Log # <b>22-014-0101</b>	Evaluator's Agency <b>Honolulu PD</b>	Case# <b>(Session XXV - #3 IG)</b>
Recorder/Witness <b>Officer Jason Foxworthy, Hawaii CO PD</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Honolulu PD</b>	
Arrestee's Name (Last, First, Middle) <b>Cole, Ricky Lee</b>		Date of Birth <b>06/04/1994</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Steven Chun #21288</b>
Date Examined / Time / Location <b>11/07/22 / 0200 / HPD Intake</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>900305</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Ofc. Chun</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Rice bowl</b>	When? <b>About 7 pm</b>	What have you been drinking? How much? <b>Red Bull ( 1 can )</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>About 3 am / 0204</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 4 or 5 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: <b>Passive, Cooperative</b>	Coordination: <b>Poor, Staggering at times</b>	
Speech: <b>Slow, Slurred, Thick</b>		Breath odor: <b>Rancid</b>		Face: <b>Flushed</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>106</u> / <u>0215</u> 2. <u>102</u> / <u>0228</u> 3. <u>96</u> / <u>0245</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye <b>Present</b> <b>Present</b> <b>35</b>	Right Eye <b>Present</b> <b>Present</b> <b>35</b>	Convergence  Right eye      Left eye	
Modified Romberg Balance Approx.      Approx. 2" 2"      2" 2"  Circular sway		Walk and Turn Test  Walked slowly		NA/30 <b>One Leg Stand</b> NA/30  L      R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down  Nearly fell. Tests stopped.	
Time Estimation <b>45</b> estimated as 30 seconds		Describe turn <b>Stopped. Slow deliberate steps</b>		Cannot do test (explain) <b>N/A</b>	
Type of footwear: <b>Sandals</b>		Nasal area: <b>Redness</b>		Oral cavity: <b>Clear</b>	
Finger to Nose (Draw lines to spots touched)  Swaying. Opened eyes on each attempt		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	4.5	6.5	4.0
		Right Eye	4.5	6.5	4.0
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <b>Slow</b>
		RIGHT ARM 		LEFT ARM 	
Blood Pressure <b>146 / 98</b>		Temperature <b>98.8 °F</b>		Chemical-like odor on hands and fingers	
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:			
What drugs or medications have you been using? <b>"None. I'm not using drugs"</b>		How much? <b>N/A</b>	Time of use? <b>N/A</b>	Where were the drugs used? (Location) <b>N/A</b>	
Date / Time of arrest: <b>11/07/22 0115</b>	Time DRE was notified: <b>0140</b>	Evaluation start time: <b>2000</b>	Evaluation completion time: <b>0255</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>R. Steiner</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant	<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

# DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Cole, Ricky Lee**

1. **Location:** The evaluation was conducted in the Interview/Booking Room at the Honolulu Police Department. The room is well illuminated and has a smooth tile floor with no obstructions. The darkroom examinations were conducted in the staff restroom.
2. **Witnesses:** Officer Jason Foxworthy of the Hawaii County PD witnessed and recorded the drug evaluation.
3. **Breath Alcohol Test:** Arresting Officer Steven Chun of the Honolulu PD administered a breath test to the suspect at the HPD at 0135 hours obtaining a 0.00% BAC result.
4. **Notification and Interview of the Arresting Officer:** On 11/07/22 at approximately 0140 hours, I was dispatched to HPD to assist Officer Chun with a drug influence evaluation. I arrived and spoke with Officer Chun and it was determined he had stopped the suspect's vehicle for failing to stop at a red light at King Street and University Ave. He stated that the suspect's speech was slurred and thick. He also had difficulty concentrating and appeared confused. Officer Chun requested the suspect to submit to SFSTs, which he agreed to do. Officer Chun observed six clues of HGN and also observed VGN. The suspect had difficulty completing the W&T and OLS tests and nearly fell several times while attempting them. Officer Chun did not detect an odor of an alcoholic beverage on the suspect's breath but did smell a strong chemical odor on his hands and clothing. The suspect was arrested for DWI and after obtaining a .00 BAC, Officer Chun requested DRE assistance. Officer Chun is a certified DRE but was on a special enforcement detail and was unable to complete the evaluation.
5. **Initial Observation of the Suspect:** I first observed the suspect at HPD in the Interview/Booking Room. He appeared passive and cooperative. His speech was slow, thick-tongued, and at times slurred. His balance appeared to be poor and he was unsteady on his feet. He swayed and wobbled as he stood and walked. Numerous times he steadied himself against the wall and the interview table. His face was flushed, and his eyes were bloodshot and watery. I introduced myself and asked if he would participate in a drug evaluation. He was slow to respond and appeared to have concentration problems. He agreed to the evaluation and stated, "Yeah, okay." When standing near him, I detected a chemical odor on his clothing.
6. **Medical Problems and Treatment:** I questioned the suspect about medical issues and any other conditions which might prohibit him from doing the evaluation. He reported that he was "a little dizzy" but was okay. I asked if he needed medical assistance and he said he did not. The suspect did not report any other medical issues, and none were observed during the evaluation.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, he acknowledged that he understood the instructions. The following tests were given:

**Modified Romberg Balance:** During this test, the suspect swayed approximately 2" in a circular motion. His time estimation was slow, estimating the passage of 30 seconds in 45 seconds.

**Walk and Turn:** For this test, a line in the tile floor was used. While in the instructions stage, the suspect lost his balance to the right two times. When instructed to begin the walking stage on the first nine steps he missed heel-to-toe once at step 4, stopped walking at step 5, and stepped off the line once at step 8. He used his arms to balance once during the first nine steps. While attempting the turn, he stopped and appeared confused on what to do. When he resumed the test, he took very slow deliberate steps, but turned as instructed. On the return nine steps, he stopped while walking once at step 2, stepped off the line with his next step, missed heel-to-toe twice at steps 6 and 8, and used his arms to balance twice.

**One Leg Stand:** While standing on his left foot and extending his right foot off the floor, the suspect swayed while balancing once, used his arms for balance once, hopped once, and put his foot down at 1,003 and 1,004 and nearly fell. The test was stopped for the suspect's safety. I asked if he was able to continue and he replied he could. While standing on his right foot and extending his left foot off the floor, the suspect swayed while balancing once, used his arms for balance once, hopped once, and put his foot down at 1,006. Due to the suspect's poor balance and him again nearly falling, the test was stopped. After the test was stopped, the suspect stated, "I'm a little dizzy" and then laughed out loud.

**Finger to Nose:** During this test, the suspect swayed noticeably. He opened his eyes on each attempt despite being told repeatedly to keep them closed. He missed the tip of his nose with the tip of his index finger on all six attempts. I also had to remind him to lower his hand after each attempt. His arm movements were slow and rigid.

## **8. Clinical Indicators of Impairment:**

**Eye Signs:** The suspect's eyes were bloodshot and watery. All six clues of HGN were present with an approximate 35-degree angle of onset. VGN and a Lack of Convergence were present with his eyes moving inward to the nose, and then moving downwards and back toward center. The test was conducted twice with the same results. His pupil size estimations were all within the DRE average ranges for each of the lighting conditions and were 4.5 mm in RL, 6.5 mm in NTD and 4.0 mm in DL. His reaction to light was slow and he did not exhibit rebound dilation.

**Vital Signs:** The suspect's pulse rates were above the DRE average range on all three checks at 106, 102, 96 bpm. His blood pressure was measured at 146/98, which was above the DRE average range for both the systolic and diastolic ranges. He was asked about his high pulse rates and blood pressure and he appeared to be confused with the question and had no explanation. The suspect's temperature was measured with a 98.8 degrees result, which was within the DRE average range for temperature.

9. **Signs of Ingestion:** The suspect had a severe redness to his nasal area. He also had a strong chemical-like odor on his clothing and hands. When asked about the odor, he indicated that earlier in the day he was helping a friend clean his car engine and they were using engine cleaner and he must have gotten the cleaner on his hands and clothes.
10. **Suspect's Statements:** The suspect denied using any medications or drugs. He admitted smoking marijuana occasionally but claimed he had not smoked marijuana in over a month. When asked about other impairing substances, he did not respond.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of an **Inhalant** and was unable to operate a vehicle safely.
12. **Toxicological Sample:** A urine sample was collected from the suspect at 0255 hours and will be forwarded to the Crime Laboratory for analysis.
13. **Miscellaneous:** An arrest warrant for Failure to Appear for Possession of Marijuana was served on the suspect. Refer to Officer Chun's DUI arrest report for additional details.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Jessie Loy</b>		DRE # <b>15621</b>	Rolling Log # <b>22-013-0063</b>	Evaluator's Agency <b>Nashville Police Department</b>	Case# <b>(Session XXV - #4 IG)</b>
Recorder/Witness <b>Lt. Dwayne Stanford, Tennessee HP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>Tennessee Highway Patrol</b>	
Arrestee's Name (Last, First, Middle) <b>Davis, Paul J.</b>		Date of Birth <b>01/21/1985</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Sgt. Scott Lewis 14965</b>
Date Examined / Time / Location <b>12/22/22 1525 Nashville HP Barracks</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>45662</b>	Chemical Test: Urine <input checked="" type="checkbox"/> Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Sgt. Lewis</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Pancakes</b>	When? <b>9 am</b>	What have you been drinking? How much? <b>Coffee &amp; Water N/A</b>	Time of last drink? <b>N/A</b>
Time now/ Actual <b>"5 pm" / 1530</b>	When did you last sleep? <b>Took a nap today</b>	How long? <b>Couple of hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I'm cold"</b>	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Sore left shoulder</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Tylenol</b>		Attitude: <b>Cooperative</b>		Coordination: <b>Poor, Unstable at times</b>	
Speech: <b>Slow, Low, Raspy</b>		Breath odor: <b>Normal</b>		Face: <b>Pale</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy			
Pulse/Time 1. <u>56</u> / <u>1542</u> 2. <u>58</u> / <u>1550</u> 3. <u>56</u> / <u>1618</u>		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye Left eye
Modified Romberg Balance Approx. 4" 4" 4" 4"  Head nodded forward		Walk and Turn Test  Slow, deliberate steps.		Cannot keep balance <u>2</u> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken	41/30 <b>One Leg Stand</b> 39/30  L R <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Sways while balancing <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Uses arms for balance <input type="checkbox"/> <input type="checkbox"/> Hopping <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Puts foot down Lost balance, nearly fell
Time Estimation <u>58</u> estimated as 30 seconds		Describe turn <b>Slow. As instructed</b>		Cannot do test (explain) <b>N/A</b>	
Type of footwear: <b>Lace-up work boots</b>		Nasal area: <b>Clear</b>		Oral cavity: <b>Clear</b>	
Finger to Nose (Draw lines to spots touched)  Slow, deliberate movements. Used pads of fingers on attempts 1, 3, & 5		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	2.0	2.5	1.5
		Right Eye	2.0	2.5	1.5
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Little or none visible</b>	
		RIGHT ARM 		LEFT ARM 	
Blood Pressure <b>112 / 64</b>		Temperature <b>97.0 °F</b>		Puncture mark on inside of arm (Photographed)	
Muscle Tone: <input type="checkbox"/> Near Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		What drugs or medications have you been using? <b>"I'm not using anymore."</b>		How much? <b>N/A</b>	Time of use? <b>N/A</b>
Date / Time of arrest: <b>12/22/22 1430</b>		Time DRE was notified: <b>N/A</b>	Evaluation start time: <b>1525</b>	Evaluation completion time: <b>1640</b>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation
DRE/Officer's Signature: <b>Jessie Loy</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhalant <input type="checkbox"/> Medical <input type="checkbox"/> CNS Depressant <input type="checkbox"/> Hallucinogen <input checked="" type="checkbox"/> Narcotic Analgesic <input type="checkbox"/> Cannabis					

## DRUG INFLUENCE EVALUATION NARRATIVE

**Subject: Davis, Paul J.**

- 1. Location:** The evaluation was conducted in the DUI processing room at the Nashville Highway Patrol office in Nashville, TN. The room had adequate overhead lighting and had a tile floor with no obstructions. The staff restroom was used for the dark room examinations.
- 2. Witnesses:** Lt. Dwayne Stanford from the TN HP was present and witnessed and recorded the entire evaluation.
- 3. Breath Alcohol Test:** At 1450 hours, the arresting officer, Sgt. Scott Lewis administered a breath test to the suspect at the Nashville HP office and obtained a 0.00% BAC result.
- 4. Notification and Interview of the Arresting Officer:** On 12/22/22, I was on duty working a special DUI patrol in the Nashville area. While on patrol I was requested to assist Sgt. Lewis of the TN HP with a suspected drug impaired driver arrest. Upon contacting Sgt. Lewis, it was learned that he had located the suspect slumped over the steering wheel of his vehicle parked along the shoulder of Route 155 near Belmont Blvd. When he approached the vehicle, he observed that it was in gear and the engine was running. The vehicle was up against a roadside cement barrier and was not moving. Sgt. Lewis knocked on the driver's window and the suspect leaned back, opened his eyes and appeared to be startled by his presence. He was asked to roll down his window and put the vehicle into Park, which he did after noticeably fumbling with the window control and the transmission lever. The suspect was coherent but appeared dazed and confused. When asked, he stated he was not sure where he was. Sgt. Lewis noted that his speech was slow, low, and raspy. His movements were also slow and deliberate. Sgt. Lewis noted that his pupils were constricted. When he exited the vehicle, his movements were slow, and he was unsteady on his feet, and he used the side of his vehicle as support. Sgt. Lewis did not detect an odor of alcoholic beverage on his breath. When asked, he stated he was feeling alright, but a little tired. He stated he was not sick and was not injured. There were no overt indicators of a medical problem. Sgt. Lewis attempted to administer SFSTs at roadside, which included the HGN, VGN, Walk and Turn and One Leg Stand tests. He did not exhibit HGN or VGN. He was uncoordinated during the Walk and Turn and One Leg Stand tests. Throughout the testing, he had difficulty maintaining his balance and displayed poor coordination. After completing the SFSTs, the suspect was placed under arrest for DUI. When placing the suspect into custody, Sgt. Lewis observed what appeared to be a bloody spot on his forearm area on the inside of his left shirt sleeve. When asked about the bloody spot, he stated that he had cut himself on a nail earlier in the day. After being placed under arrest for DUI and securing him in Sgt. Lewis' patrol vehicle, the suspect appeared to be "on the nod" at times. The suspect was advised of his Miranda Rights by Sgt. Lewis. While securing his vehicle, Sgt. Lewis located a syringe laying on the passenger side floorboard. The syringe was seized as evidence. After securing his vehicle, the suspect was transported to the Nashville HP office for processing and additional testing. After obtaining a .00 BAC result, Sgt. Lewis requested DRE assistance. (Refer to Sgt. Lewis' DUI arrest report for additional details).
- 5. Initial Observation of the Subject:** Upon my arrival at the Nashville HP office, I observed that the suspect was having difficulty keeping his eyes open and his head was continually nodding forward. I noted that he had droopy eyelids and his pupils appeared constricted. When he spoke, his voice was slow, low, and raspy. He was continually scratching his face and arms, and he complained of being cold. I explained the DRE process and asked if would participate in the evaluation, which he agreed to do by stating, "Yeah, okay, whatever." The suspect appeared to be "on the nod" and numerous times I had to repeat my questions and wait for his delayed responses. When asked if he was taking any medications or drugs, the suspect indicated that he sometimes takes Tylenol for a sore shoulder. He stated several times he was cold and at times felt nauseous. The room temperate was set at approximately 70 degrees, which is the normal setting for the time of year. His face was pale, and he did not have any distinctive breath odor. When asked, he stated he did not need any medical attention. I noted that the suspect was wearing jeans, a long sleeve plaid

shirt and black lace-up boots. When asked, he told me he thought it was about 5:00 PM when the actual time was 3:30 PM. He stated he last slept earlier in the day taking a nap but did not say when.

6. **Medical Problems and Treatment:** The suspect was asked about any medical conditions he may be experiencing, and he was slow to respond. He finally indicated that he was tired, and sometimes takes Tylenol for his shoulder. When asked about his shoulder condition, he explained that he had hurt it about two or three months ago while moving pallets at work but was not under doctor's care for the injury. When asked if he needed medical assistance for his shoulder or any other medical condition he may be experiencing, he stated, "No, I'm okay. Thanks for asking." During the evaluation, no medical issues or concerns were detected, and none were mentioned by the suspect.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, he confirmed that he understood the instructions. The following psychophysical tests were administered:

**Modified Romberg Balance:** During this test, the suspect swayed approximately four inches front to back and side to side. I estimated his sway by lining him up using a line in the brick wall behind him and to the side. His head also nodded forward during the test, and it appeared he was on the nod. His time estimation was slow, estimating 30 seconds in 58 seconds. When asked how long of time he estimated, he stated, "about 30 seconds." I asked how he estimated the 30 seconds and he said, "I just counted in my head."

**Walk and Turn:** During this test, the suspect lost his balance to the right twice during the instructions stage. Once he began the walking stage, on the first nine steps he stopped while walking three times on steps 2, 6 and 8. He missed touching heel to toe between steps 3 and 4, used his arms to balance three times and stepped off the line at step 4. As he made his turn, he took slow deliberate steps, but completed the turn as instructed. On the second nine steps, he stopped while walking once at step 1, missed touching heel to toe twice at steps 6 and 8, and stepped off the line at step 9. He used his arms to balance three times on the second nine steps.

**One Leg Stand:** On this test, the suspect had difficulty maintaining his balance while standing on both his left and right foot. While attempting to stand on his left foot and raise his right foot off the floor, he began swaying, used his arms for balance, and put his foot down at 1,012 losing his balance. His count was slow, counting to 1,041 in the 30 second period. When attempting to stand on his right foot and raise his left foot off the floor, he again swayed, used his arms for balance, and put his foot down on counts 1,003 and 1,020. He again counted slowly reaching 1,039 in the 30 second period. Each time after the test ended, he would start scratching his arms, neck, and face.

**Finger to Nose:** On this test, the suspect made slow and deliberate arm movements. He was not able to touch the tip of his nose with the tip of his index finger as directed on five of the six attempts. The only attempt where he touched the tip of his nose as instructed was attempt 6. He used the pads of his fingers for attempts 1, 3, and 5. At times during the test, he appeared to be on the nod. His knees were bent throughout the test, and at times he would lean forward. After completing the test, he again began scratching his arms, neck, and face.

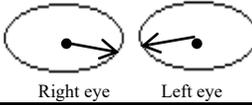
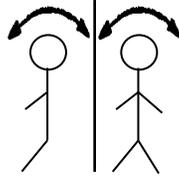
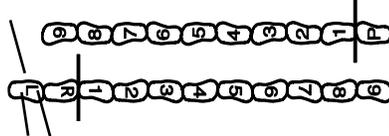
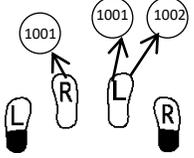
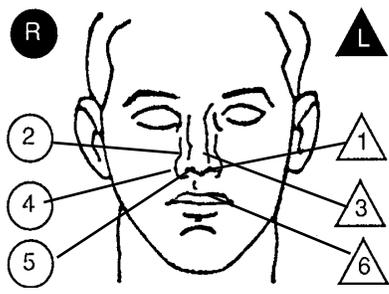
8. **Clinical Indicators of Impairment:**

**Eye Signs:** The suspect exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. No clues of HGN were observed. Vertical Gaze Nystagmus was not observed. The suspect was able to converge his eyes as directed both times the test was conducted. His pupils were constricted in all three lighting conditions and were estimated at 2.0 mm in both eyes in Room Light, 2.5 mm in both eyes in Near Total Darkness, and 1.5 mm in both eyes in Direct Light. His pupil reaction to light was little or none visible. Rebound Dilation was not observed. His eyelids were droopy throughout and several times I had to remind him to keep his eyes open during the eye examinations.

Vital Signs: The suspect's pulse rates were checked at 56, 58 and 56 beats per minute (bpm). All three were below the DRE average ranges. His B/P was measured at 112/64 mm Hg, which was below the DRE average range for both the systolic range and the diastolic range. His body temperature was measured at 97.0 degrees Fahrenheit, which was also below the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** An injection mark was located on the inside of the suspect's left arm. When questioned about the mark, he indicated he had scratched himself on a nail when loading wooden pallets at work. He was asked about the possibility of it being a drug injection mark and he again stated that it was a nail that caused it. His oral and nasal cavities appeared clear.
10. **Suspect's Statements:** After completing the evaluation and explaining my observations, I again asked the suspect about possible drug use. The suspect admitted that he once used prescription pain pills, but stated, "I'm not using them anymore." He denied any illicit drug use, stating he does not use drugs.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect was under the influence of a Narcotic Analgesic and was unable to operate a vehicle safely.
12. **Toxicological Specimen:** A urine sample was collected from the suspect at 1638 hours and was entered into evidence pending analysis by the State Crime Lab.
13. **Miscellaneous:** After completing my evaluation, a records check of the suspect indicated he was on probation for an illicit drug possession conviction. His probation officer was contacted regarding his arrest. The syringe located in his vehicle was logged into evidence pending analysis by the state crime laboratory.

# DRUG INFLUENCE EVALUATION

Evaluator <b>Deputy Marshall Eldridge</b>		DRE # <b>19147</b>	Rolling Log # <b>22-009-0084</b>	Evaluator's Agency <b>Tulsa County Sheriff's Office</b>	Case# <b>(Session XXV-#5 IG)</b>
Recorder/Witness <b>Tpr. BJ Keeling, OK Highway Patrol</b>		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency <b>Oklahoma Highway Patrol</b>	
Arrestee's Name (Last, First, Middle) <b>Elliott, John B.</b>		Date of Birth <b>04/10/1990</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Tpr. Robert James #22555</b>
Date Examined / Time / Location <b>09/05/22 / 1810 / Tulsa Co. Jail</b>		Breath Test: Results: <b>0.00</b>		Test Refused <input type="checkbox"/> Instrument #: <b>68460</b>	
Miranda Warning Given Given by: <b>Tpr. James</b>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Tuna Sandwich</b>		When? <b>About 1 pm</b>
Time now/ Actual <b>"Don't know"/1816</b>		When did you last sleep? <b>Last night</b>		How long? <b>"Maybe 5 hours"</b>	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I used to see a doctor"</b>	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>"I probably should"</b>		Attitude: <b>Emotional / Confused</b>		Coordination: <b>Poor, Unsteady</b>	
Speech: <b>Slurred / Thick / Confused</b>		Breath odor: <b>Normal</b>		Face: <b>Flushed</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy			
Pulse/Time 1. <u>68</u> / <u>1820</u> 2. <u>66</u> / <u>1840</u> 3. <u>66</u> / <u>1850</u>		HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset		Convergence  Right eye    Left eye	
Modified Romberg Balance Approx. 2"    Approx. 2"    Approx. 2"    Approx. 2" 		Walk and Turn Test  Used wall for support. Test stopped.		N/A <b>One Leg Stand</b> N/A 	
Time Estimation <u>32</u> estimated as 30 seconds		Describe turn N/A		Cannot do test (explain) N/A	
Finger to Nose (Draw lines to spots touched)  Used pads of fingers on all attempts		PUPIL SIZE		Room light (2.5 - 5.0)	
		Darkness (5.0 - 8.5)		Direct (2.0 - 4.5)	
		Left Eye		5.0    7.0    4.5	
		Right Eye		5.0    7.0    4.5	
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <b>Normal</b>	
Blood Pressure <b>188 / 98</b>		Temperature <b>99.0 °F</b>		RIGHT ARM	
Muscle Tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Nothing observed		LEFT ARM	
What drugs or medications have you been using? <b>"I don't use drugs, but probably should"</b>		How much? N/A		Time of use? N/A	
Date / Time of arrest: <b>09/05/22 1722</b>		Time DRE was notified: <b>1750</b>		Where were the drugs used? N/A	
Evaluation start time: <b>1810</b>		Evaluation completion time: <b>1920</b>		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <b>M. Eldridge</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input checked="" type="checkbox"/> Medical		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol	
<input checked="" type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant		<input type="checkbox"/> Dissociative Anesthetic	
<input type="checkbox"/> Hallucinogen		<input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant	
<input type="checkbox"/> Cannabin					

# DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Elliott, John B.**

- Location:** The evaluation was conducted in the booking area at the Tulsa County Jail in Tulsa, OK. The room is well illuminated and has smooth concrete flooring with no obstructions. The darkroom examinations were conducted in the staff restroom.
- Witnesses:** The evaluation was observed and recorded by Oklahoma Highway Patrol Trooper BJ Keeling.
- Breath Alcohol Test:** The arresting officer, Trooper James had administered a breath test to Elliott prior to my arrival and obtained a 0.00% result.
- Notification and Interview of the Arresting Officer:** On 09/05/22, at approximately 1750 hours, I was on duty and requested to contact Trooper James regarding a drug evaluation at the Tulsa County Jail. After contacting Trooper James, it was determined that the driver, John Elliott, had been involved in a minor collision in a construction zone on I-244. Construction workers at the scene reported that Elliott was acting strangely and appeared to be confused and disoriented. When Trooper James arrived at the scene, he found Elliott wandering along the roadway near his vehicle. According to Trooper James, Elliott's speech was slurred and gurgled, and at times incoherent. He also had difficulties maintaining his balance and several times staggered as he walked. Trooper James determined that Elliott was not injured and was able to perform SFSTs. Trooper James attempted to administer the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. No clues of HGN were observed. However, Elliott did have difficulty completing the other SFSTs as directed and both tests had to be stopped for safety reasons. According to Trooper James, Elliott was found to be driving with a suspended operator's license and had an outstanding misdemeanor warrant for his arrest for Failure to Appear. Elliott was taken into custody and transported to the Tulsa County Jail for processing. After obtaining a .00 BAC, I was requested to assist with the investigation.
- Initial Observation of the Suspect:** I first observed Elliott in the interview room at the County Jail. He was having problems with his balance and was unsteady on his feet. He was talking to himself, and his speech was mumbled and at times incoherent. I introduced myself and I requested to conduct a drug evaluation, which he agreed to do stating, "Alright, but I'm not drunk." I observed that his mood seemed to be changing at times, going from being cooperative to depressed acting. He was wearing blue dress pants, a light blue long sleeve shirt and black lace-up shoes.
- Medical Problems and Treatment:** When I attempted to discuss any medical problems with Elliott, he got evasive, appeared to be confused, and at times would not answer my questions. He did indicate that he was not currently taking any medication or drugs, but commented, "I probably should." I asked if he needed medical assistance and he responded, "For what, a headache."
- Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to Elliott prior to him attempting them. After each demonstration, he confirmed that he understood the test and the instructions. The following psychophysical tests were administered:

**Modified Romberg Balance:** During this test, Elliott swayed approximately two inches front to back and side to side. He estimated the passage of 30 seconds in 32 seconds.

**Walk and Turn:** During this test, Elliott could not maintain his balance in the instructions stage, losing his balance three times. He extended his right arm out and used the wall for support and the test was stopped for safety reasons. After trying to complete the test, he began rubbing his head and was mumbling to himself.

**One Leg Stand:** For this test, Elliott was not able maintain his balance on either his left or right foot and nearly fell several times attempting to do so. He claimed to be dizzy and due to his poor balance, the tests were stopped for safety reasons. He appeared to be frustrated that he could not do the tests and was mumbling to himself.

**Finger to Nose:** On this test, Elliott could not touch the tip of his nose with the tip of his index finger as directed. He used the pads of his fingers on all six attempts. He also swayed noticeably while attempting to touch his nose. I noticed that his movement when using his left arm and hand was noticeably slower and required more of an effort than when using his right arm and hand.

**8. Clinical Indicators of Impairment:**

Eye Signs: No clues of HGN were present and Vertical Gaze Nystagmus was not observed. Elliott was able to converge his eyes as instructed. Rebound dilation was not observed. His pupils were estimated at 6.0 mm in Room Light (RL), 7.0 mm in Near Total Darkness (NTD), and 4.0 mm in Direct Light (DL). His reaction to light was normal.

Vital Signs: Elliott's pulse rates were checked three times per DRE protocol and were 68, 66 and 66 beats per minute. All three results were within the DRE average range for pulse rate. His blood pressure was checked at 188/98, which was above the DRE average range for blood pressure. His body temperature was 99.0 degrees, which was within the DRE average range. Elliott was asked about his elevated blood pressure, and he indicated he was not aware of why it would be elevated. He also indicated that he did not have a history of high blood pressure.

**9. Signs of Ingestion:** Elliott's nasal and oral cavities were clear. There were no indicators of injection marks on his hands or arms.

**10. Suspect's Statements:** Elliott denied using drugs or medications. He did indicate that used to use drugs prescribed by his doctor. When asked what those drugs were, he could remember the names and appeared confused. He was further questioned about his headache, dizziness and unequal pupil sizes and he could not explain them. However, he did indicate that his dizziness could have caused the collision he was involved in. He claimed to be in good health and did not have a history of medical problems.

**11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Elliott was under the influence of a **Medical Impairment** and unable to operate a vehicle safely.

**12. Toxicological Sample:** A urine sample was collected from the subject and will be forwarded to State Crime Laboratory for analysis.

**13. Miscellaneous:** Refer to the arrest report by Trooper James for additional details. After the completion of my evaluation, Elliott was referred to the jail medical staff for further observation.

# 26 DRE

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## PREPARING THE NARRATIVE REPORT

### LEARNING OBJECTIVES

- Discuss the essential elements of the drug influence evaluation report
- Prepare a clear and concise drug influence evaluation report

### CONTENTS

A. Components of the Process .....	2
B. Components of the Drug Influence Evaluation Report.....	3
C. Drug Influence Evaluation Narrative Report Components .....	8
D. Sample Report.....	10

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Interactive Discussion

Session 26: Preparing the Narrative Report

## Learning Objectives

- Discuss essential elements of the drug influence evaluation report
- Prepare a clear and concise drug influence evaluation report

DRE 26-2

**Slide 2.**



*Briefly review the objectives, content, and activities of this session.*

### A. Components of the Process

Session 26: Preparing the Narrative Report

## Drug Influence Evaluation Report

- Complete, clear, convincing
- Well-written
- Descriptive, detailed and complete
- Organized, clearly documented, and compelling

DRE 26-3

**Slide 3.**

Successful prosecution depends on how clearly, completely, and convincingly the DRE presents their observations, measurements, and conclusions. A well-written, clear, and convincing drug influence evaluation report increases the likelihood that the case will be properly adjudicated. A prosecutor is more likely to file the charge if the evidence is organized, clearly documented, and compelling.



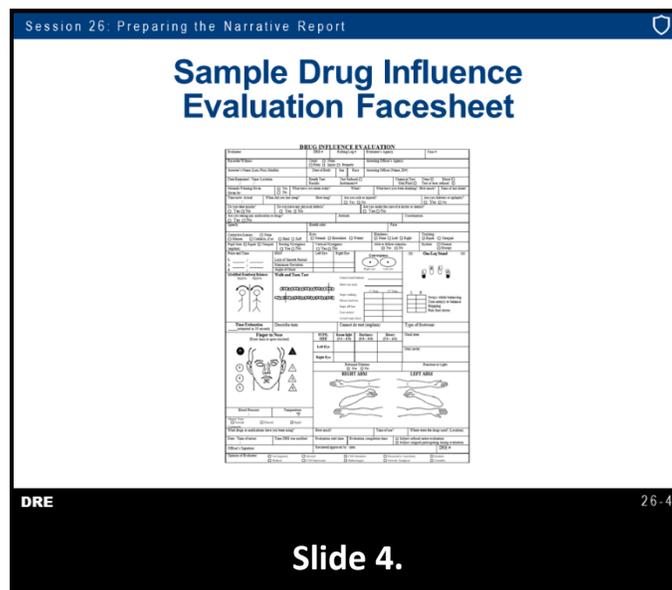
***Point out prosecutor’s decision is generally based on the offense/arrest report and, consequently, if they cannot find the information they need, they are more likely to plea bargain or dismiss the charge.***

The defense is less likely to contest the charge when the report is descriptive, detailed, and complete.



***Point out evidence gathered during the drug influence evaluation is rarely challenged when it is well documented on the evaluation form and backed up by a detailed narrative report.***

## B. Components of the Drug Influence Evaluation Report



The Drug Influence Evaluation Facesheet is part of your drug influence evaluation report; but it is not the entire report. The Facesheet contains some very important information, for example, the subject’s pulse rate was elevated on all three measurements, the subject’s eyes failed to converge, and the subject’s pupils were constricted.



***Point out some of the key information on the sample Facesheet.***

However, it is important to remember the DRE Facesheet does not contain all of the important information available concerning this subject.

Session 26: Preparing the Narrative Report

## Drug Influence Evaluation Facesheet



DRE 26-5

**Slide 5.**

Most importantly, the Drug Influence Evaluation Facesheet is a technical document. Trained DREs know how to complete and interpret the Facesheet. Boxes on the Facesheet should not be left blank. It is recommended “N/A” or “None Observed” be used.



***Ask participants to suggest some important information that might be available that wouldn't appear on the Facesheet.***

Examples include information obtained during the interview of the arresting officer, elaborate or lengthy statements made by the subject, paraphernalia found in the subject's possession, etc.

Many prosecutors, judges, and jurors won't know how to interpret the Facesheet. It is up to you to take all of the information you work so hard to obtain and put it into a clear, easily understood, report so the prosecutor, the judge, and the jury will understand what you observed and what it means.





# Drug Influence Evaluation Facesheet

## Recording Walk and Turn Test Results

### Walk and Turn Test



Cannot keep balance \_\_\_\_\_  
Starts too soon \_\_\_\_\_

1<sup>st</sup> Nine 2<sup>nd</sup> Nine

Stops walking \_\_\_\_\_  
Misses heel-toe \_\_\_\_\_  
Steps off line \_\_\_\_\_  
Uses arm(s) \_\_\_\_\_  
Actual Steps taken \_\_\_\_\_

Describe turn \_\_\_\_\_  
Cannot do test (explain) \_\_\_\_\_

DRE

26-7

### Slide 7.

Walk and Turn (WAT): The first two – cannot keep balance and starts too soon – are observed during the instruction stage. Indicate the number of times the subject stops, misses heel-to-toe, steps off line, or uses arm(s). Record the actual number of steps taken. If the subject takes additional steps, draw in the additional steps to reflect the actual number of steps taken. If the subject takes less than nine steps, place an (x) in the missing steps. If the subject stops walking, indicate where with a vertical slash mark and an “S” under that mark. If the subject steps off the line, indicate with half of a slash mark at an angle in the direction the step was off the line. If the subject misses heel-to-toe, indicate with a vertical slash mark and an “M” under that mark. Describe the turn.

DREs are not limited to only documenting the above evidence during the test. DREs are encouraged to record sufficient evidence to deliver effective testimony in court.



***Demonstrate how each clue is to be documented using easel/easel pad or dry erase board.***

Session 26: Preparing the Narrative Report

## Drug Influence Evaluation Facesheet

Recording One Leg Stand and Finger to Nose tests

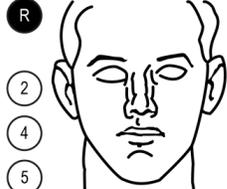
/30      **One Leg Stand**      /30

(Draw lines to spots touched)

L   R   L   R



R   L



L	R	
		Sways while balancing
		Uses arm(s) to balance
		Hopping
		Puts foot down

Type of footwear: \_\_\_\_\_

(Draw lines to spots touched)

R

2

4

5

L

1

3

6

**DRE** 26-8

### Slide 8.



***Demonstrate how each clue is to be documented using easel/easel pad or dry erase board.***

**One Leg Stand (OLS):** Indicate in the OLS box the number the subject counted to when the foot touched the floor (if applicable). Check marks should be made to indicate the number of times the subject swayed, used arms, hopped, or put foot down. Indicate how far the subject counted in 30 seconds in the top area of the box above the foot raised. Add any other indicators observed such as tremors, falling, etc.



***Demonstrate how each clue is to be documented using easel/easel pad or dry erase board.***

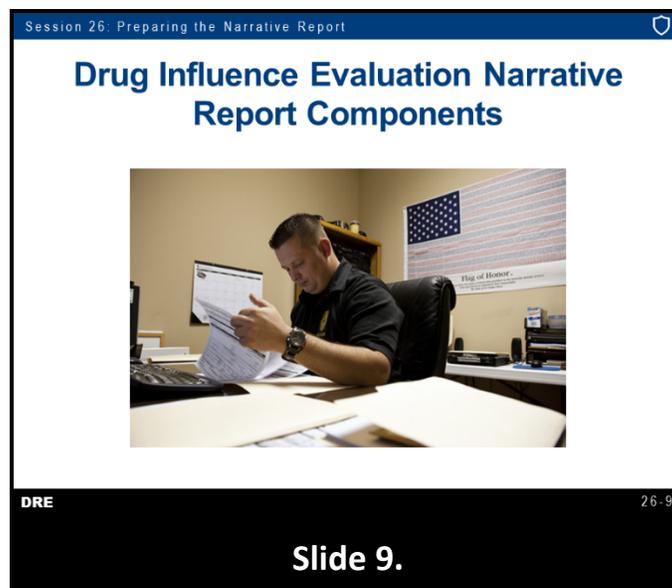
**Finger to Nose (FTN):** A line should be drawn to the appropriate triangle or circle to indicate where the subject touched their nose. Suggestion – If the DRE draws the line from the place where the subject touched to the triangle/circle, it enables them to draw a straighter line

DREs are not limited to only documenting the above evidence during the test. DREs are encouraged to record sufficient evidence to deliver effective testimony in court.



***Solicit participants' comments and questions about the Narrative Report.***

## C. Drug Influence Evaluation Narrative Report Components



The typical Drug Influence Evaluation Narrative Report format contains 13 components.

First component – Location: For example, where the evaluation was conducted.

Second component – Witnesses: List the person who served as the evaluator and the recorder and their agency. List officers who helped to conduct the evaluation. List who observed the evaluation. Include any instructors who witnessed the evaluation.

Third component – the Breath Alcohol Test: Indicate Breath Alcohol Concentration (BAC) result. List who administered the breath alcohol test. List the time the test was administered.

Fourth component – Notification and Interview of the Arresting Officer: List when you were first notified of the request for the drug influence evaluation. Summarize the information you were given at that time. Summarize the information provided by the arresting officer. Document the details of your interview with the arresting officer and other witnesses.

Fifth component – Initial Observation of the Subject: Describe where you first saw the subject. Describe noteworthy aspects of your initial observations. List the findings of the Preliminary Examination of the subject.

Sixth component – Medical Problems and Treatment: Describe your observations or indications of any apparent injury or illness affecting the subject. Describe any statements of injury or illness. Summarize any medical treatment offered to the subject.



***Point out DREs should document as much information as possible about any reported medical issues claimed by the subject and if medical treatment is warranted, it should be arranged, or at least offered.***

Seventh component – Psychophysical Indicators of Impairment: Summarize performance of the MRB, WAT, OLS, and FTN tests. Describe any relevant behaviors on the tests not included on the Facesheet. Document any other pertinent observations, such as eyelid tremors, leg tremors, miscounting, etc.

Eighth component – Clinical Indicators of Impairment



***Point out in this section of the DRE's report the word "average" or words "average ranges" refers to the results of the specific test within the DRE average range(s).***

Eye Signs: Briefly summarize your observations of Horizontal Gaze Nystagmus (HGN), Vertical Gaze Nystagmus (VGN), LOC, Pupil Size, Reaction to Light, and appearance of the subject's eyes.

Vital Signs: Briefly summarize the subject's pulse rate, blood pressure, and temperature.

Ninth component – Signs of Administration: Record the results of examinations of oral and nasal cavities. Document the results of examinations for injection marks. Document any odors detected on subject's breath, hands, clothing, etc. Document physical debris of drugs or drug paraphernalia found on subject's person.

Tenth component – Subject's Statements and other Observations: "Miranda" waiver and responses.



***Remind participants to contact their local prosecutor's office for information on when to give Miranda during the evaluation.***

Document any volunteered or spontaneous statements. Record any statements made as a result of your interview. Include any admissions or denial of drug use, time, location drugs were used, and any statements made relating to the subject's perception of their impairment, if applicable.

Eleventh component – DRE's Opinion:



***Remind participants anytime they have a positive BAC reading, they must list alcohol (ETOH) as part of the opinion.***

State the category or categories of drugs you believe is/are affecting the subject. State your opinion concerning the subject's ability to operate a vehicle safely, if applicable to this case.



**Write on an easel/easel pad or dry erase board the proper wording of the DRE's opinion: "It is my opinion as a certified Drug Recognition Expert that (name) is under the influence of (drug category) and unable to operate a vehicle safely."**

"It is my opinion as a certified Drug Recognition Expert that (name) is under the influence of (drug category) and unable to operate a vehicle safely."

Twelfth component – Toxicological Sample



**If available, show participants a copy of a toxicology request form they will be using.**

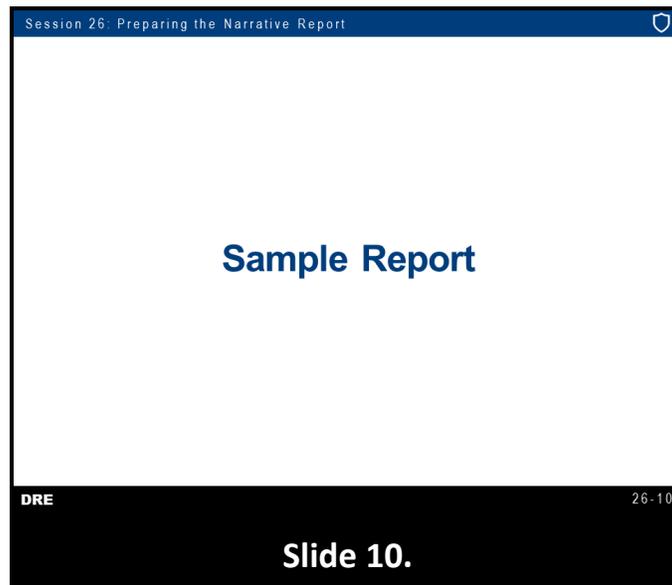
**State the type of sample (urine, blood, etc.) obtained from the subject.**

The narrative report should include: What sample was obtained; The time the sample was collected (if known); Information on who collected the sample or observed the collection of the sample; Where the sample was taken and to whom it was given; If the subject refused to provide a sample, state that fact.

Thirteenth component – Miscellaneous: Include any other pertinent information such as drugs or drug paraphernalia found in the subject's possession, additional charges, etc.

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## D. Sample Report



**Direct the participants' attention to the Sample Drug Influence Evaluation Report (Roach) in their participant guide.**

A copy of this report is found at the end of this session, for your reference. This report is a suggested guide for preparing clear, concise, detailed reports. Even if your State or prosecutor requires a different narrative report format, you should still include all 13 reporting components in a detailed manner.



***Briefly review all thirteen components of the report with the participants, including the proper terminology for the DRE's opinion.***

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A screenshot of a presentation slide. The title bar at the top reads "Session 26: Preparing the Narrative Report". The main content area is white with the text "Questions?" in blue. The footer is black with "DRE" on the left and "26-11" on the right. Below the slide, the text "Slide 11." is centered in white on a black background.

Session 26: Preparing the Narrative Report

Questions?

DRE 26-11

Slide 11.



***Solicit their comments and questions about the Narrative Report.***

# DRUG INFLUENCE EVALUATION

Evaluator <b>Officer Robert Smith</b>		DRE # <b>17516</b>	Rolling Log # <b>22-018-0155</b>	Evaluator's Agency <b>California Highway Patrol</b>	Case# <b>(Session XXVI)</b>
Recorder/Witness <b>Sgt. Gary Mertens, CHP</b>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <b>CHP</b>	
Arrestee's Name (Last, First, Middle) <b>Roach, Robert D.</b>		Date of Birth <b>04/10/1990</b>	Sex <b>M</b>	Race <b>W</b>	Arresting Officer (Name, ID#) <b>Officer Eric Stayer #18738</b>
Date Examined / Time / Location <b>08/07/22 / 1730 / Valley CHP</b>		Breath Test: Results: <b>0.00</b>	Test Refused <input type="checkbox"/> Instrument #: <b>68460</b>	Chemical Test: Urine <input type="checkbox"/> Blood <input checked="" type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given Given by: <b>Officer Stayer</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <b>Burger, Doritos &amp; cookies</b>	When? <b>About 4 pm</b>	What have you been drinking? How much? <b>Water</b>	Time of last drink? N/A
Time now/ Actual <b>6 pm? / 1733</b>	When did you last sleep? <b>Last night</b>	How long? <b>About 8 hours</b>	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic?
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>Sore back</b>		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <b>"I smoke pot for my back and to relax"</b>		Attitude: <b>Cooperative, Carefree</b>		Coordination: <b>Slow, Unsteady</b>	
Speech: <b>Slow, Thick, Low</b>		Breath odor: <b>Marijuana</b>		Face: <b>Normal</b>	
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft	Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input checked="" type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy
Pulse/Time 1. <u>98</u> / <u>1742</u> 2. <u>96</u> / <u>1758</u> 3. <u>98</u> / <u>1812</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye    Left eye	24/30 <b>One Leg Stand</b> 22/30  L R 1015 1017 1019 L R
<b>Modified Romberg Balance</b> Approx. 3" 3" 3" 3"  Circular sway/Eyelid tremors	<b>Walk and Turn Test</b>  Walked slowly / Leg tremors		Cannot keep balance <u>2</u> Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken		1st Nine    2nd Nine 1    1 2    1 1    3 9    9
<b>Time Estimation</b> <u>42</u> estimated as 30 seconds	Describe turn Walking turn with multiple steps		Cannot do test (explain) N/A		Type of footwear: <b>Brown hiking boots</b>
<b>Finger to Nose</b> (Draw lines to spots touched)  Slow movements / Eyelid tremors / Laughing		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>
		Left Eye	6.0	9.0	5.0 - 7.0
		Right Eye	6.0	9.0	5.0 - 7.0
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light: <b>Normal</b>	
		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 	
Blood Pressure <b>162 / 98</b>		Temperature <b>98.2 °F</b>		Nothing observed	
Muscle Tone: <input checked="" type="checkbox"/> Near Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		What drugs or medications have you been using? <b>"I smoke pot to relax"</b>		How much? <b>"A bowl with friends and part of a joint"</b>	Time of use? <b>"10 am &amp; 1 PM"</b>
Date / Time of arrest: <b>08/07/22 1615</b>		Time DRE was notified: <b>1705</b>		Evaluation start time: <b>1730</b>	Evaluation completion time: <b>1825</b>
DRE/Officer's Signature: <b>Robert Smith</b>		Reviewed/approved by / date:			DRE#
Opinion of Evaluator: <input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
		<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant <input checked="" type="checkbox"/> Cannabis	

## DRUG INFLUENCE EVALUATION NARRATIVE

**Suspect: Roach, Robert D.**

- Location:** The drug influence evaluation was conducted at the CHP Valley Office in Sacramento, CA. The evaluation was primarily conducted in the interview room which had adequate lighting for conducting a drug evaluation and had smooth tile flooring with no obstructions. The darkroom examinations were conducted in the staff restroom.
- Witnesses:** CHP Sergeant Gary Mertens witnessed and recorded the evaluation. The arresting officer, Officer Eric Stayer of the CHP witnessed the psychophysical tests and dark room examinations.
- Breath Alcohol Test:** Officer Stayer administered a breath test to the suspect at 1650 hours and obtained a 0.00 BAC result.
- Notification and Interview of the Arresting Officer:** On 08/07/22, I was on duty and at approximately 1705 hours was requested to contact Officer Stayer at the CHP Valley Office regarding a drug evaluation. After contacting Officer Stayer, it was determined he had received a possible impaired driver dispatch call describing the suspect's vehicle as speeding and unable to maintain a single lane of travel southbound on I-5 near the Woodland exit. Officer Stayer located the vehicle traveling south at the Del Paso Road interchange and followed the vehicle at approximately 75 mph for over a mile. He also observed the vehicle drift in and out of the outside and middle lanes of I-5. According to Officer Stayer, when he activated his overhead lights to stop the vehicle, it continued without stopping for approximately a half mile. When the vehicle pulled over, it nearly struck a roadway fog marker and stopped at the far edge of the graveled shoulder. When contacted, the driver appeared confused, and several times asked Officer Stayer why he had been stopped. When asked for his operator's license, vehicle registration and proof of insurance, the driver (Identified as Robert Roach) had slowed and deliberate movements. When asked to exit his vehicle, Roach had to steady himself with his hand against his vehicle several times. According to Officer Stayer, he did not detect an odor of an alcoholic beverage on Roach's breath. When asked about consuming alcohol, Roach denied consuming any. Officer Stayer administered SFSTs, which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and One Leg Stand (OLS) tests. According to Officer Stayer, no HGN clues were observed. However, Roach had difficulty performing the W&T and OLS tests as instructed. Officer Stayer observed four clues on the W&T test and three clues on the OLS test. When in close contact with Roach, Officer Stayer detected an odor of marijuana on his clothing and breath. He also noted that Roach had bloodshot watery eyes and droopy eyelids. When asked about marijuana use, Roach indicated that he had smoked marijuana earlier in the day with friends at Shasta Lake and several times mentioned to Officer Stayer that marijuana was legal in California. After completing the SFSTs, Officer Stayer placed Roach under arrest for DUI and advised him of his Miranda Warnings. Officer Stayer, who is a certified DRE, suspected cannabis impairment and having been trained that THC levels dissipate in a person's blood quickly after smoking, transported Roach to the Mercy General Hospital and obtained a search warrant for a blood sample. After obtaining a telephonic search warrant and collecting the blood sample, Roach was transported to the Valley CHP Office for a breath test and processing. After obtaining a .00 BAC result, Officer Stayer requested a DRE to continue the investigation.
- Initial Observation of the Suspect:** I first observed Roach in the interview room at the Valley CHP Office. He appeared to be cooperative and relaxed acting. He was slow to respond to questions and numerous times appeared confused when trying to relate information to Officer Smith. His speech was slow, slurred, and at times difficult to hear. When he stood up, he used the chair to steady himself. His pupils appeared to be dilated, and his eyes were bloodshot and watery. He was wearing tan colored shorts, a tie-dyed tee-shirt, and brown hiking boots. I introduced myself to Roach and asked if he would participate in a drug evaluation. He agreed by stating, "Sure, what the hell. You do know that marijuana is legal, right?" I asked if he remembered being advised of his Miranda Warnings and he replied that he did, and he agreed to answer my questions.

6. **Medical Problems and Treatment:** When Roach was asked about any medical conditions he may have, he indicated that at times he had a “sore back.” When asked if his back issue would prevent him from participating in the drug evaluation, he stated it would not. When asked how he got his sore back he stated, “Probably too much hiking.” I asked if he required any medical assistance for his back or any other condition and he indicated he did not. He did not report any other medical conditions, and none were observed during the evaluation.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to Roach prior to him attempting them. After each demonstration, he confirmed that he understood the test instructions. The following psychophysical tests were administered:

**Modified Romberg Balance:** During this test, Roach exhibited a circular sway of approximately three inches. His time estimation was slow, estimating 30 seconds in 42 seconds. When asked how he had determined that 30 seconds had passed, he stated, “I was just counting in my head” and then laughed out loud. Eyelid tremors were present throughout the test.

**Walk and Turn:** Prior to starting this test, Roach was asked if his boots would create any issues in completing the test. He replied he did not think so and wanted to keep them on. For the test, a line in the flooring was used. During the instructions stage of the test, Roach lost his balance to the right twice and laughed out loud. After regaining his balance and starting the walking stage, his steps were slow and deliberate. He missed touching heel to toe as instructed on his 4<sup>th</sup> and 5<sup>th</sup> steps. He used his arms to balance once and stopped while walking on the 9<sup>th</sup> step and appeared to be confused on how to continue. He then asked what to do and began laughing out loud. He was reminded to make his turn as he had been instructed and continue with the remainder of the test. He then made an improper turn by taking multiple steps using both feet instead of leaving his left foot on the line as directed. On the second nine steps, he stopped walking after his 1<sup>st</sup> step and again appeared to be confused about what to do. After being reminded of what to do, his steps were again slow and deliberate. He used his arms to balance three times on the second nine steps and missed touching heel to toe on his 8<sup>th</sup> step. Leg tremors were present throughout the test. Several times he laughed out loud as he attempted the test.

**One Leg Stand:** Per DRE protocol, this test was conducted once while standing on the left foot and once standing on the right foot. While standing on his left foot and raising his right foot off the floor, Roach counted out loud slowly, counting to 1,024 when the test was stopped after 30 seconds. He swayed while balancing once and twice used his arms for balance. He lost his balance once putting his foot down at count 1,015. While standing on his right foot and raising his left foot off the floor, he again counted slowly reaching 1,022 when 30 seconds had elapsed. He swayed while balancing once, used his arms for balance once, and put his foot down at counts 1,017 and 1,019. Leg tremors were present throughout the test. He also counted incorrectly while standing on his right foot, skipping 1,012 and 1,020. After skipping the numbers in his count, he began laughing out loud.

**Finger to Nose:** During this test, Roach’s arm movements towards his nose were slow and deliberate. He did not touch the tip of his nose with the tip of his index finger as instructed on attempts 1, 2, 4 and 5. On his 1<sup>st</sup> attempt he touched the left side of his nose. On his 2<sup>nd</sup> attempt he touched the right side of his nose. On his 3<sup>rd</sup> attempt he touched the tip of his nose as instructed. On his #4 attempt he touched the bridge of his nose. On his #5 attempt he touched below his nose. On his 6<sup>th</sup> attempt he touched the tip of his nose as instructed. Eyelid tremors were present throughout the test. He also had to be reminded three times to remove his finger from his nose and replace his arm back at his side. Several times he began laughing out loud as he attempted the test.

8. **Clinical Indicators of Impairment:**

**Eye Signs:** The eye examinations were conducted in the staff restroom which provided adequate darkness to conduct the examinations. No clues of HGN were observed. VGN was also not observed. Roach’s pupils were dilated in all three lighting conditions, estimated at 6.0 mm in both eyes in Room Light and 9.0 mm in both eyes in Near Total Darkness. Rebound dilation was present with his pupils ranging from 5.0 mm to 7.0

mm in both eyes in Direct Light. All three estimations were above the DRE average ranges for each of the lighting conditions. A Lack of Convergence was also present in both eyes with his eyes moving inward and then moving back out and downward. The test was conducted twice, and the results were the same each time. His eyes were bloodshot and watery, and his eyelids were droopy.

Vital Signs: Roach's pulse rates were checked three times during the evaluation and were 98, 96 and 98 beats per minute. All three results were above the DRE average range for pulse rate. His blood pressure was measured at 162/98, also above the DRE average range for blood pressure. His body temperature was measured at 98.2 degrees using an oral thermometer, which was within the DRE average range. Roach was asked about his elevated pulse rates and blood pressure and he indicated he was not aware of why they would be elevated and said he did not have a history of high blood pressure.

9. **Signs of Ingestion:** Roach's nasal area was clear. However, he did have a greenish coating on the back of his tongue, which can be an indicator of recent marijuana inhalation. When asked about the green coating, he had no explanation and shrugged his shoulders. No indicators of injection sites were located on his arms and hands.
10. **Suspect's Statements:** Roach admitted smoking a "bowl" of marijuana with friends at Shasta Lake and then finishing a "part of a joint" while driving to Sacramento. He told me that since California legalized recreational marijuana, he uses it more than he used to, smoking 4 or 5 times a week. When asked if the marijuana he had smoked prior to being stopped had affected him, he stated, "Maybe just a little. It was some good shit." He told me that he enjoys smoking marijuana because it relaxes him, and he prefers Indica strains. He also stated that when he smokes marijuana, he usually drives slower and considers himself a safer driver. When questioned about him driving over the speed limit prior to being stopped, he indicated that he probably wasn't paying attention to his speed and was thinking about the good time he had with his friends at Shasta Lake earlier in the day. Several times during our conversation Roach reminded me that marijuana was legal in California and that driving drunk is more dangerous than driving after smoking pot. Throughout my interview with Roach, he demonstrated a slow thought process and numerous times seemed to be confused with my questions.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Roach was under the influence of Cannabis and was unable to operate a vehicle safely.
12. **Toxicological Sample:** A blood sample was collected from Roach by Officer Stayer prior to my evaluation. Officer Stayer, who is a certified DRE is trained that THC levels in the blood can quickly dissipate after smoking marijuana ends. Therefore, he requested and obtained a search warrant for a blood sample from Roach after placing him under arrest. After obtaining the blood sample, it was submitted as evidence and will be forwarded to the Crime Laboratory for analysis.
13. **Miscellaneous:** Roach was also cited by Officer Stayer for DWS and Exceeding the Speed Limit. In addition, upon securing Roach's vehicle a metal pipe that contained what appeared to be marijuana residue was located in the vehicle. Refer to Officer Stayer's arrest report for additional details.

CC: Sacramento County D.A.'s Office  
Officer Stayer, CHP

# 27

# DRE

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## PRACTICE: TEST ADMINISTRATION

### LEARNING OBJECTIVES

- Administer selected portions of the examinations that constitute the drug influence evaluation
- Describe the evaluation procedures
- Document the results of the examinations

### CONTENTS

A. Procedures for this Session .....2

B. Hands-On Practice .....3

C. Session Wrap-Up .....5

### LEARNING ACTIVITIES

- Instructor-Led Demonstrations
- Instructor-Led Coaching
- Participant-Led Coaching

Session 27 Practice – Test Administration

## Learning Objectives

- Administer selected portions of the examinations that constitute drug influence evaluation
- Describe evaluation procedures
- Document results of examinations

DRE 27-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

### A. Procedures for this Session

Session 27 Practice – Test Administration

## Procedures for this Session

- Participants will work in teams
- At any given time, one member will be conducting and recording exams of the other member
- Third member of team will coach and critique conducting member
- Participants take turns performing each role

DRE 27-3

**Slide 3.**

Participants will work in two or three member teams.



***Three member teams are preferable. However, no four-member teams should be constructed. Thus, for example, if the class has 25 participants, assign 7 three-member teams and 2 two-member teams.***

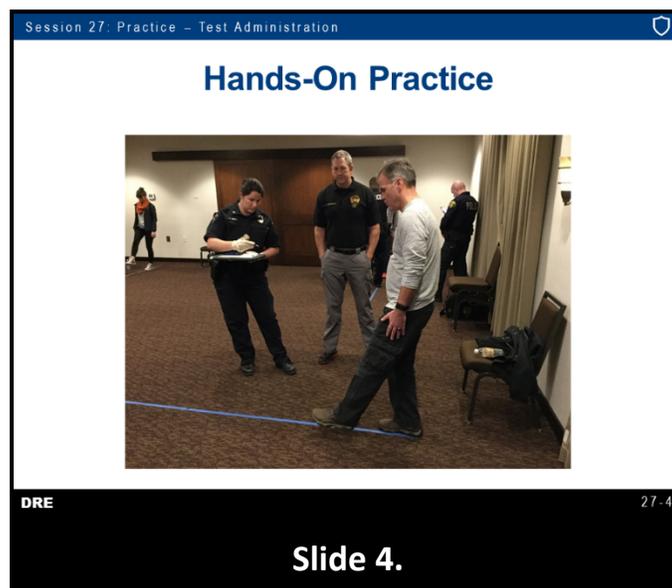
***Make team assignments.***

At any given time, one member of the team will be engaged in conducting and recording examinations of another member. The third member of the team will help coach and critique the participant who is conducting the examinations. Participants will take turns serving as test administrator, test subject, and coach.



***Emphasize participants can help each other learn by pointing out errors of omission or commission.***

## B. Hands-On Practice



***Instruct participants to begin their practice.***

***Monitor the teams and offer encouragement and constructive criticism, as appropriate.***

***Make sure each participant serves as the test administrator for at least one complete drug influence evaluation.***

Drug Influence Evaluation: For this practice session, each participant will conduct a complete drug influence evaluation.



***Instruct participants to review the standardized drug influence evaluation form in their guide.***

Begin with the Preliminary Examination.



***For practical purposes, not all 12-steps will be completed in this Session. Provide information to participants regarding steps one and two.***

Ask all of the prescribed questions.

Conduct the initial check of the eyes.

Check the pulse for the first time.

Conduct the test of Horizontal Gaze Nystagmus (HGN), Vertical Gaze Nystagmus (VGN), and Lack of Convergence (LOC).



***Point out when conducting the HGN test, the “coach” should check the participant administrator’s ability to estimate angles of 30, 40, and 45 degrees. If available, a template should be used for this check.***

Administer the four divided attention psychophysical tests: Modified Romberg Balance (MRB) test; Walk and Turn (WAT) test; One Leg Stand (OLS) test; Finger to Nose (FTN) test.



***Point out it will not be necessary for the participant (subject) actually to perform these tests (except for FTN). It will suffice for the participant (administrator) simply to give the test instructions accurately and completely.***

Check the vital signs: Blood pressure; Temperature; Check the pulse for the second time.

Dark Room Examinations: Conduct the dark room examinations.



***Point out for this practice session these examinations will not actually be given in the dark.***

Check for muscle tone.

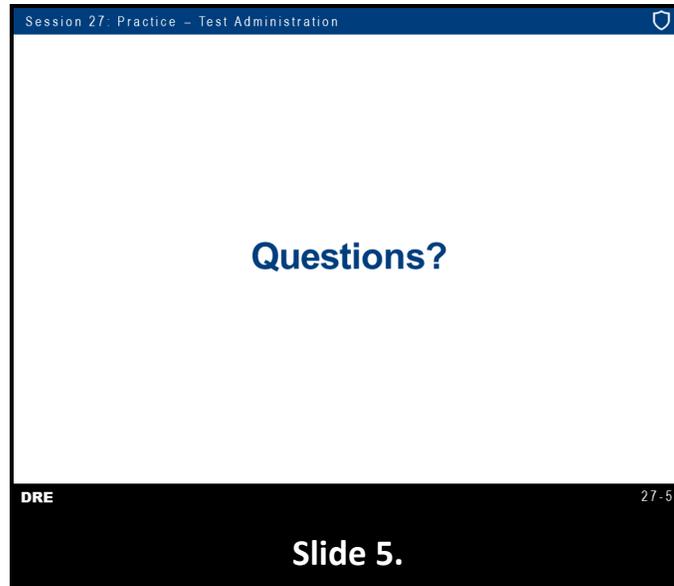
Examine the participant’s (subject’s) neck, arms, and ankles for signs of injection.

Check the pulse for the third time.



***Solicit participants’ questions concerning procedures for this practice session.***

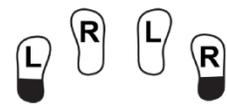
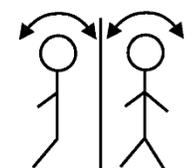
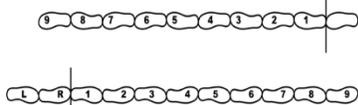
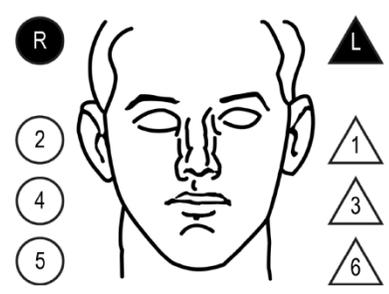
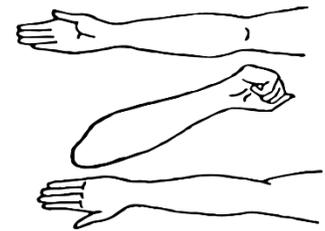
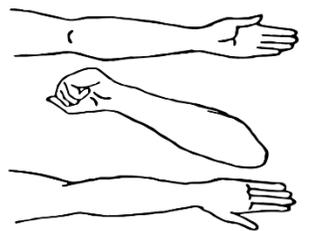
## C. Session Wrap-Up



*Solicit participants' comments and questions concerning Test Administration.*

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# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case #																																			
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency																																					
Arrestee's Name (Last, First, Middle)		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)																																				
Date Examined / Time / Location / /		Breath Test: Test Refused <input type="checkbox"/> Results: Instrument #:		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>																																					
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When?		What have you been drinking? How much?	Time of last drink?																																				
Time now/ Actual /	When did you last sleep?	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No																																				
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No																																					
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No			Attitude:		Coordination:																																				
Speech:		Breath odor:		Face:																																					
Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal																																			
Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input type="checkbox"/> Droopy																																			
Pulse and Time 1. ____ / ____ 2. ____ / ____ 3. ____ / ____	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye	Right Eye	<b>Convergence</b>  Right eye      Left eye		/30 <b>One Leg Stand</b> /30  L      R      L      R <table border="1" style="display: inline-table; margin: 5px;"> <tr><td>L</td><td>R</td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> Sways while balancing Uses arm(s) to balance Hopping Puts foot down	L	R																																	
L	R																																								
<b>Modified Romberg Balance</b> Approx.      Approx. 	<b>Walk and Turn Test</b>  Cannot keep balance _____ Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Uses arm(s) _____ Actual steps taken _____	<table border="1" style="width: 100%;"> <tr><th colspan="2">1st Nine</th><th colspan="2">2nd Nine</th></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </table>		1st Nine		2nd Nine																																		Type of footwear:	
1st Nine		2nd Nine																																							
<b>Time Estimation</b> ____ estimated as 30 seconds	Describe turn	Cannot do test (explain)																																							
<b>Finger to Nose</b> (Draw lines to spots touched) 		<table border="1" style="width: 100%;"> <tr> <th>PUPIL SIZE</th> <th>Room light (2.5 - 5.0)</th> <th>Darkness (5.0 - 8.5)</th> <th>Direct (2.0 - 4.5)</th> </tr> <tr> <td>Left Eye</td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Right Eye</td> <td> </td> <td> </td> <td> </td> </tr> </table>	PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Left Eye				Right Eye				Nasal area:  Oral cavity:  Reaction to Light: Rebound Dilatation: <input type="checkbox"/> Yes <input type="checkbox"/> No																										
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Right Eye																																									
Blood Pressure /      Temperature °F		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 																																					
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid Comments:		What drugs or medications have you been using?		How much?	Time of use?	Where were the drugs used? (Location)																																			
Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																																					
Officer's Signature:		Reviewed/approved by / date:				DRE #																																			
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant																																			
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																																			

# 28

# DRE

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## CASE PREPARATION AND TESTIMONY

### LEARNING OBJECTIVES

- Conduct a thorough pre-trial review of all evidence and prepare for testimony
- Provide clear, accurate, and descriptive direct testimony concerning drug influence evaluations
- Respond effectively and appropriately to cross examine in DRE cases

### CONTENTS

A. Guidelines for Case Preparation .....	2
B. Guidelines for Direct Testimony .....	3
C. Typical Defense Tactics .....	7

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Instructor-Led Demonstrations
- Reading Assignments

Session 28: Case Preparation and Testimony

## Learning Objectives

- Conduct a thorough pre-trial and prepare for testimony
- Provide clear, accurate, and descriptive direct testimony
- Respond effectively and appropriately to cross examination

DRE 28-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

### A. Guidelines for Case Preparation

Session 28: Case Preparation and Testimony

## Preparation

A photograph showing two men sitting at a wooden table in a courtroom. The man on the left is wearing a police uniform, and the man on the right is wearing a suit and tie. They are both looking at a document on the table.

DRE 28-3

**Slide 3.**

Content Preparation to present your case in court begins during your initial investigation. The quality of your investigation and documentation will ultimately determine your ability to accurately present information during trial.



***Point out it is especially important to take complete and accurate notes of your investigation and observations. Complete documentation of this information is essential.***

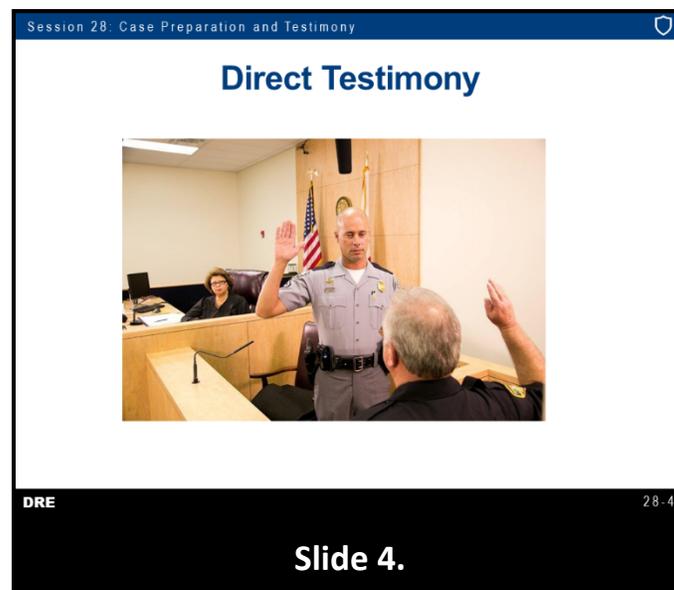
When you receive the trial notice, you should schedule a pre-trial conference with the prosecutor. In the pre-trial conference, you will: review all records and reports associated with the case; review all evidence and your conclusion; review notes with arresting officer; review any weak areas; clarify or resolve any discrepancies; review questions the prosecutors will be asking; review typical tactics the prosecutors expect the defense to use; and, review your Curriculum Vitae (CV) and credentials.

If a pre-trial conference is not possible, identify the main points of the case and discuss them with the prosecutor during the few minutes before the trial. It is very important to meet with prosecutors that have never been exposed to the Drug Evaluation and Classification (DEC) Program before trial to explain it cannot be treated like a typical DUI trial. You must explain there are different protocols for DUI vs. DRE cases.

Excellent resources for prosecutors can be obtained through the National Traffic Law Center (NTLC). Another excellent resource is your state's Traffic Safety Resource Prosecutor (TSRP).

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## B. Guidelines for Direct Testimony



Although knowledge only greater than what the public has is required to qualify as an “expert.” Your testimony will carry much more weight if you have good credentials.

An expert witness’ qualification is achieved through Voir Dire Examination. In a law or court context, this is used to question a witness to assess his or her qualifications to be considered an expert in some matter pending before the court.

When testifying, relate training and experience to the drug category being tried (e.g., CNS Depressant, Cannabis, etc.).

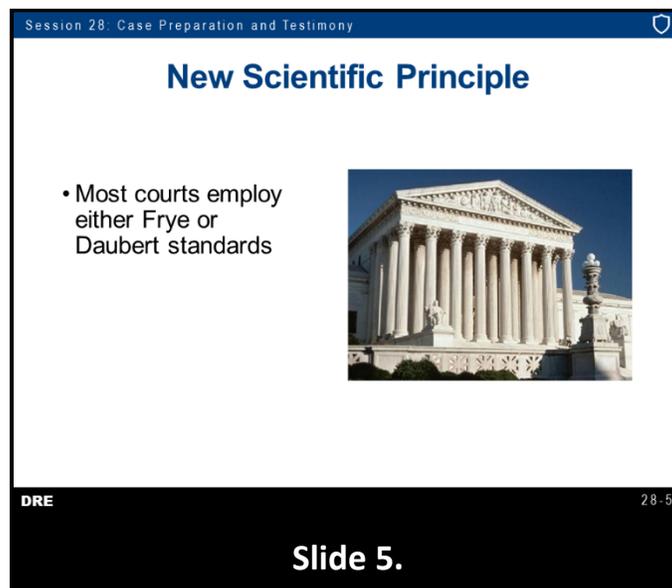
Being qualified as an expert in the past does not automatically qualify you as an expert in a particular court case. Highlight the fact you were selected to attend specialized DRE training, not just assigned randomly.



***Content Point out officers should document all previous cases where they were qualified as an expert.***

If possible, do not allow the defense to stipulate you are an expert. Document and record all evaluations conducted. Establish ratio of evaluations that resulted in a finding the subject was not under the influence. Highlight the number of times you have seen a person under the influence of the drug(s) in question and have observed the symptomatology, etc.

Ability to answer specific questions with confidence, skill, and exactness will bolster a professional image in the eyes of the judge and/or jury. To prepare for possible DRE-related testimony, a DRE should be prepared to answer the following: What is a DRE? What is involved in the DEC training program? How do DREs properly identify the drug category or categories? How do DREs explain their opinion? What are the components of a drug influence evaluation?



***Point out they aren't really new, just not within the common realm of knowledge of the average person.***

The scientific principles may be unfamiliar to the jury or judge. Your task is to establish your hard work through training will be acceptable in the court.

Most courts employ either the Frye or the Daubert standards for determining the admissibility of scientific evidence.



***Discuss the appropriate rule of evidence for your jurisdiction.***

The landmark case “Frye vs. U.S.” 293F 1013 (D.C. Cir. 1923). Frye requires the scientific principle or theory used to support “evidence” be in conformity with a generally accepted explanatory theory, if the “evidence” is to be admissible.



***Point out it is not enough qualified experts testify a particular scientific technique is valid. The technique must be generally accepted by the relevant scientific community.***

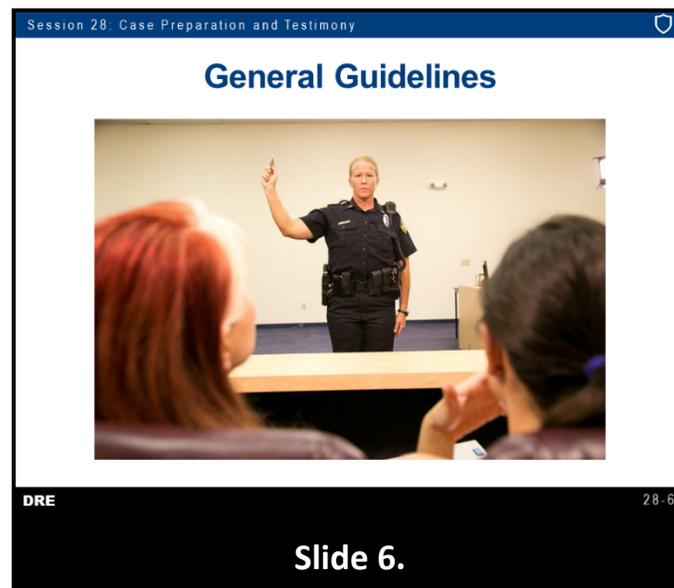
In Daubert, courts serve as a gatekeeper for all scientific evidence.



**Source:**

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

Courts assess evidence by considering four factors: Opinions are testable; Methods/principles have been subject to peer review; Known error rate can be identified; Opinions rest on methodology generally accepted within the relevant scientific/technical community.



The basic job is to present the findings of your investigation the suspect was under the influence of a drug or some combination of drugs. Keep this in mind at all times. Don't be afraid to say “I don't know”.



***Point out the officer is not expected to be an expert on all aspects of all drugs.***

Testify to only what you know. Remember, an expert witness can rely on hearsay to develop his or her expertise. Avoid contact with the defense attorney if possible. Don't be upset if prosecutor and defense attorney appear friendly to each other.



***Remind participants both sides have a specific role to play in the case at hand, but that does not preclude a personal or professional relationship.***

Remember, some jurors focus on an officer's demeanor more than content of testimony.



***Point out the DRE should be polite and courteous during testimony. Do not become agitated as a result of defense questions. Do not take personal issue with defense statements, stick to the facts.***

Do not bring manuals or articles into court for reference. Review materials before court to become familiar with contents. Explain technical terms in layman's language. For example, Horizontal Gaze Nystagmus (HGN) means an involuntary jerking of the eyes occurring as the eyes gaze to the side. Pay attention to what evidence or testimony can be and is excluded.



***Point out if the officer testifies on subject matter that was excluded, it could result in a mistrial.***

When describing subject's performance on Standardized Field Sobriety Tests (SFSTs), explicitly describe exactly what the subject did or neglected to do. Avoid using the terms "pass" or "fail". Describe the subject's actual performance. The defense may try to challenge you on this point.



***Point out if terms "normal" or "within normal" are used in the DRE report, be prepared to describe what those terms mean and how they relate to the DRE average ranges (i.e., pupil size, pulse, blood pressure, etc.).***

Results of subject's performance are describable evidence. Be sure to emphasize all evidence is taken into account before forming an opinion. If defense attorney asks a "why" question, take the opportunity to explain in great detail if appropriate.



***Point out this suggestion does not mean the officer should embellish his or her testimony...be careful not to open any doors for the defense.***

## C. Typical Defense Tactics

Session 28: Case Preparation and Testimony

### Typical Defense Tactics



- Challenging observations and interpretations
- Challenging credentials

DRE 28-7

**Slide 7.**



***Point out the defense attorney's job is to try and create a "reasonable doubt." Don't take it personally. They may be familiar with your training curricula.***

The defense relies on several factors to "impeach" or discredit your testimony. The defense will challenge your observations and interpretations. They will attempt to show the signs, symptoms, and behaviors observed have other explanations. Defense will challenge your credentials. A bona fide expert has both formal training resulting in a high degree of knowledge and experience in applying knowledge, resulting in a skill.



***Point out if the defense can discredit your training and/or experience, your testimony will have little "weight" with the jury.***

By demonstrating the officer lacks depth of knowledge in the drug field by contrasting his or her knowledge with the defense expert's knowledge. The trial tactic is to show the officer does not have the expertise to accurately determine the cause of intoxication/impairment because of inadequate formal training which lessens the value of his/her field experience and increases likelihood he/she is mistaken in his/her conclusion. Get your facts straight and stick to them.

Some examples of challenging your credibility are listed below.

Inconsistencies: Arresting officer's and examining officer's testimony must be complimentary. Any differences must be explained.

Comparison with past testimony: Try to get copies of transcripts of previous trials to review your strong/weak points. If possible, review your testimony with the prosecutor.

Testimony at odds with other established experts: Do your homework...review the literature. Explain any differences, if possible.

Lack of recall: Try to be prepared, but don't be afraid to say "I don't know". Be honest.

By demonstrating the officer incorrectly performed part of the evaluation, resulting in an erroneous conclusion.



***Point out the evaluation should be performed "by the book" each and every time it is conducted.***

The role of the hired defense witness is to propose alternative theories regarding the evidence of the case. Their qualifications or expertise may vary greatly. The prosecutor's role is to address alternative theories and may elicit testimony from the DRE for this purpose.

Typical Defense Questions: The defense may challenge certain aspects of the drug influence evaluation. For example, a defense attorney may cross examine you regarding pupil examinations:

- Where the examination took place
- How dark was the examining room
- The size or power of the penlight
- Where the defendant was placed in relationship to the examiner
- Where the penlight was directed during the examination
- Where the defendant was looking during the examination
- How many times each pupil was checked
- Are there any physical illnesses or conditions that manifest the same signs as the drug(s) in question



***Point out the list of possible answers is almost interminable.***

***Time permitting, select a few participants to practice testifying and answering general questions that may be posed in a DRE trial.***

DREs should be prepared to answer the following:

- What is a DRE?
- What is involved in the DEC training program?
- How do DREs properly identify the drug category or categories?
- How do DREs explain their opinion?
- What are the components of a drug influence evaluation?



***DRE instructors are encouraged to include additional relevant questions in this exercise.***

Session 28: Case Preparation and Testimony

Questions?

DRE 28-8

**Slide 8.**



***Solicit participants' comments and questions concerning Case Preparation and Testimony.***

## DRE DEFENSE CROSS EXAMINATION QUESTIONS

The following are representative of questions the defense may use to challenge the DRE's in court. (The defendant is identified as Miss Alicia Ann Ace.)

### **Missing Symptoms/Normals**

*This line of questions attempts to elicit the fact that the defendant did not have all of the expected signs or symptoms of the drug (s) in question.*

Officer, you were taught that bruxism or grinding of the teeth is a sign of CNS Stimulant influence, isn't it? Miss Ace didn't have that sign, did she?

*The defense may also focus on those signs or symptoms that were normal, and were therefore, not consistent with the drug in question.*

Officer, you learned the normal range of temperature in DRE training, didn't you? And that range is 98.6 plus or minus one degree, isn't it? What was Miss Ace's temperature? (98) 98 is within normal ranges, isn't it? Miss Ace's temperature was normal, wasn't it? CNS Stimulants cause elevated temperature, don't they? Miss Ace's was not elevated, was it?

### **Alternative Explanations**

*The defense elicits alternative explanations for the signs and symptoms of the drug (s) in question. These alternative explanations usually deal with medical conditions, stress, a traffic crash, etc.*

Officer, an elevated pulse rate can be caused by things other than drugs, can't it? Excitement may cause it? Stress may cause it? Being involved in a traffic crash is stressful, isn't it? And being involved in a traffic crash may cause elevated pulse, right? Being interviewed in the early morning by three police officers is stressful? And that may also cause the pulse to be elevated, can't it?

### **Defendant's Normals**

*The defense attempts to emphasize the fact that not everyone is so-called normal, that normal is subjective.*

Officer, you were taught the normal range for pulse in DRE training, weren't you? And you agree that not all people fall in that normal range, don't you? That there are people with pulse rates above normal that aren't on drugs, right? A person's pulse changes over time, doesn't it? You don't know what Miss Ace's normal pulse is, do you? It could be in the normal range, right? But it could be above or below the normal range – normally for her, isn't that so?

### **Doctor Cop**

*The line of questioning challenges the credibility of the officer's teachers – that they are police officers, rather than medical professionals.*

Officer, the teachers in this DRE school weren't doctors, were they? They weren't nurses either? Toxicologists? Pharmacologists? Paramedics? They were police officer, right?

### **Just a Cop**

*This line of questioning challenges the DRE's credentials – that they are "just a cop." This infers that the DRE evaluation is actually a medical evaluation that should be undertaken only by a medical professional.*

Officer, you're not a doctor, are you? A toxicologist? A pharmacologist? A nurse? A physiologist? You don't have a degree in chemistry, do you? You're a police officer, right?

### **The Unknown**

*By causing the officer to state that they don't know how a sign or symptom is caused, the defense attacks the officer's credibility. This line of questioning challenges the officer's expertise, by implying that a real expert would know these things.*

Officer, you don't know how CNS Stimulants dilate the pupil, do you? You don't know how alcohol supposedly causes nystagmus, do you? You don't know how CNS Stimulants supposedly elevate the heart rate, do you?

### **Guessing Game**

*This tactic attacks the DRE's opinion as a subjective guess, a belief, rather than objective. Guesses can be wrong.*

Officer, your opinion in a DRE case is subjective, isn't it? It's a belief on your part? You've made these beliefs in DRE cases in the past, haven't you? A sometimes toxicology didn't find the drug you predicted, isn't that so? And, in fact, sometimes, toxicology didn't find any drug, isn't that so? And so, sometimes your opinion is not correct, right? Sometimes, you guess wrong?

Estimated time for session: 2 Hours 30 Minutes

# DRE

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REVIEW OF DRE SCHOOL

Review of DRE School

## How do we define the term “drug” for DRE purposes?

“Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely”

DRE REV-2

**Slide 2.**

How do we define the term “drug” for Drug Recognition Expert (DRE) purposes?



*“Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.”*

Review of DRE School

## Basic Drug Statistics

- What drug, other than alcohol, was found most frequently in the Los Angeles Field Validation Study?
- What does “polydrug use” mean?
- How common was polydrug use in the Los Angeles Field Validation Study?

DRE REV-3

**Slide 3.**

What drug, other than alcohol, was found most frequently in the Los Angeles Field Validation Study?



**PCP**

What does “polydrug use” mean?



***Administering two or more drugs.***

How common was polydrug use in the Los Angeles Field Validation Study?



***More than 70% of the subjects had two or more drug categories in them.***

Review of DRE School

### Basic Drug Statistics

- How good were the DREs in the Field Validation Study?
- In the University of Tennessee Study, what percentage of injured drivers had drugs other than alcohol in them?

DRE REV-4

**Slide 4.**

How good were the DREs in the Field Validation Study?



***Nearly 80% of the time when the DREs said a particular category of drugs was present, that category was found in the subject's blood.***

***In 92.5% of the subjects, the DREs correctly identified at least one of the categories that were present.***

In the University of Tennessee Study, what percentage of injured drivers had drugs other than alcohol in them?



***40% of those drivers had evidence of other drugs in their urine.***

Review of DRE School

## Review of Symptomatology

- Name six different CNS Depressants
- Name four different CNS Stimulants
- Name two naturally-occurring Hallucinogens
- Name four different synthetic Hallucinogens

DRE REV-5

**Slide 5.**

Name six different Central Nervous System (CNS) Depressants.

Alprazolam, Butalbital, Carisoprodol, Diazepam, Gabapentin, Fluvoxamine, Methaqualone, Secobarbital, (Refer to lists in Session 9)

Name four different CNS Stimulants.

Amphetamines, Cocaine, Cathinone, Methamphetamine, Methylphenidate (Refer to list in Session 10)

Name two naturally-occurring Hallucinogens.

Bufotenine, Peyote, Psilocybin, Nutmeg

Name four different synthetic Hallucinogens.

LSD, MDMA, DMY, MDA, 2C-B (Refer to lists in Session 14)

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Review of DRE School

## Review of Symptomatology

- Name a major analog of PCP
- Name the three sub-categories of Inhalants
- What is the active ingredient in Cannabis?

DRE REV-6

**Slide 6.**

Name a major analog of PCP.



***Ketamine***

Name the three sub-categories of Inhalants.



***Volatile Solvents, Aerosols, Anesthetic Gases***

What is the active ingredient in Cannabis?



***THC***

Review of DRE School

## Review of Vital Signs: Pulse Rate

- Define "Pulse"
- **True or False:** Pulse rate is measured in units of "millimeters of mercury"
- Name three different pulse point
  - Indicate where they are located
- What is the "average" range of adult human pulse rate, for DRE purposes?

DRE REV-7

**Slide 7.**

Define "Pulse".



*The rhythmic dilation and relaxation of an artery that results from the beating of the heart.*

True or False: Pulse rate is measured in units of "millimeters of mercury".



**FALSE: pulse rate is measured in "beats per minute".**

Name three different pulse points and indicate where they are located.



**Radial, Brachial and Carotid pulse points**

What is the "average" range of adult human pulse rate, for DRE purposes?



**60-90 beats per minute**

Review of DRE School

### Review of Vital Signs: Blood Pressure

- Define “Blood Pressure”
- Name the instrument used to measure blood pressure
- When does blood pressure reach its highest value?
  - What is the highest value called?

DRE REV-8

**Slide 8.**

Define “Blood Pressure”.



***The force that the circulating blood exerts on the walls of the arteries.***

Name the instrument used to measure blood pressure.



***Sphygmomanometer***

When does blood pressure reach its highest value? What is the highest value called?



***The systolic pressure is reached when the heart contracts and pushes blood into the arteries.***

Review of DRE School

### Review of Vital Signs: Blood Pressure

- When does blood pressure reach its lowest value?
  - What is the lowest value called?
- What is the “average” range of adult human blood pressure, for DRE purposes?
- What does “Hg” stand for?

DRE REV-9

**Slide 9.**

When does blood pressure reach its lowest value? What is the lowest value called?



***The diastolic pressure is reached when the heart is fully expanded.***

What is the “average” range of adult human blood pressure, for DRE purposes?



***Systolic: 120-140mmHg***

***Diastolic: 70-90mmHg***

What does “Hg” stand for?



***Chemical symbol for mercury (“Hydrargyrum”, Latin word for “Mercury”). Blood pressure is measured in millimeters of mercury.***

Review of DRE School

## Review of Eye Examinations: Horizontal Gaze Nystagmus

- What are the three validated clues of impairment that have been established for HGN?
- What formula expresses the approximate statistical relationship between BAC and the Angle of Onset of Nystagmus?
- What categories of drugs usually will cause HGN?

**Slide 10.**

DRE

REV-10

What are the three validated clues of impairment that have been established for HGN?



***Lack of Smooth Pursuit***  
***Distinct and Sustained Nystagmus at Maximum Deviation***  
***Angle of Onset of Nystagmus***

What formula expresses the approximate statistical relationship between BAC and the Angle of Onset of Nystagmus?



***BAC = 50 – Angle of Onset***

What categories of drugs usually will cause HGN?



***CNS Depressants***  
***Dissociative Anesthetics***  
***Inhalants***

Review of DRE School

## Review of Eye Examinations: Vertical Gaze Nystagmus

- **True or False:** Any drug that causes HGN may also produce VGN
- What category of drugs causes VGN but not HGN?

DRE REV-11

**Slide 11.**

True or False: Any drug that causes HGN may also produce VGN.



***TRUE: All drugs that cause HGN will cause VGN, if the dose is large enough.***

What category of drugs causes VGN but not HGN?



***No drug causes VGN but not HGN.***

Review of DRE School

### Review of Eye Examinations: Lack of Convergence

- **True or False:** Any drug that causes nystagmus will also usually cause the eyes to be unable to converge
- What category of drugs usually causes LOC but does not cause nystagmus?

DRE REV-12

**Slide 12.**

True or False: Any drug that causes nystagmus will also usually cause the eyes to be unable to converge.



***TRUE: CNS Depressants, Dissociative Anesthetics and Inhalants usually cause the eyes to be unable to converge.***

What category of drugs usually causes LOC but does not cause nystagmus?



***CANNABIS usually causes LOC but doesn't cause nystagmus.***



## Review of Darkroom Examinations

- What are the three lighting conditions under which we must estimate the size of the subject's pupils?
- How long should we wait in the Darkroom before beginning to check the subject's pupils?
- Name the device we use to estimate the size of the subject's pupils

DRE

REV-13

### Slide 13.

What are the three lighting conditions under which we must estimate the size of the subject's pupils?



Instructor  
Note

***Room Light***

***Near Total Darkness***

***Direct Light***

How long should we wait in the Darkroom before beginning to check the subject's pupils?



Instructor  
Note

***At least 90 seconds.***

Name the device we use to estimate the size of the subject's pupils.



Instructor  
Note

***Pupillometer***



## Review of Darkroom Examinations

- What do the numbers on the Pupillometer refer to?
- In what units of measurement are those numbers given?
- For DRE purposes, what is the “average” range of an adult pupil in room light?
- What does the term “Miosis” mean?

DRE

REV-14

### Slide 14.

What do the numbers on the Pupillometer refer to?



***The diameters of the dark circles/semi-circles.***

In what units of measurement are those numbers given?



***In millimeters.***

For DRE purposes, what is the “average” range of an adult pupil in room light?



***The diameter of the pupil normally ranges from 2.5 to 5.0 mm.***

What does the term “Miosis” mean?



***“Miosis” means an abnormally small or constricted pupil.***



## Review of Darkroom Examinations

- What does the term “Mydriasis” mean?
- What category of drugs usually causes Miosis, or constricted pupils?
- What categories usually cause Mydriasis, or dilated pupils?
- What is unique about the drug Methaqualone (Quaaludes) and Soma?

DRE

REV-15

### Slide 15.

What does the term “Mydriasis” mean?



***“Mydriasis” means an abnormally large or dilated pupil.***

What category of drugs usually causes Miosis, or constricted pupils?



***Narcotic Analgesics usually cause pupils to constrict below the DRE average range.***

What categories usually cause Mydriasis, or dilated pupils?



***CNS Stimulants and Hallucinogens usually cause pupils to dilate above the DRE average range. Cannabis also may cause dilation. Certain CNS Depressants and some inhalants may also cause pupil dilation.***

What is unique about the drug Methaqualone (Quaaludes) and Soma?



***Both are CNS Depressants that cause pupil dilation.***

Review of DRE School

## Review of Divided Attention Tests

- Name the four Divided Attention Tests administered during the DRE drug influence evaluation

DRE REV-16

**Slide 16.**

Name the four Divided Attention Tests administered during the DRE drug influence evaluation.



***Modified Romberg Balance***

***Walk and Turn***

***One Leg Stand***

***Finger to Nose***

Review of DRE School

## Review of Divided Attention Tests

- Why is the MRB the first test administered?
- What four validated clues of impairment have been established for the OLS Test?
- How many times is the OLS administered during the DRE drug influence evaluation?

DRE REV-17

**Slide 17.**

Why is the Modified Romberg Balance (MRB) the first test administered?



***For standardization.***

What four validated clues of impairment have been established for the One Leg Stand (OLS) Test?



***Sways while balancing***

***Uses arm(s) to balance***

***Hopping***

***Puts the foot down***

How many times is the OLS administered during the DRE drug influence evaluation?



***Twice***

Review of DRE School

## Review of Divided Attention Tests

- Which foot must the subject stand on first when performing the OLS?
- How many validated clues of impairment have been established for the WAT test?
  - Name them
  - In what sequence is the subject instructed to touch the index fingers to the nose on the FTN test?

DRE REV-18

**Slide 18.**

Which foot must the subject stand on first when performing the OLS?



**Left**

How many validated clues of impairment have been established for the Walk and Turn (WAT) test? Name them.



***Eight validated clues***

- Cannot keep balance during the instructions***
- Starts too soon***
- Stops while walking***
- Does not touch heel-to-toe***
- Steps off the line***
- Uses arm(s) to balance***
- Improper turn***
- Incorrect number of steps***

In what sequence is the subject instructed to touch the index fingers to the nose on the Finger to Nose (FTN) test?



***Left, Right, Left, Right, Right, Left***



## General Review Questions

- What is the medical or technical term for “droopy eyelids”?
- What does “Piloerection” mean?
  - What drug often causes Piloerection?
- What is the medical or technical term for Heroin?

DRE

REV-19

### Slide 19.

What is the medical or technical term for “droopy eyelids”?



***Ptosis***

What does “Piloerection” mean? What drug often causes Piloerection?



***“Piloerection” means “Hair Standing Up”, or “Goose Bumps”. It is often caused by LSD.***

What is the medical or technical term for Heroin?



***Diacetyl Morphine***

Review of DRE School

## General Review Questions

- Explain the terms “Null”, “Additive”, “Antagonistic,” and “Overlapping” Effect as they apply to polydrug use
  - Give examples
- What is “Rebound Dilation”?
- What is pupillary unrest?
- What does “Bruxism” mean?

DRE REV-20

**Slide 20.**

Explain the terms “Null”, “Additive”, “Antagonistic,” and “Overlapping” Effect as they apply to polydrug use. Give examples.



***“Null”:* neither drug affects some specific indicator**

***“Additive”:* the two drugs produce some identical effects**

***“Antagonistic”:* the two drugs produce some directly opposite effects**

***“Overlapping”:* one drug affects some symptom the other doesn’t affect, and vice versa.**

What is “Rebound Dilation”?



***“Rebound Dilation” is a period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original size.***

What is pupillary unrest?



***The continuous change in the size of the pupils that may be observed under room or steady light conditions.***

What does “Bruxism” mean?



***Grinding the teeth.***

Review of DRE School

## General Review Questions

- What does the number denoting the size of a hypodermic needle refer to?
- What does “Synesthesia” mean?
- What is “Sinsemilla”?
- What are the twelve major components of the DRE drug influence evaluation?

DRE REV-21

**Slide 21.**

What does the number denoting the size of a hypodermic needle refer to?



***The inside diameter of the needle.***

What does “Synesthesia” mean?



***A mixing of senses, i.e. hearing colors or seeing sounds.***

What is “Sinsemilla”?



***A variety of marijuana with a high concentration of THC.***

What are the twelve major components of the DRE drug influence evaluation?



***Breath Alcohol Test***  
***Interview of Arresting Officer***  
***Preliminary Examination***  
***Examinations of the Eyes***  
***Divided Attention Tests***  
***Vital Signs Examinations***  
***Dark Room Examinations***  
***Examination for Muscle Tone***  
***Examination for Injection Sites***  
***Subject's Statements***  
***Opinion of the Evaluator***  
***Toxicological Examination***

Review of DRE School

## Review of Physiology

- Name the ten major body systems

DRE REV-22

**Slide 22.**

Name the ten major body systems.



***M is for Muscular System***

***U is for Urinary System***

***R is for Respiratory System***

***D is for Digestive System***

***E is for Endocrine System***

***R is for Reproductive System***

***S is for Skeletal System***

***I is for Integumentary System***

***N is for Nervous System***

***C is for Circulatory System***

Review of DRE School

### Review of Physiology

- What is the distinction between the “Smooth” muscles and the “Striated” muscles?
- What do we call the chemicals produced by the Endocrine System?
- What is a neuron?

DRE REV-23

**Slide 23.**

What is the distinction between the “Smooth” muscles and the “Striated” muscles?



***We consciously control the Striated; we don't consciously control the Smooth.***

What do we call the chemicals produced by the Endocrine System?



***Hormones***

What is a neuron?



***A nerve cell.***

Review of DRE School

### Review of Physiology

- What do we call the space between two nerve cells?
- What do we call the chemicals that pass from one nerve cell to the next?
- What do we call the part of the nerve cell that sends out the neurotransmitter?

DRE REV-24

**Slide 24.**

What do we call the space between two nerve cells?



***Synapse, or synaptic gap***

What do we call the chemicals that pass from one nerve cell to the next?



***Neurotransmitters***

What do we call the part of the nerve cell that sends out the neurotransmitter?



***Axon***

Review of DRE School

## Review of Physiology

- What do we call the part of a nerve cell that receives the neurotransmitter?
- What do the Sensory Nerves do?
- What do the Motor Nerves do?
- Name the two sub-divisions of Motor Nerves

DRE REV-25

**Slide 25.**

What do we call the part of a nerve cell that receives the neurotransmitter?



***Dendrite***

What do the Sensory Nerves do?



***Carry messages to the brain, from the sense organs, pain sensors, etc.***

What do the Motor Nerves do?



***Carry messages from the brain, to the muscles, etc.***

Name the two sub-divisions of Motor Nerves.



***Voluntary (control striated muscles) and Autonomic (control smooth muscles).***

---

Review of DRE School

## Review of Physiology

- Name the two sub-divisions of Autonomic Nerves
  - Describe their functions
- What does it mean to say a drug is “sympathomimetic”?
- What does it mean to say a drug is “parasympathomimetic”?

DRE REV-26

**Slide 26.**

Name the two sub-divisions of Autonomic Nerves and describe their functions.



***Sympathetic (command the body’s response to fear, excitement, etc.), and Parasympathetic (promote the body’s tranquil activities).***

What does it mean to say a drug is “sympathomimetic”?



***It means the drug’s effects mimic those caused by messages transmitted along sympathetic nerves (excitement, agitation, arousal, etc.).***

What does it mean to say a drug is “parasympathomimetic”?



***The drug’s effects mimic those caused by messages transmitted along parasympathetic nerves (relaxation, calm, sleep, etc.).***

Review of DRE School

## Review of Physiology

- Which two categories of drugs can most appropriately be called sympathomimetic?
- Which category can most appropriately be called parasympathomimetic?
- What is an artery?
- What is a vein?

DRE REV-27

**Slide 27.**

Which two categories of drugs can most appropriately be called sympathomimetic?



***CNS Stimulants and Hallucinogens***

Which category can most appropriately be called parasympathomimetic?



***Narcotic Analgesics***

***Clarification: Cannabis, Dissociative Anesthetics, and Inhalants have some sympathomimetic characteristics, but not as many as do the CNS Stimulants and Hallucinogens. CNS Depressants have parasympathomimetic characteristics, but not as many as the Narcotic Analgesics.***

What is an artery?



***Strong, elastic blood vessel that carries blood from the heart to the body's tissues and organs.***

What is a vein?



***Blood vessel that carries blood back to the heart from tissues and organs.***

Review of DRE School

## Review of Physiology

- What are the Pulmonary Arteries?
  - What is unique about them?
- What are the Pulmonary Veins?
  - What is so special about them?

DRE REV-28

**Slide 28.**

What are the Pulmonary Arteries, and what are unique about them?

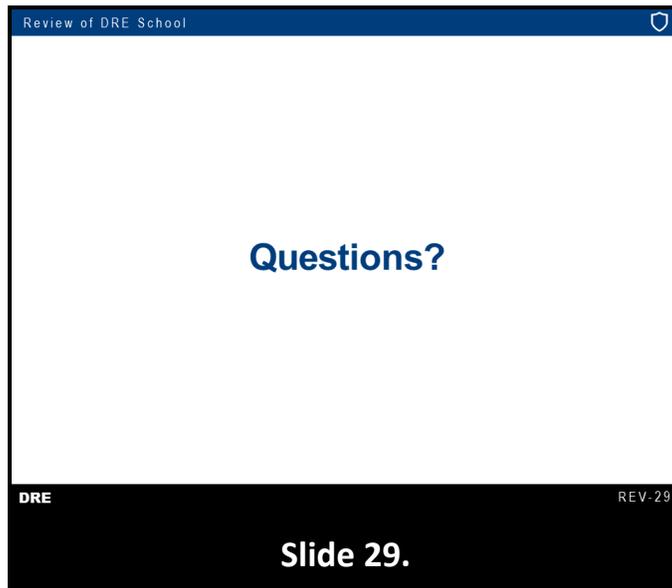


***They are the arteries that carry blood from the heart to the lungs. They are the only arteries that carry blood depleted of oxygen.***

What are the Pulmonary Veins and what is so special about them?



***They are the veins that carry blood back to the heart from the lungs. They are the only veins that carry blood rich in oxygen.***



***Solicit participants' comments and questions concerning the Review of the DRE School.***

### A SELF-TEST FOR REVIEW AND STUDY

Circle the letters corresponding to the correct answers. Note that some questions have **more than one** correct answer.

1. Suppose you examine a suspect that you know is under the combined influence of Demerol and Thorazine. Which of the following would you **not** expect to find in that suspect? (Circle all that you wouldn't expect to see.)
  - A. Tachycardia is present
  - B. Horizontal Gaze Nystagmus is present
  - C. Hypotension is present
  - D. Mydriasis is present
  - E. Lack of Convergence is present
2. The Autonomic Nervous System has **sympathetic** nerves and \_\_\_\_\_ nerves.
  - A. parasympathetic
  - B. metasymphathetic
  - C. postsymphathetic
  - D. mesosymphathetic
  - E. pilosymphathetic
3. Suppose you examine a suspect that you know is under the combined influence of Ketamine and Methamphetamine, and you observe that he or she exhibits Horizontal Gaze Nystagmus. This is an example of ....
  - A. a Synergistic Effect
  - B. an Antagonistic Effect
  - C. the Null Effect
  - D. an Overlapping Effect
  - E. an Additive Effect
4. The technical term meaning "constricted pupils" is ....
  - A. Mydriasis
  - B. Occulosis
  - C. Miosis
  - D. Bruxism
  - E. Ptosis

5. **Xanax** is an example of ....
- A. a natural hallucinogen
  - B. an Antipsychotic
  - C. a Sedative-hypnotic
  - D. a synthetic hallucinogen
  - E. an Antidepressant
6. **Fentanyl** is an example of ....
- A. an Opioid
  - B. an Analog of Phencyclidine
  - C. a Natural Alkaloid of Opium
  - D. an Opium Derivative
  - E. a non-Amphetamine-based Stimulant
7. Which of the following ordinarily will cause Horizontal Gaze Nystagmus? (Circle all that usually cause nystagmus.)
- A. Methamphetamine
  - B. Valium
  - C. The combination of Cocaine and Xanax
  - D. The combination of Cannabis and LSD
  - E. The combination of Heroin and Dilaudid
8. **Ritalin** is an example of ....
- A. a CNS Stimulant
  - B. a Narcotic Analgesic
  - C. a Hallucinogen
  - D. a CNS Depressant
  - E. an Analog of Phencyclidine
9. Suppose you examine a suspect that you know is under the combined influence of Heroin and PCP and you observe that he or she exhibits **miosis**. This is most likely due to ....
- A. the "Downside" of Heroin
  - B. an Overlapping Effect between the two drugs
  - C. an Antagonistic Effect between the two drugs
  - D. an Additive Effect between the two drugs
  - E. the "Downside" of PCP

10. Which of the following usually will be true in a subject who is under the influence of a Hallucinogen? (Circle all that usually will be true.)
- A. Pupils will be constricted
  - B. Body temperature will be elevated
  - C. Eyes will be unable to converge
  - D. Blood pressure will be elevated
  - E. Horizontal Gaze Nystagmus will be present
11. Which of the following is not classified as a Hallucinogen? (Circle all that **are not** Hallucinogens.)
- A. ETOH
  - B. DOM
  - C. MDMA
  - D. 2CB
  - E. THC
12. Which of the following ordinarily will leave body temperature within the DRE average range? (Circle all that usually don't affect body temperature.)
- A. CNS Stimulants
  - B. Dissociative Anesthetics
  - C. Cannabis
  - D. CNS Depressants
  - E. All of the above **usually do** affect body temperature
13. Suppose you examine a suspect that you know is under the combined influence of Percodan and Cannabis, and you find that the suspect's pulse rate is 74 bpm. This is most likely due to ....
- A. an Additive Effect between the two drugs
  - B. the "Downside" of Cannabis
  - C. an Overlapping Effect between the two drugs
  - D. an Antagonistic Effect between the two drugs
  - E. the "Downside" of Percodan
14. How many distinct, validated clues have been established for the Modified Romberg Balance test?
- A. Eight
  - B. Six
  - C. Four
  - D. Three
  - E. There are **no validated** clues for that test

15. A person under the combined influence of Ritalin and LSD usually will have above normal blood pressure. This is an example of ....
- A. an Overlapping Effect
  - B. a Synergistic Effect
  - C. the Null Effect
  - D. an Additive Effect
  - E. an Antagonistic Effect
16. The gap between two nerve cells is called the ....
- A. Vesicle
  - B. Neuron
  - C. Synapse
  - D. Dendrite
  - E. Axon
17. **"Ptosis"** most nearly means ....
- A. Dilated pupils
  - B. Grinding the teeth
  - C. Constricted pupils
  - D. Droopy eyelids
  - E. Goose bumps
18. How many distinct, validated clues have been established for the Walk and Turn test?
- A. Eight
  - B. Six
  - C. Four
  - D. Three
  - E. There are **no validated** clues for that test.
19. Which of the following are not subcategories of Inhalants? (Circle all that are not proper names for Inhalant Subcategories.)
- A. Fluorocarbons
  - B. Anesthetic Gases
  - C. Aerosols
  - D. Volatile Solvents
  - E. Propellants

20. **Phencyclidine** is best described as ....

- A. parasympathomimetic
- B. an antidepressant
- C. a cellular stimulant
- D. psychotrophic
- E. a dissociative anesthetic

21. Which of the following usually **will not cause** the pupils to dilate? (Circle all that usually do not cause dilation.)

- A. MDMA
- B. Methaqualone
- C. Desoxyn
- D. Peyote
- E. Ketamine

22. Which subcategory or subcategories of Inhalants usually cause blood pressure to **be depressed**? (Circle all that usually cause a depressed pressure.)

- A. Anesthetic Gases
- B. Propellants
- C. Volatile Solvents
- D. Aerosols
- E. Fluorocarbons

23. Which of the following are **Natural Alkaloids** of opium? (Circle all that are Natural Alkaloids.)

- A. Lortab
- B. Dilaudid
- C. Codeine
- D. Thebaine
- E. Hycodan

24. **“Crank”** is a street name for ....

- A. Heroin
- B. Cocaine
- C. PCP
- D. Methamphetamine
- E. LSD

25. Which of the following are **not validated clues** for the One Leg Stand test? (Circle all that aren't validated clues.)
- A. Hopping
  - B. Uses arm(s) to balance
  - C. Putting the foot down
  - D. Failing to count out loud
  - E. Sways while balancing
26. Which of the following would be considered **sympathomimetic** drugs? (Circle all that are sympathomimetic.)
- A. MDMA
  - B. Dexedrine
  - C. Xanax
  - D. Oxycontin
  - E. Desoxyn
27. Suppose you examine a suspect, and you observe **all** of the following: Horizontal Gaze Nystagmus is present, with an onset of approximately 30 degrees; BAC is 0.00; eyes are unable to converge; pupil size is 5.5 mm in near-total darkness and 3.5 mm in direct light; pupil reaction to light is within normal; pulse rate is 100 bpm; blood pressure is 148/96; body temperature is 99.8 degrees. In your opinion, this suspect is under the influence of ....
- A. a combination of a CNS Depressant and a CNS Stimulant
  - B. a CNS Depressant alone
  - C. a Dissociative Anesthetic alone
  - D. a combination of a Dissociative Anesthetic and a CNS Stimulant
  - E. a combination of a CNS Depressant and Cannabis
28. The only artery that carries **de-oxygenated** blood is the \_\_\_\_\_ artery.
- A. Carotid
  - B. Brachial
  - C. Pulmonary
  - D. Radial
  - E. Coronal

29. Suppose a subject is under the influence of **Oxycodone** and nothing else. Indicate whether each of the following will be true or false:

- A. T F Horizontal Gaze Nystagmus will not be present
- B. T F Pupils will be constricted
- C. T F Bradycardia will be present
- D. T F Eyes will be able to converge
- E. T F Hypotension will be present

30. "**Bruxism**" most nearly means ....

- A. Dilated pupils
- B. Grinding the teeth
- C. Constricted pupils
- D. Droopy eyelids
- E. Goose bumps

31. Suppose a suspect is under the influence of a combination of Marijuana and Cocaine, but nothing else. Indicate whether each of the following will be true or false:

- A. T F Pulse rate will be elevated
- B. T F Pupils will be dilated
- C. T F Horizontal Gaze Nystagmus will be present
- D. T F Eyes will be able to converge
- E. T F Blood pressure will be elevated

32. How many distinct, validated clues have been established for the Finger to Nose test?

- A. Eight
- B. Six
- C. Four
- D. Three
- E. There are **no validated** clues for this test.

33. The drug \_\_\_\_\_ is an example of a Sedative-hypnotic depressant. (Circle all that are Sedative-hypnotics.)

- A. Prozac
- B. Valium
- C. Haldol
- D. Ambien
- E. Xanax

## ANSWER KEY FOR THE SELF-TEST

1. Correct answers are A and D.  
Demerol (Meperidine) is a Narcotic Analgesic, Thorazine is a CNS Depressant. The combination should **not produce** elevated heart rate (Tachycardia) nor dilated pupils (Mydriasis). But HGN and LOC should be present, due to the Depressant, Thorazine. And, lowered blood pressure (Hypotension) should be present as an Additive Effect of both drugs.
2. Correct answer is A, **parasympathetic**.
3. Correct answer is D, **Overlapping**.  
Ketamine is an analog of PCP, a drug that usually does cause HGN. Methamphetamine is a CNS Stimulant, a type of drug that doesn't affect nystagmus (Dissociative Anesthetic). This is a case of **action plus no action equals action**, i.e., an Overlapping Effect.
4. Correct answer is C, **Miosis**.
5. Correct answer is C, **Sedative-hypnotic**.
6. Correct answer is A, **Opioid**.
7. Correct answers are B and C.  
Valium is a CNS Depressant, which of course causes nystagmus. The combination of Cocaine and Xanax gives us a Stimulant and a Depressant (Xanax), which causes nystagmus via an Overlapping Effect. None of the other drugs mentioned cause nystagmus: Methamphetamine is a Stimulant; LSD is a Hallucinogen; Heroin and Dilaudid are Narcotics; Cannabis, of course, is its own category.
8. Correct answer is A, **CNS Stimulant**.
9. Correct answer is B, **Overlapping**.  
Heroin, a Narcotic, causes constriction of the pupils (Miosis); PCP does not affect pupil size. This is another case of **action plus no action equals action**.
10. Correct answers are B and D.  
Hallucinogens are **sympathomimetic** drugs, and therefore usually elevate the vital signs. But they have no effect on either nystagmus or LOC. And, instead of constricting the pupils, Hallucinogens usually cause pupils to dilate.

11. Correct answers are A and E.

**ETOH** is the chemical name for Ethyl Alcohol, the common beverage form of alcohol that remains the most commonly-abused drug. **THC** is the primary active ingredient in Cannabis. But “MDMA” (also known as “Ecstasy”) and “DOM” (also known as “STP”) and 2CB **are** Hallucinogens.

12. Correct answers are C and D, **Cannabis and Depressants**.

13. Correct answer is D, **Antagonistic**.

A pulse rate of 74 bpm is within the DRE average range. Percodan, a Narcotic Analgesic, usually lowers the pulse, while Cannabis usually elevates the pulse. The Antagonistic Effect of the two drugs has put this subject’s pulse into a precarious, and probably temporary, state of balance.

14. Correct answer is E, **no validated clues**.

It is important to understand that, when we say there are no validated clues for MRB Test, that does **not mean** that the test is invalid. It simply means that we do not have the research data to attest that specific clues on that test are statistically reliable indicators of impairment. Those kinds of research data, at the present time, are available only for HGN, WAT, and OLS.

15. Correct answer is D, **Additive**.

Ritalin (a Stimulant) and LSD (a Hallucinogen) both usually elevate blood pressure.

16. Correct answer is C, **Synapse**.

17. Correct answer is D, **Droopy Eyelids**.

18. Correct answer is A, **Eight**.

Of the eight **validated** clues for WAT, two may be observed during the Instruction Stage of the test. They are can’t keep balance (which means the suspect breaks away from the heel-to-toe stance) and starts too soon. The other six clues pertain to the Walking Stage of the test. They include:

misses heel-to-toe  
uses arm(s) to balance  
steps off line  
stops walking  
turns improperly  
takes the wrong number of steps

Although these eight are the only validated clues for WAT, they aren’t the only things that might be observed that could serve as evidence of impairment. All of your observations of the suspect are important.

19. Correct answers are A and E, **Fluorocarbons and Propellants**.

The only proper names for subcategories of Inhalants are Volatile Solvents, Aerosols and Anesthetic Gases.

20. Correct answer is E, **Dissociative Anesthetic**.

21. Correct answer is E, **Ketamine**.

Ketamine is an analog of PCP, a drug that doesn't affect pupil size. MDMA and Peyote are Hallucinogens, and Desoxyn is a CNS Stimulant; all of those dilate pupils. Methaqualone is a very special CNS Depressant; unlike almost all other Depressants, Methaqualone does affect pupil size (by dilating the pupils).

22. Correct answer is A, **Anesthetic Gases**.

Volatile Solvents and Aerosols usually produce an elevated blood pressure. "Fluorocarbons" and "Propellants" are, of course, not proper names for subcategories of Inhalants.

23. Correct answers are C and D, **Codeine and Thebaine**.

Lortab, Dilaudid and Hycodan are all **opium derivatives**. Dilaudid derives from Morphine, and Hycodan and Lortab from Codeine.

24. Correct answer is D, **Methamphetamine**.

25. Correct answer is D, **Failing to Count Out Loud**.

Hopping, Uses Arm(s) to Balance, Putting the Foot Down and Sways While Balancing are the four (and only four) **validated** clues of impairment for OLS.

26. Correct answers are A, B and E: **MDMA, Dexedrine and Desoxyn**.

Dexedrine and Desoxyn are members of the Amphetamine family of CNS Stimulants. MDMA is a "Psychedelic Amphetamine" belonging to the Hallucinogens. CNS Stimulants and Hallucinogens are the two categories that make up the **sympathomimetic** drugs. That means they simulate the responses that the body makes to messages conveyed along the **sympathetic** nerves, i.e., elevated vital signs, dilated pupils, etc. Three other categories, namely the Inhalants, Phencyclidine and Cannabis have **some** sympathomimetic characteristics, but they are not considered to be fully sympathomimetic, and not to the degree of the CNS Stimulants and Hallucinogens. Xanax and Oxycontin aren't even close to being sympathomimetic. Xanax (a Depressant) and Oxycontin (a Narcotic) are better described as wholly or partially **parasympathomimetic**.

27. Correct answer is C, **Dissociative Anesthetic**.

Dissociative Anesthetics, by themselves, can account for all of the observations listed. Dissociative Anesthetics cause nystagmus and LOC; they do not affect pupil size, so the pupils remain within the normal range; they do not affect the reaction of the pupils to light; they usually elevate all three vital signs.

A Depressant, by itself, could not account for the elevated vitals, and usually would slow the pupils' reaction to light.

If we had a combination of a Depressant and a Stimulant, we'd expect to see the pupils dilated beyond the normal range (due to an Overlapping Effect), and we'd expect to see the reaction of the pupils slowed (due to an Additive Effect). Also, although it is possible that the vital signs could all be elevated with a combination of Depressant and Stimulant, we'd probably expect to see some "moderation" of the vitals due to an Antagonistic Effect.

If we had a combination of a Dissociative Anesthetic and a Stimulant, we could expect to see pupil dilation and some slowing of the reaction to light, due to Overlapping Effects.

If we had a combination of a Dissociative Anesthetic and a Stimulant, we could expect to see an elevated body temperature, since both of those drugs elevate temperature.

28. Correct answer is C, **Pulmonary**.

29. Correct answers are:

(A) True: **no nystagmus** will be present

(B) True: we will see miosis, or **constricted pupils**

(C) True: we will find a slow pulse, or **Bradycardia**

(D) True: we won't see a Lack of Convergence, so the eyes **will be able to converge**

(E) True: we will find a lowered blood pressure, or **Hypotension**

Oxycodone is a Narcotic Analgesic, and these observations will be consistent with impairment by Narcotics.

30. Correct answer is B, **Grinding the Teeth**

31. Correct answers are:

(A) True: An Additive Effect will **elevate the pulse** for this combo

(B) True: **pupils will dilate** due to an Overlapping or Additive Effect

(C) False: neither drug causes nystagmus, so the Null Effect will also **cause no nystagmus**

(D) False: Marijuana causes LOC, so the Overlapping Effect means the **eyes won't converge**

(E) True: An Additive Effect will **elevate the blood pressure**

32. Correct answer is E, **no validated clues**

33. Correct answers are B, D, and E: **Valium, Ambien, and Xanax**

# 29

## DRE

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### CLASSIFYING A SUSPECT (ROLE PLAY)

#### LEARNING OBJECTIVES

- Conduct a complete drug influence evaluation using the systematic and standardized 12-step process
- Compile a complete, clear, and accurate report documenting the results of the drug influence evaluation

#### CONTENTS

A. Scenarios: Simulated Examinations.....	2
B. Report Preparation Practice .....	4
C. Report Review and Critique.....	4

#### LEARNING ACTIVITIES

- Interview Practice
- Note-Taking Practice
- Small Group Work Session
- Instructor-Led Presentations
- Participant-Led Presentations
- Instructor-Led Critiques



## Learning Objectives

- Conduct a complete drug influence evaluation
- Compile a complete, clear and accurate report documenting results of the evaluation

DRE

29-2

**Slide 2.**Instructor  
Note

***Briefly review the objectives, content, and activities of this session. The goal of this session is to prepare the DRE participants for Certification Training by simulating evaluations they will be completing during field certification training. Participants will administer a complete drug influence evaluation and prepare a complete narrative report. The report will be reviewed by a DRE instructor for coaching and critique. Instructors should determine the most efficient use of the time allotted to ensure that participants complete the objectives and receive optimal benefit from this session.***

### A. Scenarios: Simulated Examinations



## Procedures

- Drug Influence Evaluation Practice
- Report Preparation
- Report Review and Critique



DRE

29-3

**Slide 3.**



***Team Assignments: Assign the participants to teams of 2-4 members.***

***The total number of participant teams should not be more than the number of role players participating in this session. Otherwise, one or more teams would be unoccupied during major portions of this segment.***

***Explain procedures to the participants.***

Each team will examine as many as possible of the role players until the time scheduled for this segment elapses.

Each examination will be carried out fully; nothing will be omitted except for the Breath Alcohol Test, the interview of the Arresting Officer and the Toxicological Examination.

At certain points in the evaluation, the role player will inform the team what to record. For example: the role players will instruct the teams concerning the evidence to be recorded from the HGN test.

All data will be recorded on the standard Drug Influence Evaluation Form.

Some role players will be simulating the signs and symptoms of exactly one category of drugs. Clarification: Role player Alpha might be simulating a person who is under the influence of a CNS Stimulant only. Role player Delta might be simulating a person under the influence of an Inhalant only.

Some role players may be simulating the signs and symptoms of two or more categories in combination. Role player Bravo might be simulating someone who is under the influence of both Dissociative Anesthetic and Cannabis. It is possible one or more role players may be simulating persons who are not under the influence of any drugs.

At the completion of each evaluation, the team will discuss the evidence obtained and reach a consensus concerning the category or categories of drugs present.

During the assigned time in this session, each participant will prepare and present a complete narrative report on one role player. The narrative will be presented to a DRE instructor for critique.

The instructor role player will review those reports pertaining to his/her role player.



Instructor  
Note



Activity

***Verify all participants understand the procedures.***

***Solicit participants' questions concerning the procedures.***

***Drug Influence Evaluation Practice: Assign a role player to each team. Example: "Alpha" to team #1, "Bravo" to team #2, "Charlie" to team #3, etc.***

***As each team completes the entire evaluation, the team will hand over its role player to the next team. That is, team #1 hand off to team #2, team #2 to team #3, etc.***

***Make sure each participant fully conducts an entire evaluation of at least one role player.***

***Allow the practice to continue until each participant has completed an entire evaluation on at least one role player. The writing of the narrative report should be completed within the time allotted for this session.***

## B. Report Preparation Practice

Assignments: Each participant is to prepare a narrative report for one role player evaluated by the team.



Instructor  
Note

***Verify each team understands who is to be the subject of the report.***

## C. Report Review and Critique

Report Presentation: Each participant should submit their report to the respective role player on whom the evaluation was conducted for review and feedback.



Instructor  
Note

***Inquire whether other teams that evaluated this same role player reached a different conclusion about the drug category or categories.***

***Review and offer constructive feedback on the narrative reports.***

***If necessary, this segment can be conducted simultaneously in two separate classrooms, with half of the teams present in each classroom, to allow all reports to be presented and critiqued within the allotted time.***

Session 29: Classifying a Suspect (Role Play)

Questions?

DRE 29-4

Slide 4.



*Solicit participants' comments and questions concerning Classifying a Suspect.*

## ROLE PLAY SCENARIOS

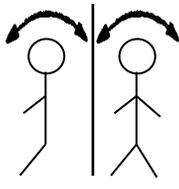
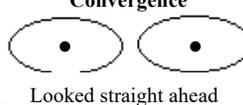
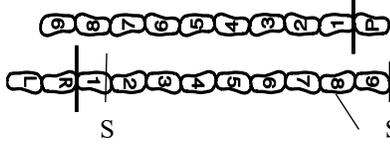
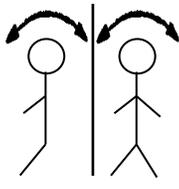
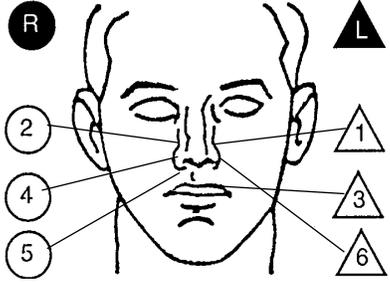
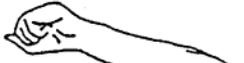
SUBJECT	DRUG CATEGORY
Alpha	Not impaired
Bravo	Cannabis
Charlie	Dissociative Anesthetic (PCP)
Delta	Narcotic Analgesic
Echo	Narcotic Analgesic and CNS Depressant
Foxtrot	Cannabis
Golf	CNS Stimulant
Hotel	Dissociative Anesthetic and Cannabis
India	Inhalant
Juliet	Alcohol (ETOH) only (BAC = 0.06)
Kilo	Narcotic Analgesic and ETOH (BAC = 0.05)
Lima	CNS Stimulant and ETOH (BAC = 0.03)



# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 - 2 IG								
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency										
Arrestee's Name (Last, First, Middle) <b>BRAVO</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)									
Date Examined / Time / Location		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>										
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Bag of chips"	When? "Noon"	What have you been drinking? How much? "Juice" 3 or 4 bottles	Time of last drink? N/A									
Time now/ Actual /	When did you last sleep? "Last night"	How long? 8 hours	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: Carefree, Cooperative		Coordination: Fair, Unsteady at times									
Speech: Slow		Breath odor: Normal		Face: Normal										
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal								
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy								
Pulse and Time 1. <u>120</u> / _____ 2. <u>116</u> / _____ 3. <u>118</u> / _____	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye      Left eye		26/30 <b>One Leg Stand</b> 24/30  L      R Sways while balancing Uses arms to balance Hopping Puts foot down								
<b>Modified Romberg Balance</b> Approx. 2" 2"      Approx. 3" 3"  Eyelid tremors	<b>Walk and Turn Test</b>  S      M Walked slowly. Leg tremors		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		1st Nine      2nd Nine <table border="1" style="display: inline-table;"><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table> 9      10		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
<input checked="" type="checkbox"/>	<input type="checkbox"/>													
<input type="checkbox"/>	<input checked="" type="checkbox"/>													
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
<b>Time Estimation</b> <u>22</u> estimated as 30 seconds	Describe turn Slow	Cannot do test (explain) N/A		Type of footwear:										
<b>Finger to Nose</b> (Draw lines to spots touched)  Used pads of fingers on all attempts. Eyelid tremors		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Clear								
		Left Eye	6.5	8.5	5.5	Oral cavity: Green coating on back of tongue								
		Right Eye	6.5	8.5	5.5	Reaction to Light: Normal								
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No												
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>										
		Nothing observed.												
Blood Pressure 168 / 100		Temperature 98.2 °F												
Muscle Tone: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid														
Comments:														
What drugs or medications have you been using? "Nothing man. It's all good."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A										
Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation										
Officer's Signature:		Reviewed/approved by / date:				DRE #								
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant								
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Cannabis      Rev 2/23								

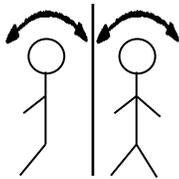
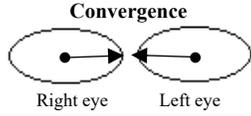
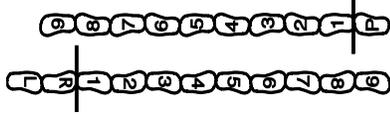
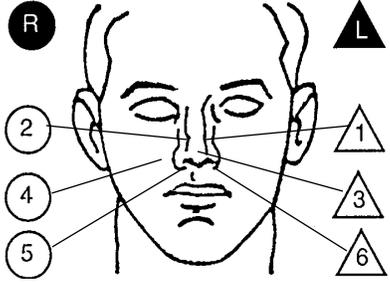
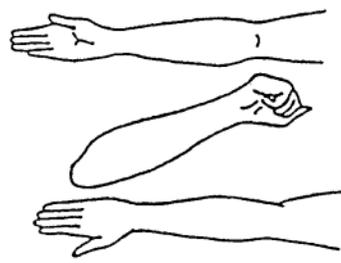
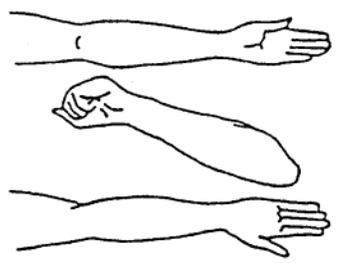
# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 - 3 IG									
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency											
Arrestee's Name (Last, First, Middle) <b>CHARLIE</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)										
Date Examined / Time / Location		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/>	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>										
Miranda Warning Given	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	What have you eaten today? "Today?" (Long pause) "No"		When?	What have you been drinking? How much? "Drink?" "No"	Time of last drink? N/A									
Time now/ Actual	When did you last sleep? "This morning"	How long? 4 hours	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: Dazed, Confused		Coordination: Slow, Rigid movements										
Speech: Slow to respond, Confused		Breath odor: Chemical-like odor		Face: Sweaty											
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal									
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy									
Pulse and Time 1. <u>112</u> / _____ 2. <u>116</u> / _____ 3. <u>114</u> / _____		HGN	Left Eye	Right Eye	38/30 <b>One Leg Stand</b> 24/30										
 <p style="text-align: center;">Rigid</p>		Lack of Smooth Pursuit	Present	Present	 <p style="text-align: center;">Convergence Looked straight ahead</p>										
		Maximum Deviation	Present	Present											
		Angle of Onset	Immed	Immed											
		 <p style="text-align: center;">Walk and Turn Test</p>		Cannot keep balance			_____								
 <p style="text-align: center;">Rigid</p>		Stiff, rigid movements	Starts too soon <input checked="" type="checkbox"/>												
Stops walking _____ Misses heel-toe _____ Steps off line <input checked="" type="checkbox"/>		1st Nine <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 2nd Nine _____		<table border="1" style="width: 100%; text-align: center;"> <tr><td>L</td><td>R</td></tr> <tr><td>X</td><td>X</td></tr> <tr><td>X</td><td>X</td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table> Sways while balancing Uses arms to balance Hopping Puts foot down		L	R	X	X	X	X				
L	R														
X	X														
X	X														
Raises arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Actual steps taken 9      N/A		Rigid. Reminded to count out loud		Type of footwear:											
<b>Time Estimation</b> 52 estimated as 30 seconds		Describe turn Did not attempt the turn		Cannot do test (explain) Stopped after first 9 steps		Type of footwear:									
<b>Finger to Nose</b> (Draw lines to spots touched)		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Clear									
		Left Eye	4.5	6.5	3.5	Oral cavity: Clear									
		Right Eye	4.5	6.5	3.5										
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Reaction to Light: Normal									
 <p style="text-align: center;">Slow rigid movements</p>		<b>RIGHT ARM</b>		<b>LEFT ARM</b>		Nothing observed									
															
															
															
Blood Pressure 172 / 102	Temperature 100 °F	Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:											
What drugs or medications have you been using? "Drugs? ... Nothing man"		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A											
Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation											
Officer's Signature:		Reviewed/approved by / date:				DRE #									
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input checked="" type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant									
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis									

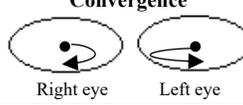
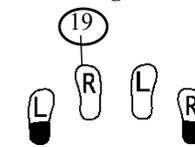
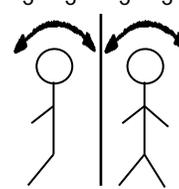
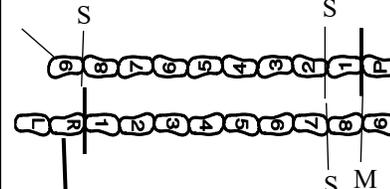
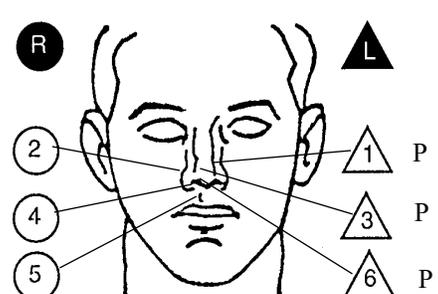
# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 - 4 IG																				
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency																						
Arrestee's Name (Last, First, Middle) <b>DELTA</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)																					
Date Examined / Time / Location		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/>	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/>		Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>																				
Miranda Warning Given	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	What have you eaten today? "I didn't eat today"		When?	What have you been drinking? How much? "Just some water today."	Time of last drink? N/A																				
Time now/ Actual	When did you last sleep? "I don't remember."	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No																					
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																							
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: Passive, Cooperative		Coordination: Slow, Sluggish, Unstable																					
Speech: Slow to respond, Low		Breath odor: Normal		Face: Normal (continually rubbing face)																						
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal																				
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy																				
Pulse and Time 1. <u>52</u> / _____ 2. <u>50</u> / _____ 3. <u>50</u> / _____	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence  Right eye      Left eye		22/30 <b>One Leg Stand</b> 24/30  Counted slowly																				
<b>Modified Romberg Balance</b> Approx. 3" 3"      Approx. 3" 3"  Scratching arms.	<b>Walk and Turn Test</b>  Slow, wobbly walk		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken		<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">1st Nine</td> <td colspan="2">2nd Nine</td> </tr> <tr> <td>✓✓</td> <td>✓</td> <td>✓✓</td> <td>✓</td> </tr> <tr> <td>✓</td> <td>✓✓</td> <td>✓</td> <td>✓✓</td> </tr> <tr> <td>✓✓✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>9</td> <td>9</td> <td>9</td> <td>9</td> </tr> </table>		1st Nine		2nd Nine		✓✓	✓	✓✓	✓	✓	✓✓	✓	✓✓	✓✓✓	✓	✓	✓	9	9	9	9
1st Nine		2nd Nine																								
✓✓	✓	✓✓	✓																							
✓	✓✓	✓	✓✓																							
✓✓✓	✓	✓	✓																							
9	9	9	9																							
<b>Time Estimation</b> <u>62</u> estimated as 30 seconds	Describe turn Slow, deliberate turn		Cannot do test (explain) N/A		Type of footwear:																					
<b>Finger to Nose</b> (Draw lines to spots touched)  Slow movements. Used pads of fingers.		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Clear																				
		Left Eye	2.0	3.5	2.0	Oral cavity: White coating, dry																				
		Right Eye	2.0	3.5	2.0	Reaction to Light: Little to none visible																				
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																								
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>																						
				Two fresh injection marks on left forearm																						
Blood Pressure 102 / 52	Temperature 97.2 °F		Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:																					
What drugs or medications have you been using? "Honest man, I'm clean."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A																						
Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																						
Officer's Signature:		Reviewed/approved by / date:				DRE #																				
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant																				
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input checked="" type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																				

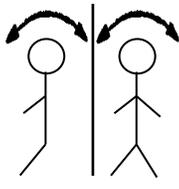
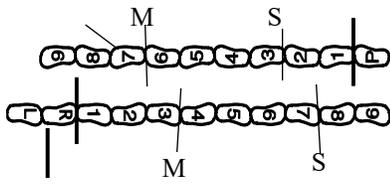
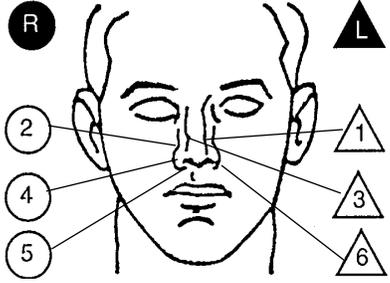
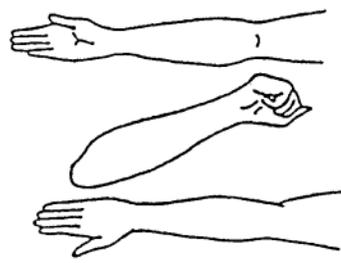
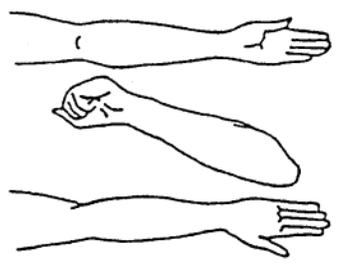
# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #		Evaluator's Agency		Case # Session 29 - 5 IG
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property			Arresting Officer's Agency		
Arrestee's Name (Last, First, Middle) <b>ECHO</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Nothing today"		When?	What have you been drinking? How much? "Water & Juice" "Couple of bottles"		Time of last drink? N/A
Time now/ Actual /	When did you last sleep? Last night	How long? About 3 hours		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "Not anymore."				Attitude: Cooperative		Coordination: Poor, staggering	
Speech: Slurred, mumbling at times		Breath odor: Normal		Face: Normal			
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy		Pulse and Time		HGN		/30 <b>One Leg Stand</b> /30	
1. <u>48</u> / _____ 2. <u>46</u> / _____ 3. <u>46</u> / _____		Lack of Smooth Pursuit Present		Left Eye Present		Right Eye Present	
Modified Romberg Balance Approx. 3" 3"    Approx. 3" 3" 		Maximum Deviation Present		Convergence 		Right eye    Left eye	
Walk and Turn Test 		Angle of Onset 40		40		L    R X    X X    X X    X Sways while balancing Uses arms to balance Hopping Puts foot down	
Time Estimation 65 estimated as 30 seconds		Describe turn N/A		Cannot do test (explain) Nearly fell		Type of footwear:	
Finger to Nose (Draw lines to spots touched) 		PUPIL SIZE		Room light (2.5 - 5.0)		Darkness (5.0 - 8.5)	
Head nodded forward. Slow, deliberate movements		Left Eye		2.5		3.5	
Blood Pressure 104 / 60		Right Eye		2.5		3.5	
Temperature 97.4 °F		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Little or none visible			
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM 		LEFT ARM 			
Comments: What drugs or medications have you been using? "I stopped using about 2 years ago."		Fresh injection mark on inside of left forearm		How much? N/A		Time of use? N/A	
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:	
Officer's Signature:		Reviewed/approved by / date:				DRE #	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol		<input type="checkbox"/> CNS Stimulant	
<input type="checkbox"/> Medical		<input checked="" type="checkbox"/> CNS Depressant		<input type="checkbox"/> Hallucinogen		<input type="checkbox"/> Dissociative Anesthetic	
						<input type="checkbox"/> Inhalant	
						<input checked="" type="checkbox"/> Narcotic Analgesic	
						<input type="checkbox"/> Cannabis	

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #		Evaluator's Agency		Case # Session 29 - 6 IG
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property			Arresting Officer's Agency		
Arrestee's Name (Last, First, Middle) <b>FOXTROT</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #:		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	What have you eaten today? "Brownies"		When? "2 hours ago"	What have you been drinking? How much? "Arizona Ice Tea" 1 can		Time of last drink? N/A
Time now/ Actual	When did you last sleep? Last night	How long? About 8 hours		Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "No medicine"				Attitude: Cooperative, Carefree, Relaxed		Coordination: Poor, Unsteady	
Speech: Slurred, Talkative		Breath odor: Normal			Face: Normal		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy							
Pulse and Time		HGN		Convergence		25/30 <b>One Leg Stand</b> 23/30	
1. <u>112</u> / _____ 2. <u>116</u> / _____ 3. <u>116</u> / _____		Lack of Smooth Pursuit None      None					
Modified Romberg Balance Approx. 3" 3"      Approx. 3" 3" 		Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken		Sways while balancing Uses arms to balance Hopping Puts foot down	
Time Estimation <u>22</u> estimated as 30 seconds		Describe turn Slow. Laughed when turning		Cannot do test (explain) N/A		Type of footwear: Lace-up shoes	
Finger to Nose (Draw lines to spots touched) 		PUPIL SIZE		Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area: Clear
Eyelid tremors. Used pads of fingers on 1, 3, 5, & 6		Left Eye		5.5	9.0	5.0 - 6.5	Oral cavity: Raised taste buds. Green coating on back of tongue
		Right Eye		5.5	9.0	5.0 - 6.5	Reaction to Light: Normal
Blood Pressure 164 / 98		Temperature 98.0 °F		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		RIGHT ARM	
Muscle Tone: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:		Nothing observed		LEFT ARM	
What drugs or medications have you been using? "I'm not taking drugs." (Laughed)		How much? N/A		Time of use? N/A		Where were the drugs used? (Location) N/A	
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:	
Officer's Signature:		Reviewed/approved by / date:				DRE #	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol		<input type="checkbox"/> CNS Stimulant	
		<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input type="checkbox"/> Hallucinogen	
				<input type="checkbox"/> Dissociative Anesthetic		<input type="checkbox"/> Inhalant	
				<input type="checkbox"/> Narcotic Analgesic		<input checked="" type="checkbox"/> Cannabis	

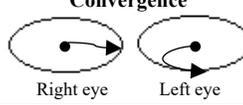
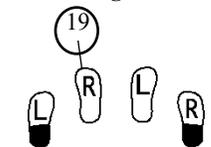
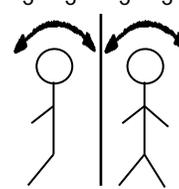
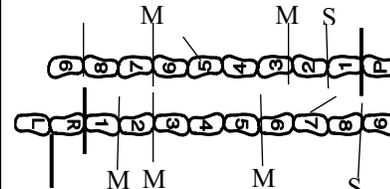
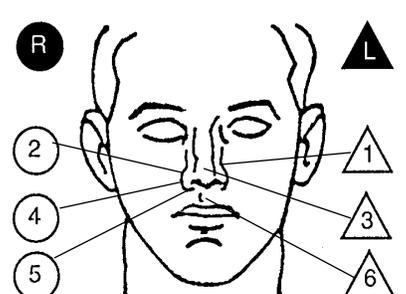
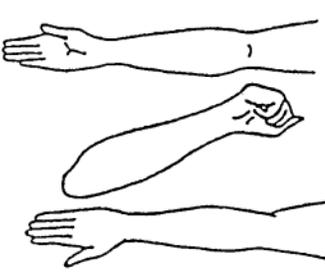
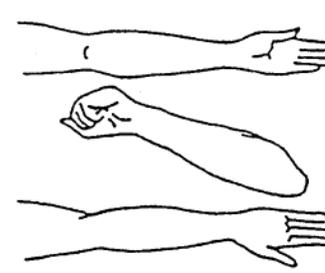
# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 - 7 IG	
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency			
Arrestee's Name (Last, First, Middle) <b>GOLF</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>		
Miranda Warning Given	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Beef jerky & pepperoni		When? 4 pm	What have you been drinking? How much? Red Bull 1 can	Time of last drink? N/A	
Time now/ Actual	When did you last sleep? 2 days ago	How long? About 3 hours	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "Am I under arrest?"			Attitude: Excited, Animated		Coordination: Jittery, Quick, Unsteady		
Speech: Talkative, Rapid		Breath odor: Rancid		Face: Sweaty			
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy		Pulse and Time		HGN		Convergence	
1. <u>112</u> / _____ 2. <u>106</u> / _____ 3. <u>110</u> / _____		Lack of Smooth Pursuit None		Right Eye None		38/30	
Modified Romberg Balance Approx. 3" 3"    Approx. 3" 3" 		Maximum Deviation None		Left Eye None		42/30	
Eyelid tremors		Angle of Onset None		Right Eye None		One Leg Stand 	
Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/>		Starts too soon <input checked="" type="checkbox"/>		L    R X    X X    X X    X X    X	
Time Estimation <u>22</u> estimated as 30 seconds		Describe turn Slow. Laughed when turning		Cannot do test (explain) N/A		Type of footwear:	
Finger to Nose (Draw lines to spots touched) 		PUPIL SIZE		Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area: Redness
Quick and jerky arm movements.		Left Eye		6.5	8.5	5.5	Oral cavity: Clear
Blood Pressure 174 / 102		Right Eye		6.5	8.5	5.5	Reaction to Light: Slow
Temperature 99.8 °F		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		RIGHT ARM 		LEFT ARM 	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Nothing observed					
Comments:		How much? N/A		Time of use? N/A	Where were the drugs used? (Location) N/A		
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature:		Reviewed/approved by / date:					DRE #
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol		<input checked="" type="checkbox"/> CNS Stimulant	
		<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input type="checkbox"/> Hallucinogen	
						<input type="checkbox"/> Dissociative Anesthetic	
						<input type="checkbox"/> Inhalant	
						<input type="checkbox"/> Narcotic Analgesic	
						<input type="checkbox"/> Cannabis	

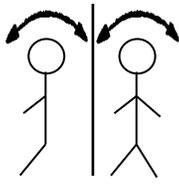
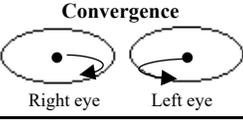
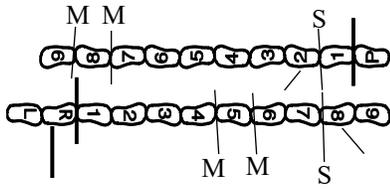
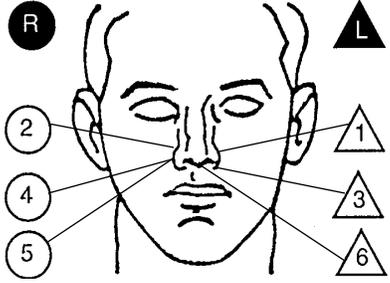
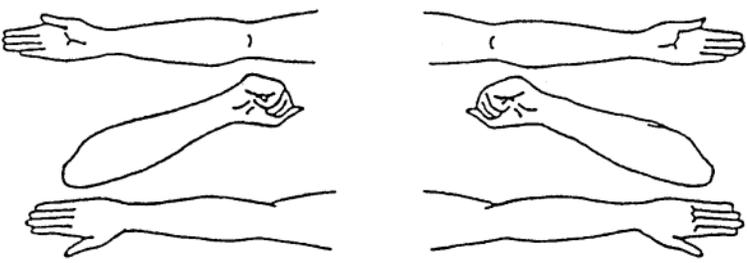
# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 - 8 IG								
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency										
Arrestee's Name (Last, First, Middle) <b>HOTEL</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)									
Date Examined / Time / Location		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>										
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "I don't remember"	When?	What have you been drinking? How much? "Uh...some juice I think."	Time of last drink? N/A									
Time now/ Actual /	When did you last sleep? No response	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No										
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input type="checkbox"/> No		No response										
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No		Attitude: Indifferent		Coordination: Poor, Staggering										
Speech: Slow, Deliberate, Incomplete responses		Breath odor: Chemical-like		Face: Flushed										
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal								
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagmus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy								
Pulse and Time 1. <u>112</u> / _____ 2. <u>114</u> / _____ 3. <u>120</u> / _____	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye Present Present Immed	Right Eye Present Present Immed	Convergence  Right eye      Left eye		22/30 <b>One Leg Stand</b> 26/30  L      R X      X X      X X      X Sways while balancing Uses arms to balance Hopping Puts foot down								
<b>Modified Romberg Balance</b> Approx. 3" 3"      Approx. 3" 3"  Circular sway. Eyelid tremors	<b>Walk and Turn Test</b>  Rigid movements. Did not count steps out loud		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		1st Nine      2nd Nine <table border="1" style="display: inline-table;"><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table> 9      11		<input checked="" type="checkbox"/>							
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>													
<b>Time Estimation</b> <u>52</u> estimated as 30 seconds	Describe turn Staggered to the right		Cannot do test (explain) N/A		Type of footwear: Boots									
<b>Finger to Nose</b> (Draw lines to spots touched)  Had to be reminded to remove his finger each time.		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Clear								
		Left Eye	7.0	9.0	6.5 - 7.5	Oral cavity: Green coating on tongue. Raised taste buds.								
		Right Eye	7.0	9.0	6.5 - 7.5	Reaction to Light: Normal								
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No												
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>										
		Nothing observed												
Blood Pressure 184 / 112	Temperature 100 °F		Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:									
What drugs or medications have you been using? No response		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A										
Date / Time of arrest: /	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation										
Officer's Signature:		Reviewed/approved by / date:			DRE #									
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input checked="" type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant								
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input checked="" type="checkbox"/> Cannabis								

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #		Evaluator's Agency		Case # Session 29 - 9 IG
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property			Arresting Officer's Agency		
Arrestee's Name (Last, First, Middle) <b>INDIA</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)		
Date Examined / Time / Location		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #:		Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>	
Miranda Warning Given	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Cheese sandwich"		When? Noon	What have you been drinking? How much? "Mountain Dew" "A couple"		Time of last drink? N/A
Time now/ Actual	When did you last sleep? "This morning"	How long? "2 hours"	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I'm okay"		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I've got a headache"		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I smoke weed sometimes"			Attitude: Cooperative, Confused		Coordination: Poor, Staggering		
Speech: Low, Slow, Mumbling		Breath odor: Solvent-like odor			Face: Flushed		
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)		Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Pulse and Time		HGN		Convergence		22/30 <b>One Leg Stand</b> 26/30	
1. <u>96</u> / _____ 2. <u>92</u> / _____ 3. <u>88</u> / _____		Lack of Smooth Pursuit Present		Right Eye Present		 Right eye      Left eye	
		Maximum Deviation Present		Left Eye Present			
		Angle of Onset 30		30		 L      R	
<b>Modified Romberg Balance</b> Approx. 3" 3"      Approx. 3" 3"  Circular sway. Eyelid tremors.		<b>Walk and Turn Test</b>  Rigid movements. Did not count steps.		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops walking _____ Misses heel-toe <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Steps off line <input checked="" type="checkbox"/> Raises arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Actual steps taken      1st Nine      2nd Nine 9                              9		Sways while balancing <input checked="" type="checkbox"/> Uses arms to balance <input checked="" type="checkbox"/> Hopping <input type="checkbox"/> Puts foot down <input type="checkbox"/>	
<b>Time Estimation</b> 40 estimated as 30 seconds		Describe turn Staggered. Lost balance.		Cannot do test (explain) N/A		Type of footwear: Boots	
<b>Finger to Nose</b> (Draw lines to spots touched)  Had to be reminded to touch his nose.		<b>PUPIL SIZE</b> Left Eye      5.0 Right Eye      5.0		Room light (2.5 - 5.0)      5.0 Darkness (5.0 - 8.5)      7.0 Direct (2.0 - 4.5)      4.0		Nasal area: Redness. Running nose Oral cavity: Red	
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Slow			
Blood Pressure 148 / 98		Temperature 98.8 °F		<b>RIGHT ARM</b> 		<b>LEFT ARM</b> 	
Muscle Tone: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Nothing observed					
Comments: What drugs or medications have you been using? "Nothing tonight"		How much? N/A		Time of use? N/A		Where were the drugs used? (Location) N/A	
Date / Time of arrest:		Time DRE was notified:		Evaluation start time:		Evaluation completion time:	
Officer's Signature:		Reviewed/approved by / date:				DRE #	
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired <input type="checkbox"/> Medical		<input type="checkbox"/> Alcohol <input type="checkbox"/> CNS Depressant		<input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Hallucinogen	
						<input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Narcotic Analgesic	
						<input checked="" type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis	

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 - 10 IG																							
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency																									
Arrestee's Name (Last, First, Middle) <b>JULIET</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)																								
Date Examined / Time / Location		Breath Test: Results: 0.06	Test Refused <input type="checkbox"/> Instrument #: 12345	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>																									
Miranda Warning Given	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Cereal"	When? "About 7 am"	What have you been drinking? How much? "Beer"	Time of last drink? "A couple"	"Hour ago"																							
Time now/ Actual	When did you last sleep? "Last night"	How long? "8 hours"	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																								
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																										
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I smoke weed sometimes"			Attitude: Cooperative, Withdrawn		Coordination: Unsteady																								
Speech: Low, Mumbling		Breath odor: Alcoholic beverage		Face: Flushed																									
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal																							
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy																							
Pulse and Time 1. <u>82</u> / _____ 2. <u>80</u> / _____ 3. <u>80</u> / _____		HGN	Left Eye	Right Eye	32/30 <b>One Leg Stand</b> 28/30																								
 <p>Circular sway.</p>		Lack of Smooth Pursuit	Present	Present	 <p>Convergence</p>																								
		Maximum Deviation	Present	Present																									
		Angle of Onset	45	45																									
		 <p>Walk and Turn Test</p>																											
<b>Modified Romberg Balance</b> Approx. 2" 2"    Approx. 3" 3"		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken _____		<table border="1" style="width: 100%; text-align: center;"> <tr> <td colspan="2">1st Nine</td> <td colspan="2">2nd Nine</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>9</td> <td>9</td> <td></td> <td></td> </tr> </table>		1st Nine		2nd Nine		<input checked="" type="checkbox"/>	9	9																	
1st Nine		2nd Nine																											
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																										
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																										
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																										
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																										
9	9																												
<b>Time Estimation</b> 36 estimated as 30 seconds		Describe turn Slow turn		Cannot do test (explain) N/A		Type of footwear: Lace-up shoes																							
<b>Finger to Nose</b> (Draw lines to spots touched)   <p>Slow movements</p>		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Clear																							
		Left Eye	4.5	6.0	3.5	Oral cavity: Clear																							
		Right Eye	4.5	6.0	3.5																								
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Reaction to Light: Normal																							
Blood Pressure 128 / 84		Temperature 98.7 °F		<b>RIGHT ARM</b>		<b>LEFT ARM</b>																							
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:																											
What drugs or medications have you been using? "I just had a couple beers."		How much? N/A		Time of use? N/A	Where were the drugs used? (Location) N/A																								
Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																									
Officer's Signature:		Reviewed/approved by / date:				DRE #																							
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input checked="" type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant																							
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																							

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 – 11 IG																										
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency																												
Arrestee's Name (Last, First, Middle) <b>KILO</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)																											
Date Examined / Time / Location		Breath Test: Results: 0.03	Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Urine <input type="checkbox"/> Blood <input type="checkbox"/> Oral Fluid <input type="checkbox"/> Test or tests refused <input type="checkbox"/>																												
Miranda Warning Given	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Chicken dinner	When? 6 pm	What have you been drinking? How much? Wine 2 glasses	Time of last drink? 2 hours ago																											
Time now/ Actual	When did you last sleep? Last night	How long? 6 hours	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																												
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																													
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: Cooperative, Drowsy acting		Coordination: Unsteady, Slow																											
Speech: Slow, Low, Mumbling		Breath odor: Alcoholic beverage		Face: Flushed, Dry mouth, Licking lips																												
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal																										
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy																										
Pulse and Time 1. <u>60</u> / _____ 2. <u>58</u> / _____ 3. <u>58</u> / _____	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye Present None None	Right Eye Present None None	Convergence  Right eye      Left eye		N/A/30 <b>One Leg Stand</b> N/A/30 																										
<b>Modified Romberg Balance</b> Approx. 2" 2"      Approx. 3" 3"  Head nodded forward	<b>Walk and Turn Test</b>  Lost balance three times. Test stopped.		Cannot keep balance      ✓✓✓ Starts too soon Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		1st Nine      2nd Nine <table border="1" style="display: inline-table;"><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> L      R <table border="1" style="display: inline-table;"><tr><td>X</td><td>X</td></tr><tr><td>X</td><td>X</td></tr><tr><td></td><td></td></tr><tr><td>X</td><td>X</td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down Nearly fell / Stopped for safety reasons																				X	X	X	X			X	X
X	X																															
X	X																															
X	X																															
<b>Time Estimation</b> 40 estimated as 30 seconds	Describe turn Slow turn		Cannot do test (explain) N/A		Type of footwear: Slip-on shoes																											
<b>Finger to Nose</b> (Draw lines to spots touched)  Slow movements.		<b>PUPIL SIZE</b>	<b>Room light (2.5 – 5.0)</b>	<b>Darkness (5.0 – 8.5)</b>	<b>Direct (2.0 – 4.5)</b>	Nasal area: Clear																										
		Left Eye	1.5	2.0	1.5	Oral cavity: Clear																										
		Right Eye	1.5	2.0	1.5	Reaction to Light: Little or None Visible																										
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																														
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>																												
		Nothing observed																														
Blood Pressure 108 / 64	Temperature 97.2 °F		Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:																											
What drugs or medications have you been using? "I just drank some wine but I'm not drunk."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A																												
Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																												
Officer's Signature:		Reviewed/approved by / date:				DRE #																										
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input checked="" type="checkbox"/> Alcohol	<input type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant																										
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input checked="" type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																										

# DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29 - 12 IG								
Recorder/Witness		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency										
Arrestee's Name (Last, First, Middle) <b>LIMA</b>		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)									
Date Examined / Time / Location		Breath Test: Results: 0.04	Test Refused <input type="checkbox"/> Instrument #:	Chemical Test: Oral Fluid <input type="checkbox"/>	Urine <input type="checkbox"/>	Blood <input type="checkbox"/> Test or tests refused <input type="checkbox"/>								
Miranda Warning Given Given by:	<input type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Pizza	When? 7 pm	What have you been drinking? Beer	How much? Two	Time of last drink? 3 hours ago								
Time now/ Actual /	When did you last sleep? Yesterday	How long? 3 hours	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you diabetic or epileptic? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No									
Do you take insulin? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Attitude: Anxious, Restless		Coordination: Jittery, Unsteady									
Speech: Loud, Rapid, Slurred		Breath odor: Alcoholic beverage		Face: Normal										
Corrective Lenses: <input checked="" type="checkbox"/> None <input type="checkbox"/> Glasses <input type="checkbox"/> Contacts, if so <input type="checkbox"/> Hard <input type="checkbox"/> Soft		Eyes: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery		Blindness: <input checked="" type="checkbox"/> None <input type="checkbox"/> Left <input type="checkbox"/> Right		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal								
Pupil Size: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal (explain)	Resting Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vertical Nystagmus <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Able to follow stimulus <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Eyelids: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy								
Pulse and Time 1. <u>102</u> / _____ 2. <u>100</u> / _____ 3. <u>102</u> / _____	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye Present Present None	Right Eye Present Present None	Convergence  Right eye      Left eye		22/30 <b>One Leg Stand</b> 24/30  L      R      L      R X      X      X      X X      X      X      X X      X      X      X Sways while balancing Uses arms to balance Hopping Puts foot down								
<b>Modified Romberg Balance</b> Approx. 2" 2"      Approx. 3" 3"  Bruxism	<b>Walk and Turn Test</b>  Walked quickly. Abrupt steps		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		1st Nine      2nd Nine <table border="1" style="display: inline-table;"><tr><td>✓✓</td><td>✓✓✓</td></tr><tr><td>✓</td><td>✓✓</td></tr><tr><td>✓✓✓</td><td>✓✓✓</td></tr><tr><td>9</td><td>9</td></tr></table>		✓✓	✓✓✓	✓	✓✓	✓✓✓	✓✓✓	9	9
✓✓	✓✓✓													
✓	✓✓													
✓✓✓	✓✓✓													
9	9													
<b>Time Estimation</b> <u>22</u> estimated as 30 seconds	Describe turn Quick spin	Cannot do test (explain) N/A		Type of footwear: Slip-on boots										
<b>Finger to Nose</b> (Draw lines to spots touched)  Quick, jerky movements. Jammed fingers to nose.		<b>PUPIL SIZE</b>	<b>Room light (2.5 - 5.0)</b>	<b>Darkness (5.0 - 8.5)</b>	<b>Direct (2.0 - 4.5)</b>	Nasal area: Redness. No nasal hair right nostril								
		Left Eye	7.5	9.0	6.0	Oral cavity: Clear								
		Right Eye	7.5	9.0	6.0									
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Slow										
		<b>RIGHT ARM</b>		<b>LEFT ARM</b>										
		Nothing observed												
Blood Pressure 170 / 100	Temperature 99.8 °F													
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid														
Comments:														
What drugs or medications have you been using? "Nothing. Just a couple of beers man."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A										
Date / Time of arrest:	Time DRE was notified:	Evaluation start time:	Evaluation completion time:	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation										
Officer's Signature:		Reviewed/approved by / date:				DRE #								
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired	<input checked="" type="checkbox"/> Alcohol	<input checked="" type="checkbox"/> CNS Stimulant	<input type="checkbox"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant								
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis								

# 30 DRE

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## TRANSITION TO THE CERTIFICATION PHASE OF TRAINING

### LEARNING OBJECTIVES

- Demonstrate the knowledge and skills the course was intended to help develop
- Summarize the key topics covered
- Offer comments and suggestions for course improvement
- Prepare for Field Certification Training
- Understand the steps involved in the Drug Recognition Expert (DRE) certification process

### CONTENTS

A. Summary .....	2
B. Post-Test.....	5
C. Session Wrap-Up .....	5
D. Certification Training Assignments and Schedule .....	6
E. Closing Remarks.....	13

### LEARNING ACTIVITIES

- Participant-Led Presentations
- Participants' Anonymous Critique of Course
- Knowledge Examination
- Instructor-Led Presentation

Session 30: Transition to the Certification Phase of Training

## Learning Objectives

- Demonstrate the knowledge and skills the course was intended to develop
- Summarize key topics covered
- Offer comments and suggestions for course improvement
- Prepare for Field Certification Training
- Understand steps for certification

DRE 30-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

### A. Summary

Session 30: Transition to the Certification Phase of Training

## The Seven Categories of Drugs

- CNS Depressants
- CNS Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

DRE 30-3

**Slide 3.**



***Ask participants to name the seven categories.***

***Make sure all categories are named, then reveal the bottom of the slide with the list.***

The Seven Categories of Drugs are:

- Central Nervous System (CNS) Depressants
- CNS Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

Session 30: Transition to the Certification Phase of Training

## Drug Influence Evaluation

International Association of Chiefs of Police  
Drug Evaluation and Classification Program  
Drug Influence Evaluation Checklist

1. Breath alcohol test
2. Interview of arresting officer
3. Preliminary examination and first pulse  
(Note: Gloves must be worn from this point on.)
4. Eye examinations
5. Divided attention tests:
  - Modified Romberg Balance
  - Walk and Turn
  - One Leg Stand
  - Finger to Nose
6. Vital signs and second pulse
7. Dark room examinations and administration examination
8. Check for muscle tone
9. Check for injection sites and third pulse
10. Interrogation, statements, and other observations
11. Opinion of evaluator
12. Toxicological examination

DRE 30-4

**Slide 4.**



***Ask participants to name the components of the procedure. Make sure all components are named then reveal the bottom portion of the slide with the components listed.***

The components of the Drug Influence Evaluation Procedure are:

- Breath Alcohol Test
- Interview of Arresting Officer
- Preliminary Examination
- Examinations of Eyes
- Divided Attention Tests
- Vital Signs Examinations
- Dark Room Examinations
- Check for Muscle Tone
- Inspection for Injection Sites
- Statements and Observations
- Opinion of the Evaluator
- Toxicological Examination



**Ask participants to discuss the kinds of evidence/information gleaned from each component.**

Session 30: Transition to the Certification Phase of Training

### Symptomatology Matrix Review

- CNS Depressants
- CNS Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

DRE 30-5

**Slide 5.**



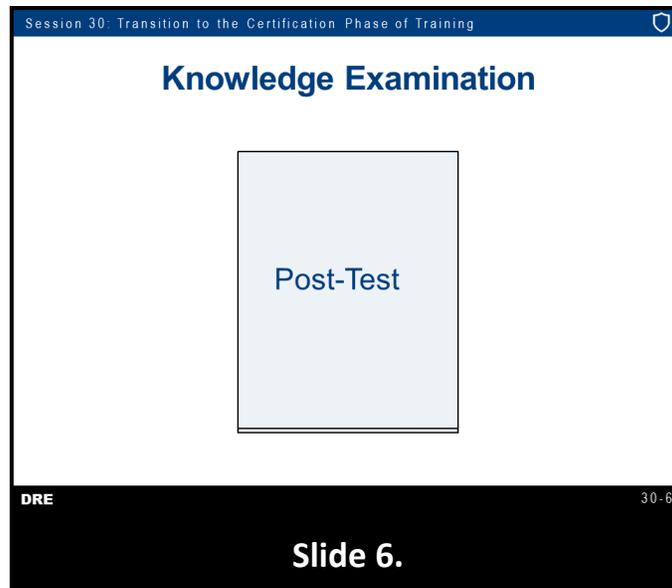
***Symptomatology Matrix Review: Instruct participants to turn to the symptomatology chart in their guides.***

***Briefly summarize and review the major signs and symptoms associated with each drug category. Reveal each category one at a time and conduct the review.***

***Solicit participants' questions concerning the major content topics of the course.***

***Inform the participants the final exam in a "closed book" test. Instruct them to put all books and notes away.***

## B. Post-Test



Session 30: Transition to the Certification Phase of Training

### Knowledge Examination

Post-Test

DRE 30-6

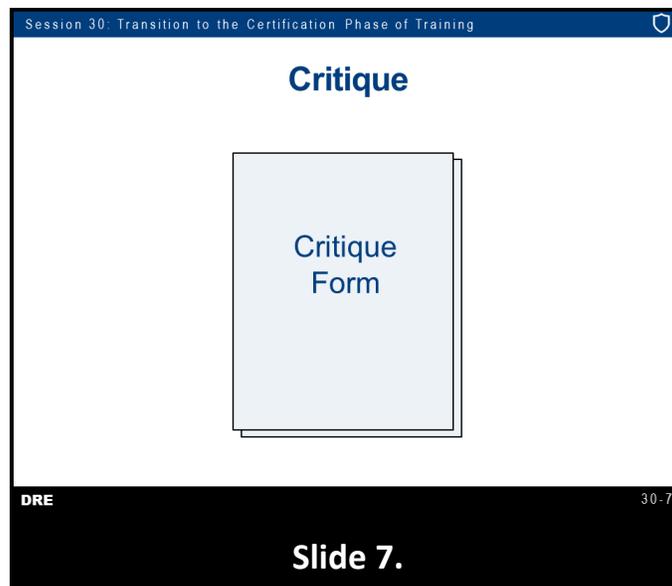
**Slide 6.**



***Knowledge Examination: Distribute post-test knowledge examination.***  
***Allow participants approximately 80 minutes to complete the knowledge examination.***  
***Collect the completed knowledge examination.***  
***Grade the knowledge examinations.***

---

## C. Session Wrap-Up



Session 30: Transition to the Certification Phase of Training

### Critique

Critique Form

DRE 30-7

**Slide 7.**



***Critique: Hand-out critique forms to the participants for completion.***

---

## D. Certification Training Assignments and Schedule

Session 30: Transition to the Certification Phase of Training

### DEC Program Training Phases

1. **Phase I** – Two-day (16-hour) Pre-School
2. **Phase II** – 7-day (56-hour) DRE School
3. **Phase III** – Field Certifications

DRE 30-8

**Slide 8.**



***Remind participants of the three phases of training needed to complete their certification process:***

***Phase I – Pre-School***

***Phase II – 7-Day School***

***Phase III – Field Certifications***



## Field Evaluations Requirements



DRE

30-9

### Slide 9.



***Review with participants the International Association of Chiefs of Police (IACP) International Standards for DRE certification.***

IACP Standard 1.10 requires the candidate DRE satisfactorily complete a minimum of twelve (12) evaluations, identifying subjects under the influence of at least three of the drug categories. All three must be supported by toxicology.

The candidate DRE must also act as the evaluator for at least six evaluations. All evaluations, either administered or observed, must be documented on the candidate's Rolling Log.

Candidate DREs need to have toxicology samples from at least nine (9) subjects evaluated during the certification process.

The candidate DRE cannot be certified unless the opinion concerning the drug category(s) is supported by toxicology 75 percent of the time or in at least seven (7) of the nine samples submitted for certification.

Field certification evaluations must be observed and supervised by a DRE instructor to count towards minimum certification requirements. The evaluation must be observed in its entirety and the instructor who observed the entire evaluation must review the Facesheet and narrative report. Once this report is approved, only this instructor should sign-off on the observed evaluation.



## Field Certifications

- DRE Kits
- Certification Progress Log
- Your Participant Manual
- Your Rolling Log
- A prepared mind



DRE

30-10

**Slide 10.**Instructor  
Note

***Remind participants of what will be needed for the field certifications.***

DRE Kits

- Certification Progress Log
- DRE Participant Guide
- Rolling Log
- A “prepared mind”

Instructor  
Note

***Emphasize the importance of attending DRE Field Certification Training with a positive attitude, patience, and a commitment for success. Expect long workdays.***

***Remind participants DRE field certifications must be completed as soon as possible following completion of the classroom training.***

***Remind participants by the time they have completed field certification(s), they shall have prepared a Curriculum Vitae (CV).***



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Session 30: Transition to the Certification Phase of Training

## Certification Knowledge Examination

- *Standard 1.12...Prior to concluding field certification training, the candidate shall satisfactorily complete an approved "Certification Knowledge Examination"*
- *...The examination shall only be administered after the candidate has completed not less than six drug evaluations*

DRE 30-12

**Slide 12.**

- Standard 1.12...Prior to concluding field certification training, the candidate shall satisfactorily complete the IACP approved "Certification Knowledge Examination"
- ...The examination shall only be administered after the candidate has completed not less than six drug evaluations

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Session 30: Transition to the Certification Phase of Training

## Certification Knowledge Examination

- A multi-part, comprehensive examination
- No significant errors or omissions allowed
- Examines candidate's overall knowledge



DRE 30-13

**Slide 13.**

Prior to concluding the certification process, the candidate DRE must satisfactorily complete the IACP-approved Certification Knowledge Examination. The Certification Knowledge Examination is a multi-part comprehensive examination where the participant cannot make significant errors or omissions.

Examination consists of five parts which tests the candidate DRE’s knowledge of the drug symptomatology matrix, drug effects, drug combinations, and report writing skills.

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Session 30: Transition to the Certification Phase of Training

### IACP Certification Progress Log

- After each component required for certification is completed, a DRE Instructor must sign off on your log
- You must be recommended for certification by two DRE Instructors
  - Instructors will sign off in the Authorized Signature portion at the bottom of the Progress Log

DRE 30-14

**Slide 14.**

After each component required for certification is completed, a DRE Instructor must sign off on the DRE candidate’s log.



***Remind participants only the instructor who observed the evaluation can sign-off on the evaluation.***

The candidate DRE must be recommended for certification by two DRE instructors.

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Session 30: Transition to the Certification Phase of Training

## Maintaining Proficiency



DRE 30-15

**Slide 15.**

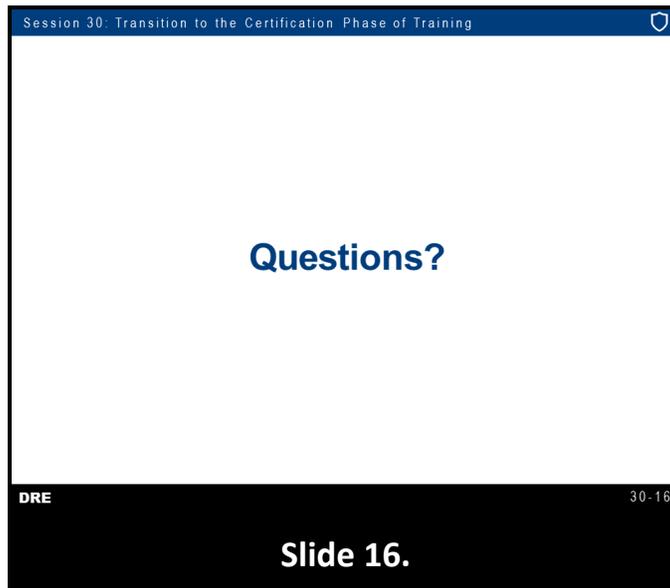
DRE certification is for a period of two years. IACP International Standard 3.4 ...A DRE shall demonstrate continuing proficiency by:

- Performing a minimum of four (4) acceptable drug evaluations since the last date of certification, one of which must be observed by a DRE instructor



***DEC Program state coordinators may require evaluations to be entered into the NHTSA DRE Data System as a condition for recertification.***

- Completing a minimum of eight (8) hours of approved re-certification training
  - Presenting an updated Curriculum Vitae (CV) and Rolling Log to the appropriate coordinator for review
-



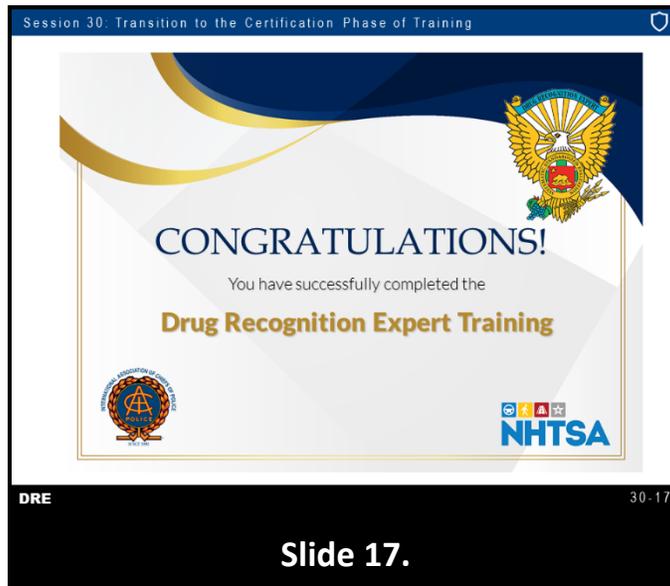
**Slide 16.**



*Solicit questions from participants regarding the Transition to the Certification Phase of Training.*

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## E. Closing Remarks



**Slide 17.**



*Closing remarks will be offered by appropriate representatives of the department of faculty.*



## INSTRUCTOR'S GUIDELINES FOR THE FINAL EXAMINATION

ADMINISTERING THE FINAL EXAMINATION: The NHTSA/IACP approved Final Examination (Form A) is administered at the completion of this training. Each participant must receive one copy of the examination and an answer sheet. To guard against loss of a copy of the examination, do not simply hand over a large supply of examinations to the first row of participants and ask them to "pass them back". Instead, instructors must physically hand a single copy to each individual participant. **EMPHASIZE THAT PARTICIPANTS MUST WRITE NOTHING ON THE EXAMINATION ITSELF.** When a participant completes the test, make sure you collect their copy of the examination along with the answer sheet. Carefully inspect the copy of the examination to make sure nothing has been written on it. Destroy completely any copies that have been marked in any way.

GRADING THE EXAMINATION: The Final Examination contains 100 multiple choice questions. A participant must correctly answer at least 80 questions to pass the examination and progress to Certification Training. A participant who is totally correct on at least 80 questions passes. A participant who answers 21 or more questions incorrectly fails.

WHAT DO WE DO WHEN A PARTICIPANT FAILS? The International Standards established for this program by IACP, and endorsed by NHTSA, grant every participant who fails the Final Examination one additional attempt to pass. **BUT PLEASE NOTE THAT SOME OF THE STATES AND LAW ENFORCEMENT AGENCIES PARTICIPATING IN THE DRUG EVALUATION AND CLASSIFICATION PROGRAM HAVE ADOPTED A MORE EXACTING STANDARD.** For example, some agencies will not allow a "failed" participant a second attempt unless he or she scored at least 70 on the first attempt.

All participating agencies have the right to set standards that are more stringent than those promulgated by IACP. Therefore, when a participant fails the Final Examination, your first duty is to determine whether the participant qualifies for a second attempt.

Assuming a "failed" participant qualifies, the second attempt cannot occur sooner than two weeks following the completion of the school and must occur not later than four weeks after the School end. In other words, there is an enforced waiting period of two weeks, to provide time for remedial study; then, there is a two week "window of opportunity". **NO EXCEPTION CAN BE MADE TO THIS.**

During the two-week waiting period, the participant is expected to study the guide and their class notes. Tutoring by certified DRE instructors is permissible and encouraged. However, if you tutor a "failed" participant, be sure that you do not simply "teach the test". **DO NOT GO OVER THE FINAL EXAMINATION WITH THE PARTICIPANT. DO NOT LET HIM OR HER KNOW WHICH QUESTIONS WERE ANSWERED INCORRECTLY.** Do use the available quizzes and other study guides to help tutor the participant. These include the "Challenge Quiz" found at the end of the PRE-School Participant's Guide; the Pre-test for this School; the five quizzes that are used in this School; and the "Self-Test for Review and Study" that is found at the end of Session 28 of the DRE School Participant's Guide.

One thing that the “failed” participant cannot do during the two-week waiting period is formally enroll in Certification Training. It is permissible for him or her to attend Certification Training events as an observer. But the “failed” participant cannot administer any subject evaluations, nor can they serve as the recorder for any evaluations. And, of course, the “failed” participant will receive absolutely no credit for any evaluations they observe.

The second attempt at the Final Examination must employ Form B Final Written Examination. If the participant correctly answers at least 80 questions on the second attempt, they pass. If the score is 79 or lower, or if the two to four week “window” elapses and the participant has not been re-tested, they irrevocably fail, and are no longer a participant in the Drug Evaluation and Classification Program. The only way that the participant can be re-admitted to the Program would be to enroll in another DRE School, complete it in its entirety, and pass the Final Examination.



**DRUG EVALUATION AND CLASSIFICATION PROGRAM  
FIELD CERTIFICATION INSTRUCTOR OBSERVATION**

Date: \_\_\_\_\_ Time: \_\_\_\_\_ DRE Student: \_\_\_\_\_

Evaluation #: \_\_\_\_\_ Test Subject: \_\_\_\_\_

Scribe: \_\_\_\_\_ Observer: \_\_\_\_\_

\_\_\_\_\_ **Errors of Omission** \_\_\_\_\_ **Errors of Commission** \_\_\_\_\_

Preliminary Examination:       None Observed                       None Observed

Comments/Observations:  
\_\_\_\_\_

Eye Examination:       None Observed                       None Observed

Comments/Observations:  
\_\_\_\_\_

Psychophysical Tests:    None Observed                       None Observed

Comments/Observations:  
\_\_\_\_\_

Vital Signs:                       None Observed                       None Observed

Comments/Observations:  
\_\_\_\_\_

Dark Room Examination:       None Observed                       None Observed

Comments/Observations:  
\_\_\_\_\_

Opinion of Student: \_\_\_\_\_ Agree  Disagree

Toxicology Sample:  Urine  Blood  Other Result: \_\_\_\_\_

Comments: \_\_\_\_\_

DRE Instructor: \_\_\_\_\_ DRE#: \_\_\_\_\_

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## Resources

(1988, March 7). *Washington Post*.

(1988, March 7). *Washington Post*.

(2012). *Society of Forensic Toxicologists Newsletter*, 36(4).

Adler, E. V., & Burns, M. (1994). *Drug Recognition Expert (DRE) Validation Study*. AZ: Arizona Governor's Office of Highway Safety.

Advokat, C. D., Comaty, J. E., & Julien, R. M. (2019). *Julien's Primer of Drug Action* (14th ed.). Macmillan Learning.

Berning, A., Compton, R., & Wochinger, K. (2015). *Results of the 2013–2014 National Roadside Survey of Alcohol and Drug Use by Drivers*. (Traffic Safety Facts Research Note. Report No. DOT HS 812 118). Washington, DC: National Highway Traffic Safety Administration.

Bigelow, G. E., Bickel, W. E., Roache, J. D., Liebson, I. A., & Nowowieski, P. (1985). *Identifying Types of Drug Intoxication: Laboratory Evaluation of a Subject-Examination Procedure*. Washington DC: National Highway Traffic Safety Administration. doi:DOT HS 806753

BMJ-British Medical Journal. (2012, February 10). Cannabis use doubles chances of vehicle crash, review finds. *ScienceDaily*. Retrieved May 14, 2022, from [www.sciencedaily.com/releases/2012/02/120210111254.htm](http://www.sciencedaily.com/releases/2012/02/120210111254.htm)

Britannica, T. Editors of Encyclopaedia. (2020, May 27). *homeostasis*. Retrieved from Encyclopedia Britannica: <https://www.britannica.com/science/homeostasis>

Burns, M., & Anderson, E. W. (1995). *A Colorado Validation Study of the Standardized Field Sobriety Test (SFST) Battery*. Colorado Department of Transportation .

Centers for Disease Control and Prevention. (2015). *Alcohol-Impaired Driving Among Adults — United States, 2012*. Morbidity and Mortality Weekly Report. August 7, 2015 / 64(30);814-817. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a2.htm>

Citek, K. (2014). *Eye Tests on Suspect with a "Blind" Eye*. Pacific University College of Optometry.

Compton, R., & Anderson, T. (1985). *The Incidence of Driving Under the Influence of Drugs*. National Highway Traffic Safety Administration, Staff Technical Report: DOT HS 806 900.

Couper, F., Huestis, M., Fulford, J., Perkinson, N., Miller, S., Katz, A., Symoun, J., Raymond, P., & Smither, D.D. (2023). *Drugs and Human Performance Fact Sheets* [Unpublished manuscript]. National Highway Traffic Safety Administration.

- Crean, R. D., Crane, N. A., & Mason, B. J. (2011, March). An Evidence Based Review of Acute and Long-Term Effects of Cannabis Use on Executive Cognitive Functions. *Journal of Addiction Medicine*, 5(1), 1-8. doi:10.1097/ADM.0b013e31820c23fa
- Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).
- DEA Intelligence Report. (2018). *Slang Terms and Code Words: A Reference for Law Enforcement Personnel*. doi:DEA-HOU-DIR-022-18
- Declues, K., Perez, S., & Figueroa, A. (2018). A Two-Year Study of  $\Delta$  9 Tetrahydrocannabinol Concentrations in Drivers; Part 2: Physiological Signs on Drug Recognition Expert (DRE) and non-DRE Examinations. *Journal of forensic sciences*, 63(2), 583-587. Retrieved from <https://doi.org/10.1111/1556-4029.13550>
- Drug Alert: Marijuana Edibles*. (n.d.). Retrieved May 16, 2022, from Just Think Twice: <https://www.justthinktwice.gov/article/drug-alert-marijuana-edibles>
- Fatality Analysis Reporting System (FARS)*. (n.d.). Retrieved May 17, 2022, from NHTSA: <https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>
- Hampton Police Division Crime and Intelligence Analysis Unit. (2013). Subject: Waxy Marijuana. *Intelligence Bulletin, Bulletin: #2013-10*.
- Hartman, R. L., Richman, J. E., Hayes, C. E., & Huestis, M. A. (2016). Drug Recognition Expert (DRE) examination characteristics of cannabis impairment. *Accident Analysis and Prevention*, 92, 219-229. Retrieved from <https://doi.org/10.1016/j.aap.2016.04.012>
- Kosnoski, E. M., Yolton, R. L., Citek, K., Hayes, C. E., & Evans, R. B. (1998). The Drug Evaluation Classification Program: using ocular and other signs to detect drug intoxication. *Journal of American Optometric Association*, 69(4), 211-227.
- Leigh, R. J., & Zee, D. S. (2015). A Survey of Eye Movements: Characteristics and Teleology. In R. J. Leigh, & D. S. Zee, *The Neurology of Eye Movements* (5th ed., p. 12ff). Online: Oxford University Press. doi:10.1093/med/9780199969289.001.0001
- Marnell, T. (2022). *Drug Identification Bible* (2022/2023 ed.).
- Mu-Chen, L., Brady, J. E., DiMaggio, C. J., Lusardi, A. R., Tzong, K. Y., & Guohua, L. (2012, January). Marijuana Use and Motor Vehicle Crashes. *Epidemiologic Reviews*, 34(1), 65-72. Retrieved May 16, 2022, from <https://doi.org/10.1093/epirev/mxr017>
- National Center for Statistics and Analysis. (1994). *Alcohol*. (Traffic Safety Facts. Report No. 94F1): National Highway Traffic Safety Administration.
- National Center for Statistics and Analysis. (2021). *Alcohol-impaired driving: 2019 data*. (Traffic Safety Facts. Report No. DOT HS 813 120). National Highway Traffic Safety Administration.

National Center for Statistics and Analysis. (2021). *Speeding: 2019 data*. (Traffic Safety Facts. Report No. DOT HS 813 194). National Highway Traffic Safety Administration.

National Institute of Mental Health. (2018, July). *Anxiety Disorders*. Retrieved March 30, 2022, from National Institute of Mental Health:  
<https://www.nimh.nih.gov/health/topics/anxiety-disorders>

National Institute of Mental Health. (2018, February). *Depression*. Retrieved March 30, 2022, from National Institute of Mental Health:  
<https://www.nimh.nih.gov/health/topics/depression>

National Institute of Mental Health. (2020, January). *Bipolar Disorder*. Retrieved March 30, 2022, from National Institute of Mental Health:  
<https://www.nimh.nih.gov/health/topics/bipolar-disorder>

National Institute of Mental Health. (2020, May). *Schizophrenia*. Retrieved March 30, 2022, from National Institute of Mental Health:  
<https://www.nimh.nih.gov/health/topics/schizophrenia>

People v. McLean, 16 Cal.Rptr. 347,56 Cal.2d 660,365 P.2d 403 (1961).

People v. Perry, 7 Cal.3d 756, 789-790, 103 Cal.Rptr. 161, 499 P.2d 129 (1972).

People v. Willis, 70 Cal.App. 465, 233 P. 812 (Cal. Ct. App 1924).

Price, S. L., Fisher, C., Kumar, R., & Hilgerson, A. (2011, March). Cannabinoid Hyperemesis Syndrome as the Underlying Cause of Interactable Nausea and Vomiting. *Journal of Osteopathic Medicine*, 111(3), 166-169. Retrieved May 16, 2022, from  
<https://doi.org/10.7556/jaoa.2011.111.3.166>

*Research Shows That Any Dose of Alcohol Combined With Cannabis Significantly Increases Levels of THC in the Blood*. (2015, May 27). Retrieved May 16, 2022, from AACC:  
<https://www.aacc.org/media/press-release-archive/2015/alcohol-combined-with-cannabis-significantly-increases-levels-of-thc-in-the-blood>

*Salvia Divinorum*. (2020, April). Retrieved May 16, 2022, from United States Drug Enforcement Administration: <https://www.dea.gov/factsheets/salvia-divinorum>

Stuster, J., & Burns, M. (1998). *Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent*. Santa Barbara, CA: Anacapa Sciences, Inc.

Substance Abuse and Mental Health Services Administration. (2017). *Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health*. (HHS Publication No. SMA 18-5068, NSDUH Series H-53). Rockville, MD:: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from Retrieved from <https://www.samhsa.gov/data/>

- Substance Abuse and Mental Health Services Administration. (2021). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- Tennant, F. S. (n.d.). Identifying the Cocaine User. *3rd*. 1985: Veract.
- Toennes, S. W., Ramaekers, J. G., Theunissen, E. L., Moeller, M. R., & Kauert, G. F. (2008, September). Comparison of Cannabinoid Pharmacokinetic Properties in Occasional and Heavy Users Smoking a Marijuana or Placebo Joint. *Journal of Analytical Toxicology*, *32*(7), 470-477. doi:10.1093/jat/32.7.470
- U.S. Department of Justice—Federal Bureau of Investigation. (2020). *Crime in the United States, 2019*. Retrieved April 5, 2022, from FBI: UCR: <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/topic-pages/persons-arrested#:~:text=The%20highest%20number%20of%20arrests,3%2C011.0%20arrests%20per%20100%2C000%20inhabitants.>
- World Health Organization. (2009). Clinical Guidelines for Withdrawal Management and Treatment of Drug Dependence in Closed Settings. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK310658/>