

Participant Manual

Drug Recognition Expert Course



Revised: 02/2018

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Session 1

Introduction and Overview



Session 1 - Introduction

Drug Recognition Expert



7-Day School

Drug Recognition Expert Course 1-3

A. Welcoming Remarks and Goals

Welcoming Remarks

Introductions - Representatives of Host Agencies and Other Dignitaries

Faculty Introductions

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**

Upon successfully completing this session participants will be able to:

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

CONTENT SEGMENTS

- A. Welcoming Remarks and Goals
- B. Housekeeping
- C. Participant Introductions
- D. Training Goals
- E. Training Objectives
- F. Overview of Content and Schedule
- G. Course Activities
- H. Overview of Participant Manual
- I. Glossary of Terms
- J. Course Pre-Test Administration


LEARNING ACTIVITIES

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

Session 1 - Introduction

Housekeeping

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



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Drug Recognition Expert Course

B. Housekeeping

Paperwork

Attendance

Attendance is mandatory at all sessions of this school.

Breaks

Facility

Interruptions

Session 1 - Introduction

Participant Introductions

- Name
- Agency
- Affiliation
- Experience



Drug Recognition Expert Course 1-5

C. Participant Introductions



Drug Recognition Expert (DRE) Certification Phases

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.

Course Goal

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



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.

Incidence of Drug-Impaired Driving

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



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.

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



Maryland Shock Trauma Center study (1985 – 1986)

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

University of Tennessee Study (1988)

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

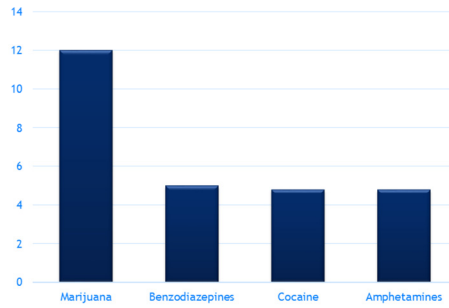


University of Tennessee study (1988)

- 40% of drivers treated at Trauma Center for crash injuries had drugs other than alcohol in them

Washington State (2006)

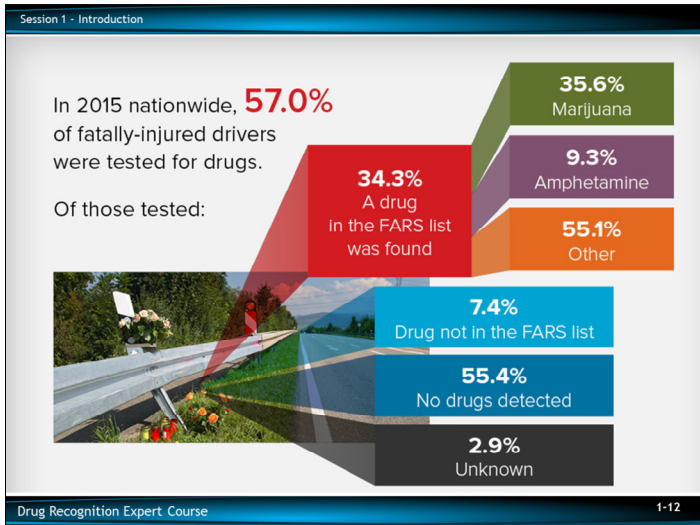
Results of blood and/or urine tests from 370 fatally-injured drivers :



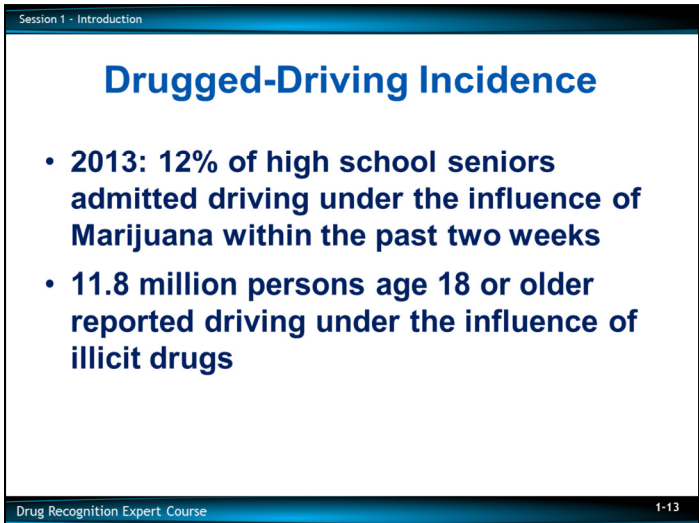
Washington State (Schwilke, et al., 2006)

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 %)
 - 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 – 36.5% – of the identified drugs were Marijuana in some form, followed by amphetamine at 9.3%.



Drugged-Driving Incidence

- 2013: 12% of high school seniors admitted driving under the influence of marijuana within the past two weeks
- 11.8 million persons age 18 or reported driving under the influence of illicit drugs

Session 1 - Introduction

DEC Program

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

Drug Recognition Expert Course 1-14

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.

Session 1 - Introduction

Classroom Training Goals



Drug Recognition Expert Course 1-15

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
3. To qualify police officers to progress to Certification Training

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

E. Training Objectives

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

Session 1 - Introduction

Classroom Training Objectives

- Properly interpret results of 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)**

Drug Recognition Expert Course 1-17

- 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.

Session 1 - Introduction

Course 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

Drug Recognition Expert Course 1-18

F. Overview of Course Content and Schedule

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

Session 1 - Introduction

Course Content

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

Drug Recognition Expert Course 1-19

- 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)
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G. Course Activities

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
- 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:

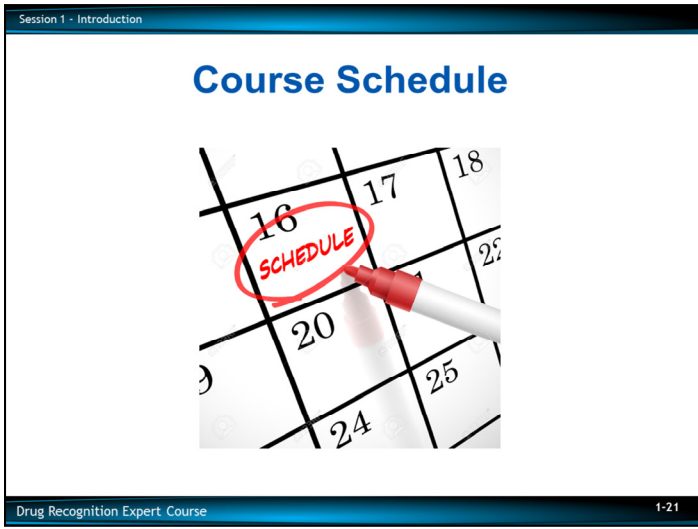
- Pulse, Blood Pressure, Body Temperature

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



Schedule

Participant Manual

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



H. Overview of Participant Manual

- The Participant Manual is the basic reference document for this course
- The manual contains thumbnails of each instructor presentation per session that includes key messages for each slide
- Read each session prior to each day's classes
- Use the manual 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 Certification Phase**

80%


Drug Recognition Expert Course 1-23

By taking good notes and by studying the manual carefully, participants should have no trouble in passing the course.

- There will be numerous quizzes during the class

Session 1 - Introduction

Glossary of Terms



DRUG EVALUATION AND CLASSIFICATION PROGRAM

GLOSSARY OF TERMS

ACCOMMODATION REFLEX
The adjustment of the eye at various distances. Meaning the pupils will automatically constrict as objects move closer.

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

ADDITIVE EFFECT
One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an additive effect if they both affect the indicator in the same way. For example, cocaine elevates pulse rate and PCP also elevates pulse rate. The combination of cocaine and PCP produces an additive effect on pulse rate.

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.

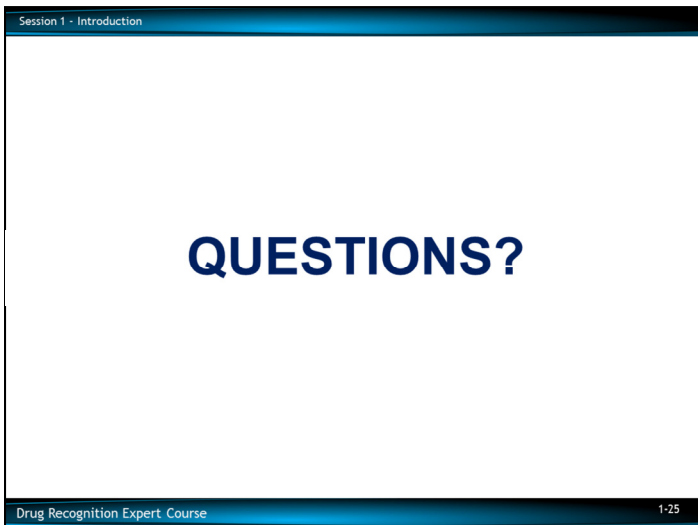
ANALGESIC
A drug that relieves or allays pain.

Drug Recognition Expert Course1-24

I. Glossary of Terms

The Glossary of Terms used in the course is located in the Participant Manual.

It is recommended that participants be familiar with the terms and definitions in the Glossary of Terms.



Session 1 - Introduction

Course Pre-Test Administration

- 10 minutes
- Scores not entered in permanent record

Drug Recognition Expert Course 1-26

J. Course Pre-Test Administration

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

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an additive effect if they both affect the indicator in the same way. For example, cocaine elevates pulse rate and PCP also elevates pulse rate. The combination of Cocaine and PCP produces an additive effect on pulse rate.

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

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an antagonistic effect if they affect the indicator in opposite ways. For example, Heroin constricts pupils while Cocaine dilates pupils. The combination of Heroin and Cocaine produces an antagonistic effect on pupil size. Depending on how much of each drug was taken, and on when they were taken, the suspect's pupils could be constricted, or dilated, or within the DRE Average range of pupil size.

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 CONTRATION (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 balance, or steady state, involving levels of salts, water, sugars and other material in the body's fluids.

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.

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 ingesting 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 state 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.

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

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce a null effect if neither of them affects that indicator. For example, PCP does not affect pupil size, and alcohol does not affect pupil size. The combination of PCP and alcohol produces a null effect on pupil size.

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

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an overlapping effect if one of them affects the indicator but the other doesn't. For example, cocaine dilates pupils while alcohol doesn't affect pupil size. The combination of cocaine and alcohol produces an overlapping effect on pupil size: the combination will cause the pupils to dilate.

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 ingest a drug. Hypodermic needles, small pipes, bent spoons, etc., are examples of drug paraphernalia. The singular form of the word is "paraphernalium". For example, one hypodermic needle would be called a "drug paraphernalium".

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 USE

Ingesting drugs from two or more drug categories.

POLYDRUG USE

Ingesting two or more different drugs.

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 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 ingesting 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 SFSTs, namely Horizontal Gaze Nystagmus (HGN), Walk and Turn (WAT), and One Leg Stand (OLS). Based on a series of controlled laboratory studies, scientifically validated clues of impairment have been identified for each of these three tests. They are the only Standardized Field Sobriety Tests for which validated clues have been identified.

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. 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.

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.

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**

Upon completion of this session, participants will be able to:

- 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

CONTENT SEGMENTS

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

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments

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.”

A. Definition and Categories of Drugs

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

What is a “Drug”?



- 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

Central Nervous System Depressants

Examples:

- Alcohol
- Barbiturates
- Antidepressants
- Anti-Anxiety
Tranquilizers



Central Nervous System (CNS) Depressants

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

Alcohol remains the most familiar drug. In 2015, 51.7% of the population aged 12 and older were current drinkers of alcohol.

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
- 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

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Central Nervous System (CNS) Stimulants

CNS Stimulants constitute another widely-abused category of drugs.

According to the 2015 NSDUH Survey, there appears to be approximately 1.8 million current (within the last month) Cocaine users aged 12 and older in the U.S.

Estimates of drug use vary widely, especially for illicit drugs such as Cocaine, Methamphetamines, etc.

- In 2015, approximately 1.6 million persons aged 12 or older were current non-medical users of stimulants.

CNS Stimulants:





- Speed up the operation of the central nervous system and of the various bodily functions controlled by the central nervous system
- Cause the user to become hyperactive, extremely talkative
- Speech may become rapid and repetitive
- Heart rate increases
- Blood pressure increases
- Body temperature rises, user may become excessively sweaty
- Induce emotional excitement, restlessness, irritability
- 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



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Hallucinogens

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.

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)
- Produce sights, sounds, odors, feelings, and tastes that aren’t real
- Induce a temporary condition very much like psychosis or insanity
- 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.

Dissociative Anesthetics

Examples:

- **Dextromethorphan**
- **Ketamine**
- **PCP (Phenyl Cyclohexyl Piperidine)**



Dissociative Anesthetics

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.

- 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.

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.

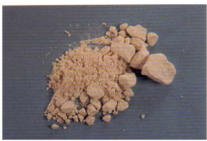

- DXM is normally used in liquid or pill form
- In high doses, DXM impairment is similar to the effects of PCP or Hallucinogens

Session 2 - Drugs in Society and in Vehicle Operation

Narcotic Analgesics

Examples:

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

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Narcotic Analgesics

There are two subcategories of Narcotic Analgesics:

1. Natural Opiates are derivatives of Opium

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

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.)



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Inhalants

Inhalants are the fumes of certain substances.

These substances are found in many common products:

- 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


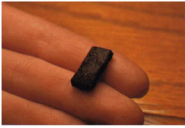
Cannabis

Active ingredient:

- Tetrahydrocannabinol (THC)

Examples:

- Marijuana
- Hashish
- Marinol



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Cannabis

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

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

Apart from alcohol, Marijuana is the most commonly-abused drug in this country.

According to the NSDUH 2015 Survey, Marijuana was listed as the most common illicit drug used in the U.S. There were 22.2 million Americans over the age of 12 reporting use in the past month.

Daily or almost daily use of marijuana (used on 20 or more days in the past month) increased from 5.1 million persons in 2005-2007 to 8.1 million persons in 2013.

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

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.

Drug Combinations



Drug Combinations

Many drug users appear to be “chemical gluttons.” They often ingest drugs from two or more different drugs at the same time.

The term for this is “polydrug use.”


When drug users ingest drugs from two or more categories, this is termed “polycategory use.”

Some very common examples of polydrug or polycategory use include:

- Alcohol with virtually any other drug
- Marijuana and PCP - A common way to ingest 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 a “space base”
- “Crack” Cocaine and Marijuana, sometimes called a “primo”
- “Crack” and Methamphetamine, sometimes called “croak”

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Drug Combinations



+

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Sometimes, people take two different drugs (such as Heroin and Cocaine) that produce some opposite effects.

- 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 ingested multiple drugs, that person will experience multiple drug effects.

Under proper medical supervision, specific drugs often are used to reverse overdose conditions. However, it is important to bear in mind, 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.

Session 2 - Drugs in Society and in Vehicle Operation

Incidence and Characteristics of Drug Use in America

- 28.6 million Americans 12 or older are current illicit drug users
- Marijuana most commonly used – 24.0 million current users
- 6.2 million current users of non-medical psychotherapeutic drugs

Drug Recognition Expert Course

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B. Incidence and Characteristics of Drug Use in America

- In 2016, 28.6 million Americans aged 12 years or older were current illicit drug users
- Marijuana was the most commonly used illicit drug in 2016, with 24.0 million users reporting use in the past month
- In 2016, 6.2 million current users of non-medical psychotherapeutic drugs
 - These include pain relievers, tranquilizers, stimulants, and sedatives

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.

C. Incidence of Drug-Impaired Driving

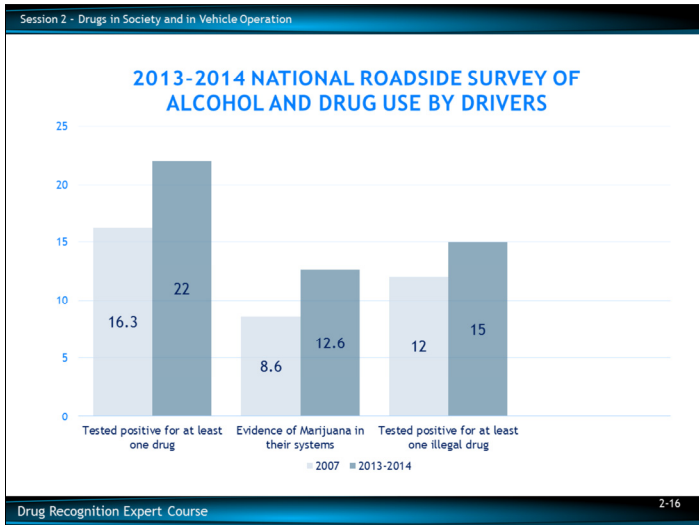
Accurate data on the frequency with which people drive while under the influence of drugs is somewhat limited.

This is due to the various reasons that include:

- Many impaired drivers are never detected
- 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.

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

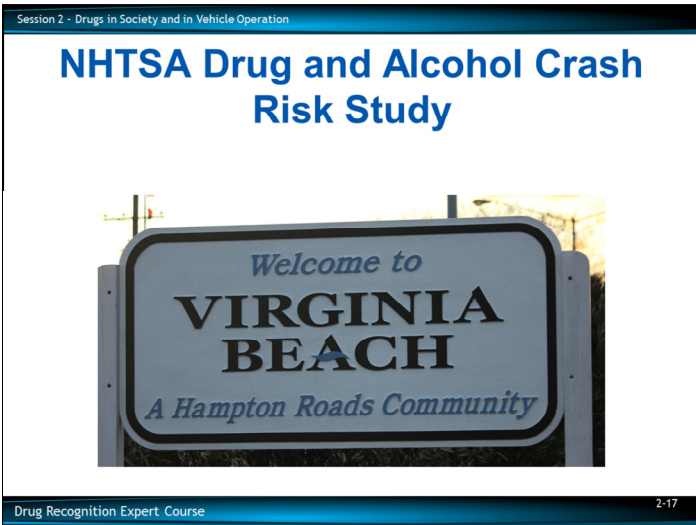


The National Highway Traffic Safety Administration (NHTSA) undertook a comprehensive study of the prevalence of potentially-impairing drug use by drivers in 2013 and 2014. Report: The 2013-2014 National Roadside Survey of Alcohol and Drug Use by Drivers. (NHTSA)

Approximately 30,000 drivers were asked to provide an oral fluid or blood sample. Samples were tested for illegal drugs, prescription medicines, and over-the-counter drugs.

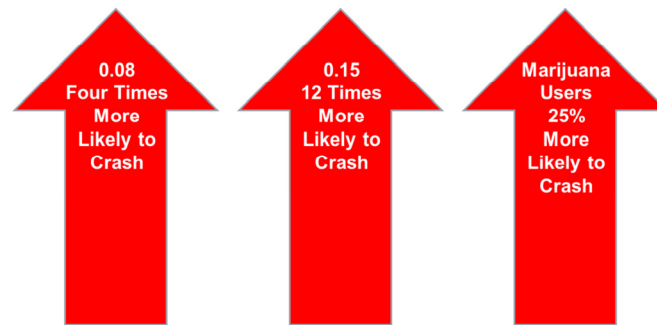
- About 22% of drivers tested positive for at least one drug, up from 16.3% in the 2007 Roadside Study
- 12.6% of the drivers had evidence of Marijuana use in their systems, up from 8.6% in the 2007 Roadside Study
- More than 15% of drivers tested positive for at least one illegal drug, up from 12% in 2007

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



- Largest such study ever conducted to assess the comparative risk of drunk- and drugged-driving
- Conducted in Virginia Beach, VA over a 20-month period
- 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

NHTSA Drug and Alcohol Crash Risk Study Key Findings



- 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

Session 2 - Drugs in Society and in Vehicle Operation

QUESTIONS?

Drug Recognition Expert Course 2-19

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? To which category does alcohol belong? To which category does Cocaine belong?
3. What does “polydrug” mean?

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? To which category does alcohol belong? To which category does Cocaine belong?

3. What does “polydrug use” mean?

Test Your Knowledge

- 4. What is a “Speedball?”
- 5. In the 2013-2014 National Roadside Survey of Alcohol and Drug Use by Drivers, more than _____% of drivers tested positive for at least one illegal drug.

4. What is a “Speedball?”

5. In the 2013-2014 National Roadside Survey of Alcohol and Drug Use by Drivers, more than _____% of drivers tested positive for at least one **illegal** drug.

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Session 3

Development and Effectiveness of the Drug Evaluation and Classification Program



Learning Objectives

- **State origin and evolution of DEC Program**
- **Describe DEC Program research and validation**
- **State impact of legal precedents established by case law**

Upon successfully completing this session, the participant will be able to:

- 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

CONTENT SEGMENTS

- A. Origin and Evolution of Drug Evaluation and Classification Program
- B. Evidence of Program Effectiveness
- C. Case Law Review

LEARNING ACTIVITIES

Instructor-Led Presentations

Reading Assignments

LAPD Developed DRE



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

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.

Dick Studdard (Traffic Officer):

- Sergeant Studdard retired from the LAPD in June, 1990
- Sgt. 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.

LAPD Developed DRE



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 drugs.

Len Leeds, former LAPD Narcotics Officer:

- Approached by Sergeant Studdard and asked to collaborate in the development of a program to help identify drug-impaired subjects
- Initiated some independent research by consulting with physicians, enrolling in relevant classes, studying text books, technical articles, etc.
- 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.

LAPD and NHTSA

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

B. Evidence of Program Effectiveness

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 wide spread 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.

The DRE Process



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

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.

- Administered the same way to all subjects
- Administered the same way by all officers

Reasons for Standardized Procedure

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

The Need for Reliable Standardized Assessment Procedure

- 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

Two Stages of Validation

Laboratory Validation Study

- Johns Hopkins University



Field Validation Study

- Los Angeles



Two Stages of Validation

NHTSA assisted LAPD in a two-phase validation study.

- Laboratory validation, using volunteers who ingested selected drugs
 - Johns Hopkins validation was conducted in 1984
- Field validation, using persons actually arrested in Los Angeles on suspicion of drug influence
 - LAPD Field Validation Study was conducted in 1985

The research validation studies and their titles were:

- Identify 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.
- 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)

Laboratory Validation Study

Johns Hopkins University



Laboratory Validation Study

- The Laboratory Validation took place at Johns Hopkins University in Maryland

- The drug examiners were senior DREs from LAPD. The LAPD participants:
 - Dick Studdard
 - Jerry Powell
 - Pat Russell
 - 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)

Laboratory Validation Study

Johns Hopkins University



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.

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.”

Laboratory Validation Study



Normal daily dose for therapeutic purposes:

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

Doses administered for this study:

- Secobarbital: 300 mg
- Diazepam: weak – 15mg, strong – 30mg
- d-amphetamine: weak – 15 mg, strong – 30 mg
- Marijuana: weak – 12 puffs or 1.3% THC cigarettes, strong – 12 puffs of 2.8% THC cigarettes

Laboratory Study Results

- **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**

Results

- 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

Laboratory Study Results

- **DRE officers were less successful in classifying low-dose subjects**
 - **17.5% of d-amphetamine impaired**
 - **32.5% of weak marijuana impaired**

-
- 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”
 - 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 ingesting street-level doses of drugs
-
-
-
-
-
-

Field Validation Study Los Angeles

173 drivers arrested for DUI-Drugs

- None involved in crashes
- 28 DREs participated
- Excluded all cases where no blood sample obtained

Field Validation Study

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

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.

Field Validation Study 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)

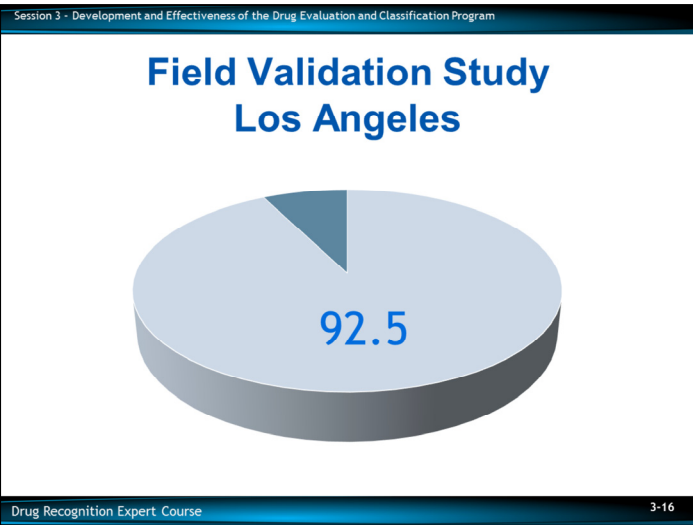
Results of the Field Study

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.

- 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)

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

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 the following:

- 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

Confirmation Rates for Specific Categories

92%: Phencyclidine (PCP)

85%: Narcotic Analgesics

78%: Cannabis

50%: CNS Depressants



The confirmation rates for specific categories:

- PCP: blood tests confirmed DREs' predictions in 92% of the cases
- Narcotic Analgesics: blood tests confirmed 85% of the DREs' predictions
- Cannabis: blood tests confirmed 78% of DREs' predictions
- Central Nervous System (CNS) Depressants: blood tests confirmed 50% of DREs' predictions

Confirmation Rates for Specific Categories

33%: CNS Stimulants



- CNS Stimulants: blood tests confirmed 33% of DREs' predictions.

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

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 confirmation rate of 86.5% had been achieved.

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

Case Law Review

“Frye” Standard

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



C. Case Law Review

Court Rulings

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.

The Frye standard: “Is the procedure or principle espoused, accepted by the relevant scientific community?”

Frye standard was set by the US Supreme Court in 1923.

Case Law Review

“Daubert” Standard

Shows reliability before scientific evidence can be admitted



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

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

Case Law Review

“Frye” Standard

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



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
- *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
- *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
- *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

Case Law Review

“Daubert” Standard

- **New Mexico v Aleman**
- **Nebraska v Cubrich**



- *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
- *Nebraska v. Cubrich, Case No. CR03-8203 Sarpy County Court (2004)*
 - In this case, the court used the Daubert Standard

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.

HGN Case Law

Arizona v Blake



HGN Case Law

One key element of DEC – namely, HGN – has been recognized as meeting the Frye standard by several State Supreme Courts. First to do so was Arizona, in the case known as State vs. Blake.

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.

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 dysfunction,” one cause of which could be the ingestion of alcohol.

Session 3 - Development and Effectiveness of the Drug Evaluation and Classification Program

QUESTIONS?

Drug Recognition Expert Course 3-24

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 Laboratory Study?
3. In what percentage of cases in the Los Angeles Field Validation Study did blood tests confirm the DREs' opinion PCP was present?

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 Laboratory Study?

3. In what percentage of cases in the Los Angeles Field Validation Study did blood tests confirm the DREs' opinion PCP was present?

Test Your Knowledge

4. What percentage of blood tests in the LAPD Field Validation Study confirmed the presence of at least one drug category predicted by the DREs?
5. What was the landmark State Supreme Court case that upheld the use of HGN as evidence of impairment?
6. What do we call the traditional standard for admissibility of scientific evidence, set by the U.S. Supreme Court?

4. What percentage of blood tests in the LAPD Field Validation Study confirmed the presence of at least one drug category predicted by the DRE's?

5. What was the landmark State Supreme Court case that upheld the use of HGN as evidence of impairment?

6. What do we call the traditional standard for admissibility of scientific evidence, set by the U.S. Supreme Court?

Session 4

Overview of Drug Recognition Expert Procedures



Learning Objectives

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

Upon successfully completing this session, the participant will be able to:

- 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

CONTENT SEGMENTS

- A. Components of the Drug Evaluation and Classification Program Procedure
- B. Interview of the Arresting Officer
- C. The Preliminary Examination
- D. Examinations of the Eyes
- E. Divided Attention Tests
- F. Examinations of Vital Signs
- G. Dark Room Checks of Pupil Size
- H. Examination of Muscle Tone
- I. Examination for Injection Sites
- J. Subject Statements
- K. Opinion of Evaluator
- L. Toxicological Examination
- M. Video Demonstration

LEARNING ACTIVITIES

Instructor-Led Presentation/Demonstrations

Video Presentations

Reading Assignments

The Drug Influence Evaluation



A. Components of the Drug Evaluation and Classification Process

The Drug Influence Evaluation

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.

- Determine whether the impairment may stem from illness or injury requiring medical attention or is drug-related
- Determine what category (or categories) of drugs are the likely cause of the impairment
- Some of these observable signs and symptoms relate to the subject's appearance
- Some of these observable signs and symptoms relate to the subject's behavior
- Some relate to the subject's performance of carefully administered psychophysical tests

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?

Drug Recognition Expert Course 4-4

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 a judgment is made concerning what categories of drugs are affecting the subject

The evaluation is standardized in that it is administered 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

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

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.

Drug Influence Evaluation Steps

1. **Breath alcohol test**
2. **The interview of the arresting officer**
3. **Preliminary examination**
4. **Examinations of the eyes**
5. **Divided attention tests**
6. **Examination of vital signs**

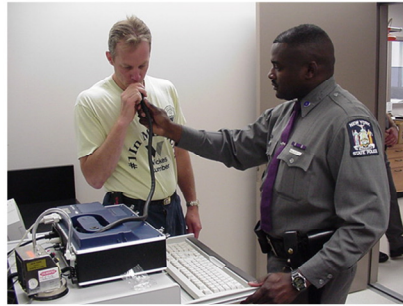
Drug Influence Evaluation Steps

The DEC drug influence evaluation has twelve components or steps.

Drug Influence Evaluation Steps

- 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 examination**

1. Breath Alcohol Test



Breath Alcohol Test

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.

2. Interview of the Arresting Officer



The Interview of the Arresting Officer.

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 ingested.

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.

3. Preliminary Examination



The Preliminary Examination

- The preliminary examination is your first opportunity to observe the subject closely and directly
- A major purpose of the preliminary examination is to determine if the subject may be suffering from an injury or some other medical condition not necessarily related to drugs
- **The preliminary examination will help you decide whether to continue with the drug influence evaluation, pursue a possible medical complication, or proceed with a DWI (alcohol) case**
- Another major 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

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	Race	Arresting Officer (Name, ID#)	
Date Examined / Time / Location	Breath Test: Results	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 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		

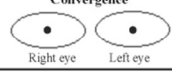

The preliminary examination consists of a series of questions dealing with:

- Possible injuries or medical problems
- Observations of the subject's face, speech, and breath
- Pupil size and tracking ability
- Initial checks of the subject's eyes
- Initial examination of the subject's pulse

While you are assessing the subject's tracking ability, you can also perform a preliminary assessment of whether any nystagmus is present in the subject's eyes. In particular, 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. This is not a complete Horizontal Gaze Nystagmus (HGN) test at this time. An entire HGN test will be conducted in the next step.

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			Right eye	Left eye
Angle of Onset				

Drug Recognition Expert Course 4-12

Examinations of the Eyes

Certain drugs produce very easily observable effects on the eyes.

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 HG.

HGN is not the only observable effect on the eyes that will be caused by various drugs.

5. Divided Attention Tests

Modified Romberg Balance
Approx. Approx.

Time Estimation
estimated as 30 seconds

Walk and Turn Test

Cannot keep balance	_____
Starts too soon	_____
Stops walking	_____
Misses heel-toe	_____
Steps off line	_____
Reverses arms	_____
Actual steps taken	_____
Describe turn	_____
Cannot do test (explain)	_____

One Leg Stand

L	R	
		Sways while balancing
		Uses arms to balance
		Hopping
		Puts foot down

Type of footwear: _____

Finger to Nose
(Draw lines to spots touched)

Divided Attention Psychophysical Tests

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.

The divided attention tests used in the DRE examination include:

- Modified Romberg Balance (MRB)
- Walk and Turn (WAT)
- One Leg Stand (OLS)
- Finger to Nose (FTN)

6. Examination of Vital Signs

Pulse and Time	
1.	_____ / _____
2.	_____ / _____
3.	_____ / _____

Blood Pressure /	Temperature °F
---------------------	-------------------

Examination of Vital Signs

Many categories of 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.

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	Darkness	Direct	Nasal Area
Left Eye				Oral Cavity
Right Eye				
Rebound Dilation Yes <input type="checkbox"/> No <input type="checkbox"/>			Reaction to Light	

Drug Recognition Expert Course 4-15

Dark Room Examinations

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 widen dramatically, or dilate.

Some other drugs cause the pupils to narrow, 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.

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

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

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

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

Drug Recognition Expert Course 4-16

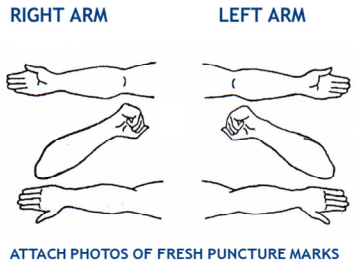
Examination of Muscle Tone

Evidence of muscle tone can also be observed when taking the subject’s pulse, blood pressure, or while examining for injection sites.

Certain categories of drugs can cause the user’s muscles to become markedly tense and rigid. Others may cause flaccidity or “rubbery-like” muscle tone.

Evidence of this muscle tone may come to light when the subject attempts to perform the divided attention tests.

9. Examination for Injection Sites



Examination for Injection Sites

Certain drugs are commonly injected by their users via hypodermic needles.

Heroin is probably most commonly associated with injection, but several other types of drugs also are injected by many users.

Uncovering 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"/> Dissociative Anesthetic	<input type="checkbox"/> Inhalant
<input type="checkbox"/> Violent	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Dependent Analgesic	<input type="checkbox"/> Cannabis

Subject's Statements and Other Observations

At this point in the examination, 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.

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

Session 4 - Overview of Drug Recognition Expert Procedures

11. Opinion of Evaluator



Drug Recognition Expert Course 4-19

Opinion of Evaluator


Based on all of the evidence and observations gleaned 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.

Session 4 - Overview of Drug Recognition Expert Procedures

12. Toxicological Examination



Drug Recognition Expert Course 4-20

Toxicological Examination

The toxicological examination is a chemical test or tests designed to obtain scientific, admissible evidence to support the DRE's opinion.

Departmental policy and procedures should be followed in requesting, obtaining, and handling the toxicological sample.

Session 4 - Overview of Drug Recognition Expert Procedures

Interview of Arresting Officer

Subject's Behavior

- Was subject operating a vehicle?
- What actions, maneuvers, etc. were observed?
- Was there a crash?
- Was subject observed smoking, drinking or eating?

Drug Recognition Expert Course 4-21

B. Interview of the Arresting Officer

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.

Interview Behavior

Issues concerning the subject's behavior:

- 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?

Interview of Arresting Officer

Subject's Behavior

- Was subject inhaling any substance?
- How did subject respond to stop?
- Did subject try to conceal or throw away any items?
- What has been subject's attitude and demeanor?
 - Has it changed?

- 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?

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?**

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?

Session 4 - Overview of Drug Recognition Expert Procedures

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?**

Drug Recognition Expert Course 4-24

Interview: Physical Evidence

Issues concerning physical evidence:

- 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?

Overview of Preliminary Examination

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



C. Overview of the Preliminary Examination

The preliminary examination consists of:

- Questions
- Observations of face, breath, and speech
- Initial checks of the eyes
- The initial check of the subject’s pulse

Preliminary Examination Questions

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

Preliminary Examination Questions

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

- 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?

Initial Checks of Eyes

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



Initial Checks of the Eyes

The initial checks of the subject's eyes include several particularly important steps, which include:

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.

Assessment of the Ability of the Eyes to Track a Moving Object

The presence of nystagmus indicates the possible presence of certain categories of drugs.

Initial Estimation of the Angle of Onset of HGN

The approximate angle of onset may indicate the presence of some drug other than alcohol.

Initial Checks of Eyes

There is a general correlation between BAC and the Angle of Onset of Nystagmus



If the subject has also ingested 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 ingested a Dissociative Anesthetic, the onset could occur much earlier, perhaps as soon as the eyes start to move to the side.

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

Eye Examinations



Horizontal Gaze Nystagmus

D. Examinations of the Eyes

Eye Examinations

The Examinations of the Eyes consist of three tests:

HGN

Clue #1 – Lack of Smooth Pursuit

Clue #2 – Distinct and Sustained Nystagmus at Maximum Deviation

Clue #3 – Angle of Onset

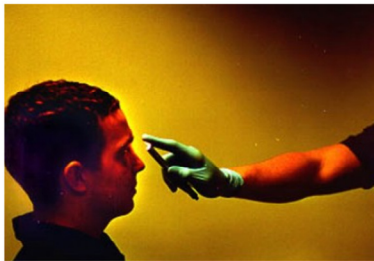
Eye Examinations



Vertical Gaze Nystagmus

Vertical Gaze Nystagmus (VGN)

Eye Examinations



Lack of Convergence

Lack of Convergence (LOC)

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.

Then, the stimulus is slowly pushed in toward the bridge of the subject's nose and held for approximately one (1) second.

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

Divided Attention Tests

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



E. Divided Attention Tests

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)
- Finger to Nose (FTN)

Divided Attention Tests

- MRB
- WAT
- OLS
- FTN



MRB Test Demonstration

Instruction stage:

WAT Test Demonstration

Instruction stage:

OLS Test Demonstration

Instruction stage:

FTN Test Demonstration

Instruction stage:

Examinations of Vital Signs

- Pulse
- Blood pressure
- Temperature



F. Examinations of Vital Signs

The vital signs consist of three things routinely measured in basic physical examinations:

- Pulse
- Blood Pressure
- Temperature

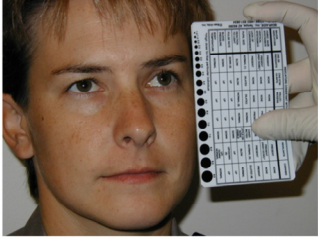
These measurements require some familiar instruments.

- Stethoscope
- Manual blood pressure cuff and gauge (sphygmomanometer)
- Oral thermometer with disposable mouthpieces

Session 4 - Overview of Drug Recognition Expert Procedures

Dark Room Checks of Pupil Size

- Room light
- Near-total darkness
- Direct light



Drug Recognition Expert Course 4-35

G. Dark Room Checks of Pupil Size

Dark Room Checks for Pupil Size

The principal activity that takes place during the dark room examinations is the estimation of pupil size under three lighting conditions, or levels.

- Room light
- Near total darkness
- Direct light

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

Room Light


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

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

Session 4 - Overview of Drug Recognition Expert Procedures

Dark Room Checks of Pupil Size

- Room light
- **Near-total darkness**
- Direct light



Drug Recognition Expert Course 4-36

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.

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

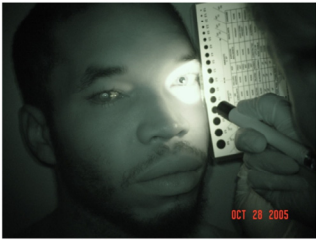
The light is then moved near the subjects left eye just until it is possible to distinguish the colored portion of the eye (Iris).

Hold the pupillometer alongside the eye and locate the circle or semi-circle closest in size to the pupil.

Session 4 - Overview of Drug Recognition Expert Procedures

Dark Room Checks of Pupil Size

- Room light
- Near-total darkness
- **Direct light**



Drug Recognition Expert Course 4-37

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.

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

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

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.

Other Activities

Two other activities are conducted while in the darkroom.

- Examination of the nasal area
- Examination of the oral cavity

Examination of Muscle Tone

- Flaccid
- Normal
- Rigid



H. Examination of Muscle Tone

Muscle Tone

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.

Examine the right arm in the same fashion.

Examination For Injection Sites



I. Examination for Injection Sites

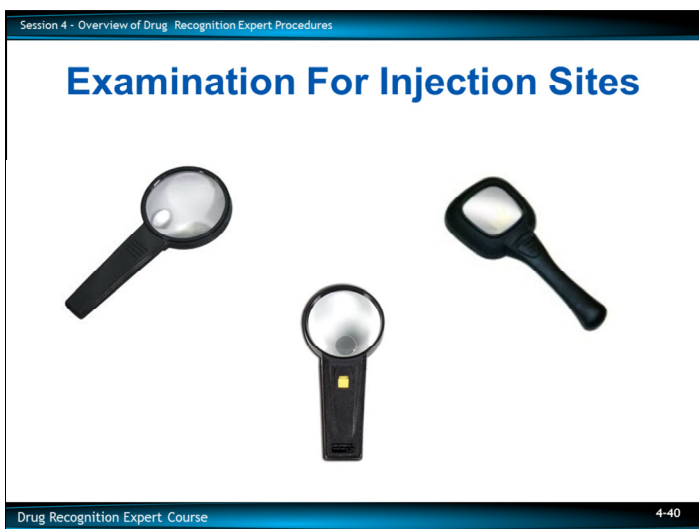
Some injection sites may be relatively easy to notice.

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.

Often, a fresh injection site may not be readily observable.

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.



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

During this step, the third pulse is taken.

Subject Statements

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



J. Subject Statements

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

Session 4 - Overview of Drug Recognition Expert Procedures

Drug Influence Form Questions

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 #

Drug Recognition Expert Course 4-42

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

Opinion of the Evaluator

Based on totality of the evaluation



K. Opinion of the Evaluator

By this point in the evaluation, the DRE should have formed an opinion of the category or categories of drugs responsible for any observed impairment.

This opinion is based on the totality of the evaluation.

Toxicological Examination

- **Toxicology Samples**
 - Follow State implied consent laws
 - Follow department or agency evidence policies



L. Toxicological Examination

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.

Toxicology Samples

Your State's implied consent statutes will dictate the type of sample you can obtain; urine, blood, breath, or saliva.

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. Make sure the seal is tight to prevent leaks.

Toxicology Samples

- **Obtaining a Sample**
 - **Urine**
 - **Blood**
 - **Must include preservative**
- **Chain of custody**



Obtaining a Sample

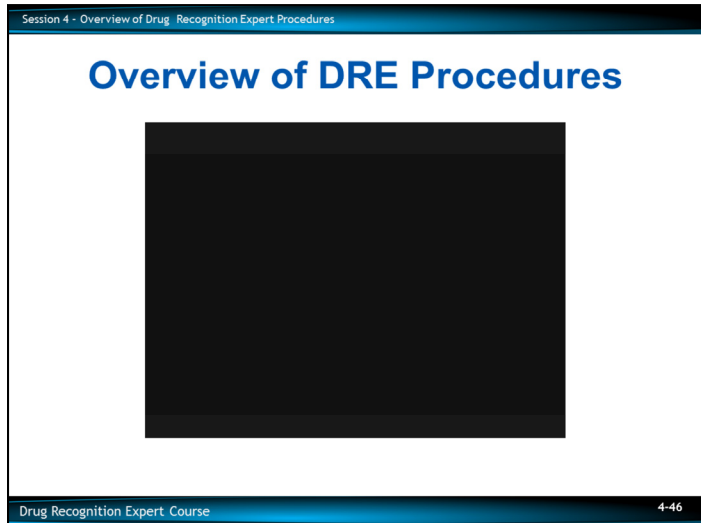
- Urine – normally the officer must witness the collection of the sample
- Blood – should be drawn by a qualified technician and witnessed by the officer
- The sample must include a preservative
 - This is often pre-packaged in the container intended for this use.

Samples should be refrigerated or frozen as soon as possible to minimize degeneration during storage.

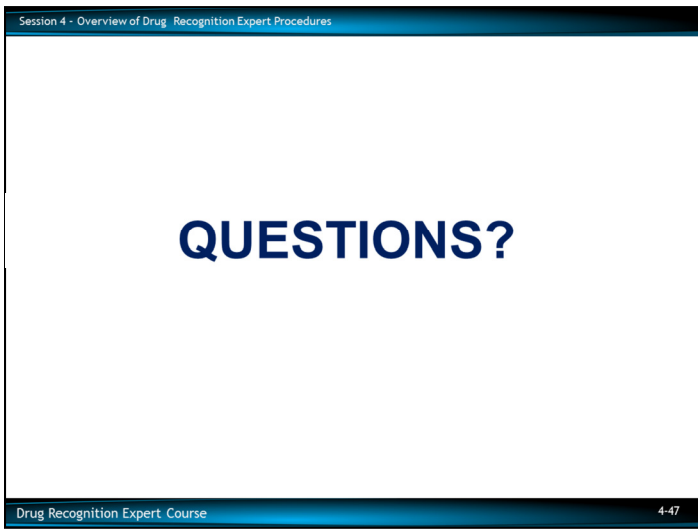
Chain of Custody

DREs should follow their department policy regarding the chain of custody of evidence. Particularly, DREs should ensure:

- The evidence is sealed properly, which may include officer identification markings (i.e., initials, labels, tags, and packaging)
- Proper completion of paperwork for the chain of custody and laboratory analysis of the sample
- The sample is properly submitted following established evidential protocols



M. Video Demonstrations (Optional)



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?

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?

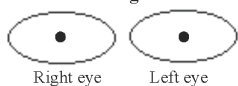

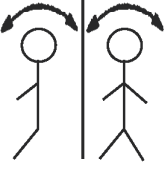
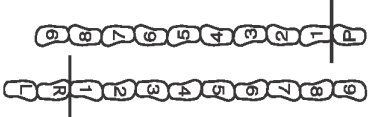
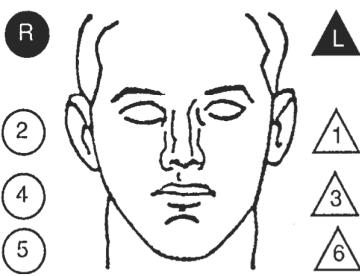
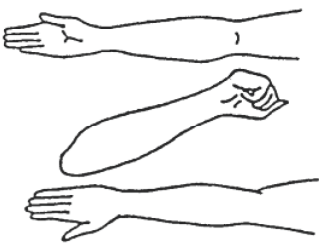
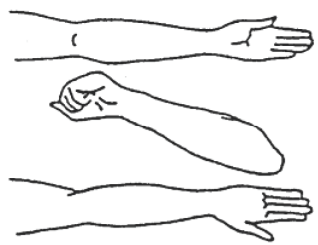
International Association of Chiefs of Police

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 ingestion 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

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 1. ___ / ___ 2. ___ / ___ 3. ___ / ___	HGN	Left Eye	Right Eye	Convergence  Right eye Left eye		/30 One Leg Stand /30  L R Sways while balancing Uses arms to balance Hopping Puts foot down												
	Lack of Smooth Pursuit																	
	Maximum Deviation																	
	Angle of Onset																	
Modified Romberg Balance Approx. Approx. 	Walk and Turn Test 		Cannot keep balance _____ 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>1st Nine</td> <td>2nd Nine</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>		1 st Nine	2 nd Nine										
	1 st Nine	2 nd 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)	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												

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**

Upon successfully completing this session, the student will be able to:

- 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

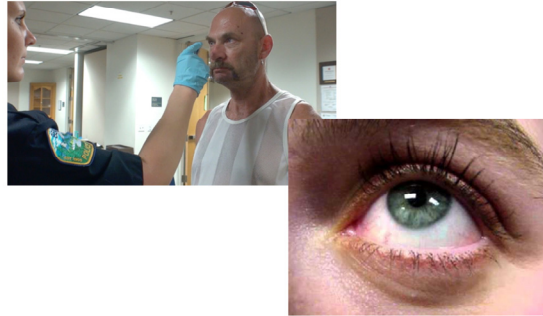
CONTENT SEGMENTS

- A. Purpose of the Examinations
- B. Procedures and Clues
- C. Demonstrations
- D. Document Procedures

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Student-Led Demonstrations
Students' Hands-On Practice
Reading Assignments

Purpose of Eye Examinations



A. Purpose of the Eye Examinations

The principal purpose of all 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.

If HGN is observed, it is likely the subject may have ingested 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 ingested a large dose of alcohol for that individual, a Dissociative Anesthetic, such as PCP, or high doses of other Depressants or Inhalants.

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:

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

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:

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

Explanation: BAC = 100 x 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.

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

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.

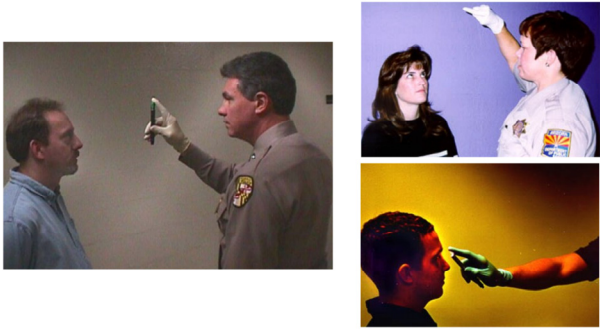
Pupil Size and Reaction to Light

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

- 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
- 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.

Eye Examinations



Review of Eye Examinations

- HGN
- VGN
- LOC
- Pupil Size Estimation
- Reaction to Light

Three Clues of HGN

1. Lack of Smooth Pursuit
2. Distinct and Sustained Nystagmus at Maximum Deviation
3. Angle of Onset of Nystagmus

B. Procedures and Clues

Three Clues of HGN

- Lack of Smooth Pursuit
- Distinct and Sustained Nystagmus at Maximum Deviation
- Angle of Onset of Nystagmus

HGN test consists of three separate checks, administered independently to each eye.

First Clue: Lack of Smooth Pursuit



First Clue: Lack of Smooth Pursuit

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

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
- 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

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.

First Clue: Lack of Smooth Pursuit



- 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

Second Clue: Distinct and Sustained Nystagmus at Maximum Deviation



Second Clue: Distinct and Sustained Nystagmus at Maximum Deviation

The second check is for “Distinct and Sustained Nystagmus at Maximum Deviation.”

- 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

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.

Second Clue: Distinct and Sustained Nystagmus at Maximum Deviation



A slight or barely visible tremor is not sufficient to consider this clue present.

A definite, sustained jerking must be seen.

Third Clue: Angle of Onset of Nystagmus



Third Clue: Angle of Onset of Nystagmus

The final check is for the "Angle of Onset of Nystagmus."

- 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

Stimulus should be moved at a speed that requires approximately four seconds to travel from center to approximately 45 degrees.

- When you think you see the eye jerk, stop moving the stimulus and hold it still
- Verify the eye is, in fact, jerking
- Once you have established you have located the point of onset, estimate the angle
- Then, repeat the process for the right eye
- Then, again check onset for the left eye, and again for the right

Participants' Initial Practice of Angle Estimation

- 30 degrees
- 35 degrees
- 40 degrees

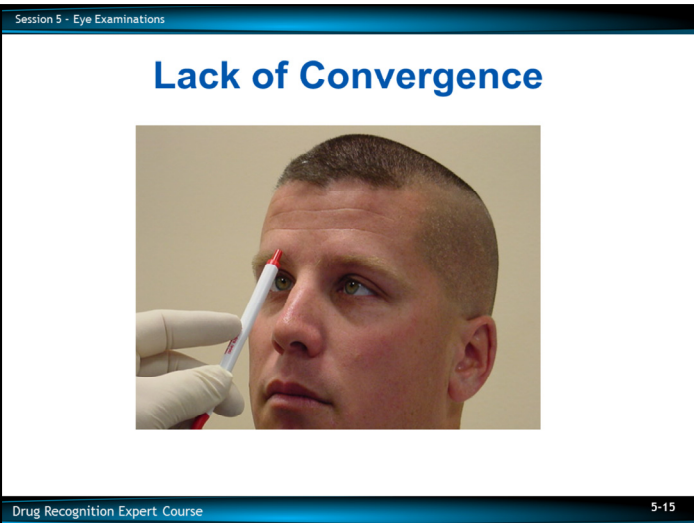
Vertical Gaze Nystagmus



VGN

- 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 jerking

Participants’ Initial Practice of the VGN Test



LOC

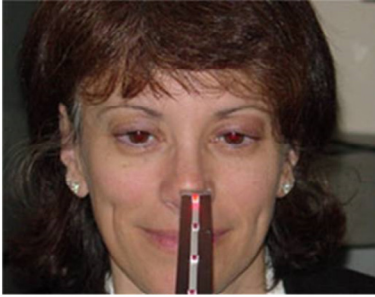
The test for LOC is also very simple. This test may not be as reliable as the other eye tests because some people may have an inability to cross their eyes normally.

- Lack of Convergence 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 check for LOC if they are readily available

If the subject's eyeglasses are not readily available, the Drug Recognition Expert (DRE) should still conduct the test.

Session 5 - Eye Examinations

Lack of Convergence




Drug Recognition Expert Course 5-16

- Position the stimulus approximately 12-15 inches in front of the subject's face
- Instruct the person to hold their head still and follow the stimulus with the eyes only
- Keep the object 12-15 inches away from the person's nose and start to move the stimulus slowly in a circle approximately the same size as the subject's face
- Once you have verified the subject is tracking the stimulus, stop moving in a circular manner with the stimulus above eye level, move it 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

Session 5 - Eye Examinations

Lack of Convergence



Drug Recognition Expert Course 5-17

Participants' Initial Practice of the Check for the LOC

Eye Exams Practice

- Check for Equal Pupil Size
- Check for Resting Nystagmus
- Assessment of tracking ability
- Initial estimation of nystagmus angle of onset
- HGN
- VGN
- LOC

Practice

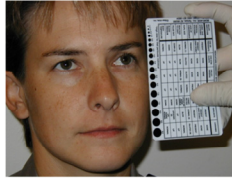
Preliminary Eye Exams

- Check for Equal Pupil Size
- Check for Resting Nystagmus
- Assessment of tracking ability
- Initial estimation of nystagmus angle of onset

Eye Exams

- HGN
- VGN
- LOC

Estimation of Pupil Size



13-STEP DRE EVALUATION MATRIX		
1.0	1.0	1.0
1.1	1.1	1.1
1.2	1.2	1.2
1.3	1.3	1.3
1.4	1.4	1.4
1.5	1.5	1.5
1.6	1.6	1.6
1.7	1.7	1.7
1.8	1.8	1.8
1.9	1.9	1.9
2.0	2.0	2.0
2.1	2.1	2.1
2.2	2.2	2.2
2.3	2.3	2.3
2.4	2.4	2.4
2.5	2.5	2.5
2.6	2.6	2.6
2.7	2.7	2.7
2.8	2.8	2.8
2.9	2.9	2.9
3.0	3.0	3.0
3.1	3.1	3.1
3.2	3.2	3.2
3.3	3.3	3.3
3.4	3.4	3.4
3.5	3.5	3.5
3.6	3.6	3.6
3.7	3.7	3.7
3.8	3.8	3.8
3.9	3.9	3.9
4.0	4.0	4.0
4.1	4.1	4.1
4.2	4.2	4.2
4.3	4.3	4.3
4.4	4.4	4.4
4.5	4.5	4.5
4.6	4.6	4.6
4.7	4.7	4.7
4.8	4.8	4.8
4.9	4.9	4.9
5.0	5.0	5.0

Estimating Pupil Size

The pupils of our eyes continually adjust in size to accommodate different lighting conditions.

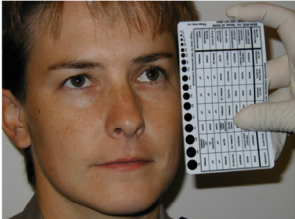

We use a device called a pupillometer to estimate the size of the subject's pupils.

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.

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.

Session 5 - Eye Examinations

Pupillary Considerations



Drug Recognition Expert Course 5-20

“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 further away.

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.

Have the subject maintain his/her eyes fixated on a stationary object greater than six feet away.

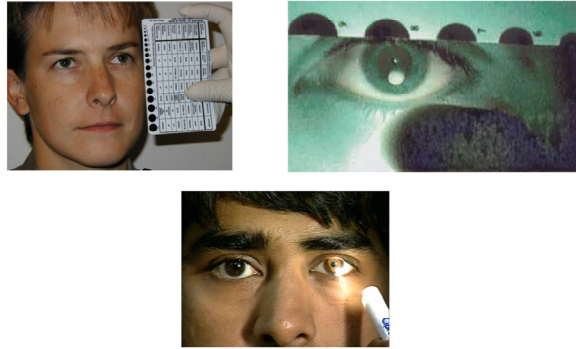
Pupillary Unrest

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.

Three Lighting Conditions



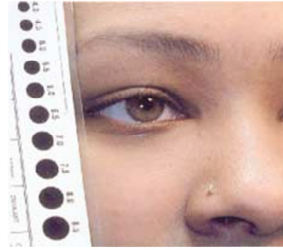
The Three Lighting Conditions

Pupil sizes are estimated under three different lighting conditions:

- Room Light
- Near Total Darkness
- Direct Light

Estimation of Pupil Size – Room Light

Pupils are examined in room light prior to darkening the room.



Estimation of Pupil Size under Room Light

- The pupils are examined in room light prior to darkening the room

Participant’s Initial Practice of Pupil Size Estimation—Room Light

Session 5 - Eye Examinations

Estimation of Pupil Size in Dark Room

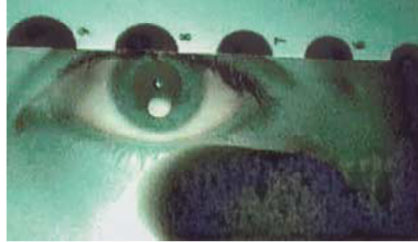


Drug Recognition Expert Course 5-23

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 the officer's eyes to adjust to the light), and then proceed with the dark room exam.

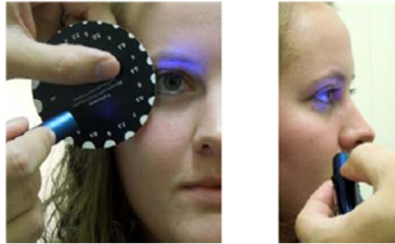
Estimation of Pupil Size – Near Total Darkness



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
- Bring the glowing tip up toward the subject's left eye until you can just distinguish the pupil from the colored portion of the eye (iris)
- Continue to hold the glowing tip 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

Estimation of Pupil Size – Near Total Darkness – UV Light



Estimation of Pupil Size under Near Total Darkness Using Ultra Violet Light

Independent research has demonstrated Ultraviolet (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 this test is used, it should be used after pupil size estimations have been attempted with a finger-covered pen light.

Hold the UV light along the subject's face at any location from the side of the eye to just below the eye. If the light is held along the cheek, it can be used to illuminate the pupillometer.

Start with the light about parallel to the plane of the subject's face and slowly increase the angle outward until the light just passes through the cornea, the clear window at the front of the eye.

When using a UV light to assess pupil size, it is important to remember to never shine 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.

Estimation of Pupil Size – Near Total Darkness – UV Light

1. Position UV light near subject's face, along cheek, just below left eye
2. Angled, parallel, and approximately 6-8 inches from subject's face




1. Position the UV light near the subject's face along the cheek just below the eye starting with the subject's left eye. Position the tip of the light approximately 6 - 8 inches from the eye (Refer to photo). However, the distance can vary depending on the brightness of the light being used.
2. Start with the light about parallel to the subject's face and slowly increase the angle outward until the light passes through the cornea (the clear window at the front of the eye) until the yellow-green glow of the crystalline lens is evident.

Session 5 - Eye Examinations

Estimation of Pupil Size – Near Total Darkness – UV Light

3. **Avoid shining light directly into subject's eye**
4. **Use pupillometer to estimate pupil size**
5. **Conduct same procedure for right eye**



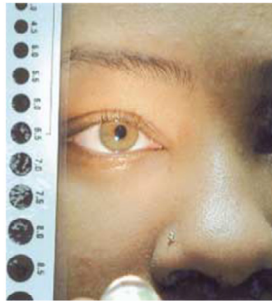
Drug Recognition Expert Course 5-27

3. Avoid shining the UV 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, nor to the evaluator's eyes.
4. Using a DRE pupillometer, estimate the size of the glowing pupil in near total darkness.
5. Conduct the same procedure for the right eye.

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 covered penlight procedure. If a DRE uses the UV light for the near total darkness estimation, it should be documented in the narrative report.

Estimation of Pupil Size – Direct Light



Estimation of Pupil Size under Direct Light

- 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.
- Position the penlight so it illuminates and approximately fills the subject's eye socket
- Hold the penlight in that position for a minimum of 15 seconds
- During the 15 seconds, bring the pupillometer up alongside the left eye
- Find the circle or semi-circle that is closest in size to the pupil
- Repeat this procedure for the subject's right eye

Rebound Dilation

A period of pupillary constriction followed by a period of pupillary dilation where pupil steadily increases in size and does not return to its original constricted size.

Click Picture to Play

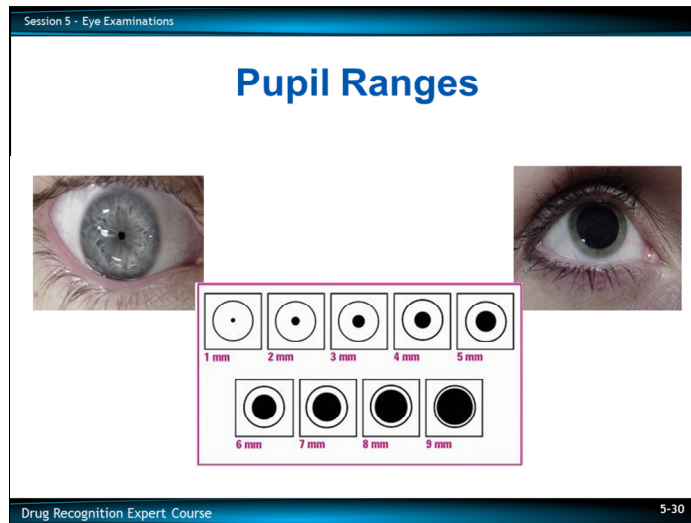


Rebound Dilation

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 does not return to its original constricted size.

Example: The pupil is estimated at 8.5mm 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.





Pupil Ranges

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 dark conditions.

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 constricted pupil (small) 
- **Mydriasis** – abnormally dilated pupil (large) 

Drug Recognition Expert Course 5-31

Pupil Size Technical Terms

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

Room light

- Approximately 4.0 mm with pupil sizes ranging from 2.5 to 5.0 mm

Near total darkness

- Approximately 6.5 mm with pupil sizes ranging from 5.0 to 8.5 mm

Direct light

- Approximately 3.0 mm with pupil sizes ranging from 2.0 to 4.5 mm

Drug Recognition Expert Course 5-32

DRE Average Pupil Sizes

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

Reaction to Light

Assessment of how quickly pupil constricts to its smallest size during check of pupil size under direct light.



Reaction to Light

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.

- As you introduce the beam of light directly into the subject's eye, note how the pupil reacts
- 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

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 by the officer 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.

Session 5 - Eye Examinations

Demonstrations



Drug Recognition Expert Course 5-34

C. Demonstrations

- Check for Lack of Smooth Pursuit
- Check for Distinct and Sustained Nystagmus at Maximum Deviation
- Check for an Onset of Nystagmus Prior to 45 Degrees

Estimation of Angle of Onset

Demonstration of VGN and LOC

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

Demonstration of Pupil Size and Reaction to Light Checks

- Room Light

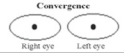
Dark Room checks of pupil size

- Near Total Darkness
- Direct Light
- Reaction to Light

Session 5 - Eye Examinations

Sample Eye Examination

Corrective Lenses: <input type="checkbox"/> None <input type="checkbox"/> Contact, 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							

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

PUPIL SIZE	Room Light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Visual acuity
Left Eye				Visual acuity:
Right Eye				Visual acuity:
Pupils Dilated: <input type="checkbox"/> Yes <input type="checkbox"/> No				Reaction to Light:

Drug Recognition Expert Course 5-36

D. Documentation Procedures

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

HGN

VGN

“Yes” implies VGN was present, “No” implies it was not present.

LOC

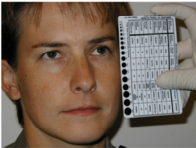


The dark room eye examinations are documented in a subsequent section of the form.

Preliminary Eye Exams

Eye Exams

Session 5 - Eye Examinations

Pupil Size Estimations

Drug Recognition Expert Course 5-37

Pupil Size Estimations

- Room Light
- Near Total Darkness
- Direct Light

Reporting out of Pupil Size Estimations

Session 5 - Eye Examinations

Tabulations

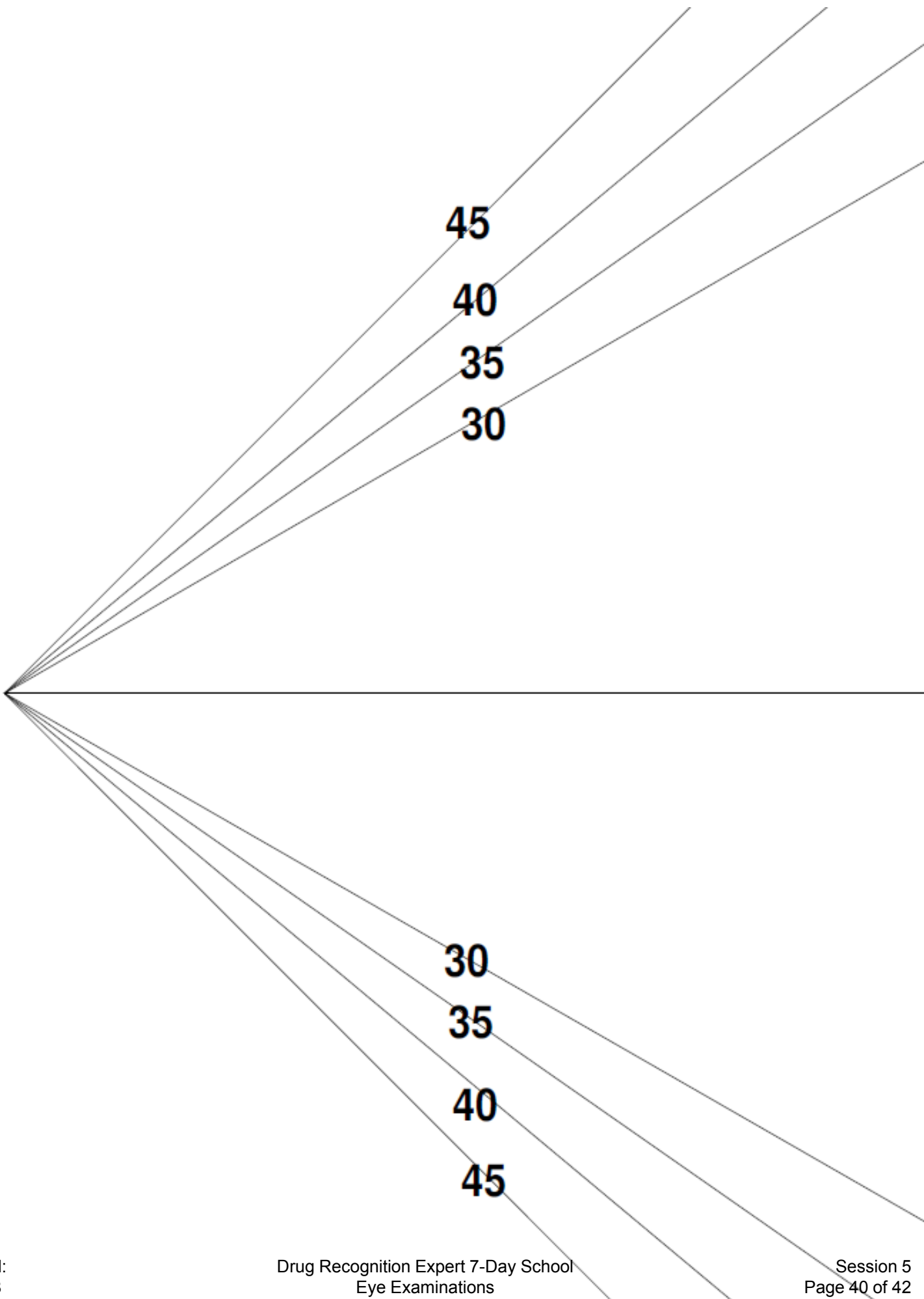
- Room Light
- Near Total Darkness
- Direct Light

Drug Recognition Expert Course 5-38

Tabulations
Room Light

Near Total Darkness Tabulation:

Direct Light Tabulation:



45

40

35

30

30

35


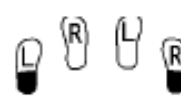

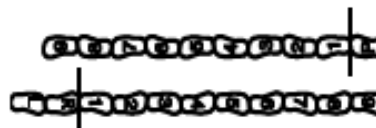
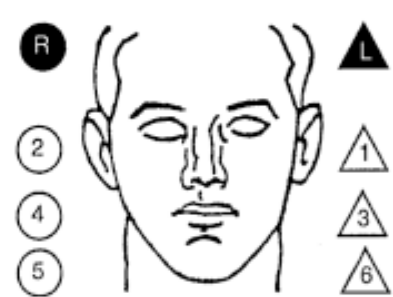
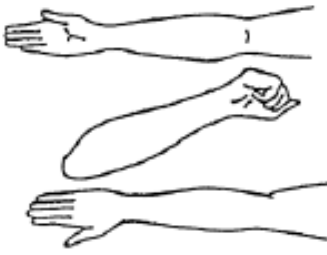
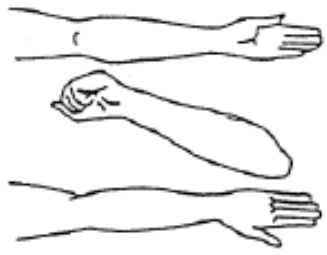
40

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: 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? <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	Convergence  Right eye Left eye		/30 One Leg Stand /30 																		
Modified Romberg Balance Approx. Approx. 		Walk and Turn Test 			Cannot keep balance _____ Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken _____		1 st Nine 2 nd Nine <table border="1" style="display: inline-table; vertical-align: middle;"><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; vertical-align: middle;"><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> Sways while balancing Uses arms 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)	Nasal area:		Oral cavity:																	
Left Eye																										
Right Eye																										
			Rebound Dilation: <input type="checkbox"/> Yes <input type="checkbox"/> No			Reaction to Light:																				
			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															

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 evaluation is used to detect signs or symptoms indicative of drug impairment

Upon successfully completing this session the participant will be able to:

- Explain in layman's terms the general concept of human physiology
- Explain in layman's terms the purposes and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.)
- Explain in layman's terms how drugs work in the body
- Explain in general terms how the drug evaluation is used to detect signs and symptoms indicative of drug impairment

CONTENT SEGMENTS

- A. Physiology and Drugs: An Overview
- B. Body Systems
- C. The Concept of Homeostasis
- D. A Simplified Concept of the Nervous System
- E. How Drugs Work
- F. Medical Conditions That May Mimic Drug Impairment

LEARNING ACTIVITIES

Instructor-Led Presentations

Reading Assignments

How Does the Body Work?



A. Physiology and Drugs: An Overview

Before we can understand how drugs work, we must have a basic understanding of how the body works.

We will review general concepts of how the body functions in a “normal” or “standard” human.

“Average” Within DEC Program

“Average” or “Expected value” or “Expected range” is a quantity that represents the “middle” or “typical” value the majority of healthy, non-impaired people would exhibit or have in a specific test measured numerically.

“Normal” or Drug Recognition Expert (DRE) Averages

In the Drug Evaluation and Classification (DEC) Program we use the terms “Normal,” “Average,” “Average Ranges,” “DRE Average Range,” or “Expected Range”.

- **“Average”** is a quantity that represents the “middle” or “expected value” the majority of healthy, non-impaired people would exhibit or have in a specific test that is measured numerically
- **“Normal”** describes both a range of values or results “close to” average or expected, but can be above or below the “average” or “expected value” for the majority of healthy non-impaired people
 - “Normal” can also be used to describe unremarkable conditions on tests that are not measured numerically such as muscle tone, etc.
- **“Expected Value”** or **“Expected Range”** describes the range or value expected for a healthy, non-impaired person.

Within the DEC Program, “normal” means the same thing as “healthy” or “non-impaired” or within the “DRE average range.”

Session 6 - Physiology and Drugs: An Overview

“Normal” Within DEC Program

“Normal” describes both a range of values or results “close to” average or “expected”, but can be above or below the “average” value for the majority of healthy non-impaired people as well as to describe unremarkable muscle tone, etc.

Drug Recognition Expert Course 6-5

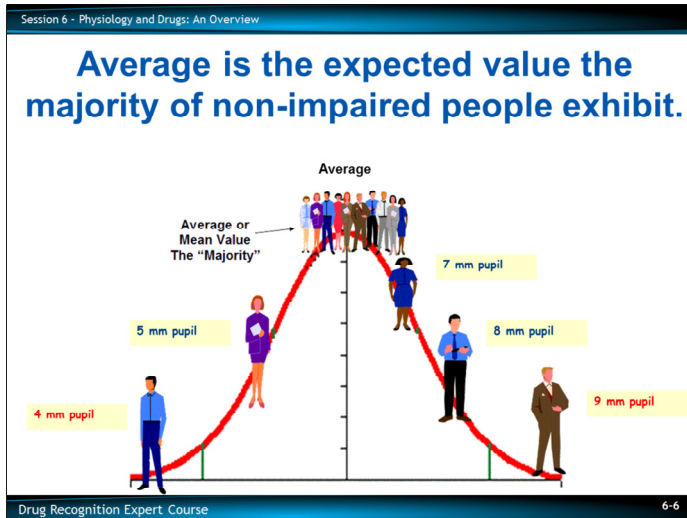
For example, the “Average,” or “expected value”, for pupil size in near total darkness is 6.5 mm. This means when **ALL** the sizes were measured **using the DRE test protocol** in a large number of pupils in healthy, non-impaired adults, the average pupil size was approximately 6.5 mm while the average range for normal pupil size was 5.0-8.5 mm.

In the DEC Program “normal” or “normals” is commonly used to refer to a result within the DRE average ranges, such as pupil sizes, pulse rate, blood pressure, etc. of a healthy non-impaired person.

When using the term “normal” or “normals” the DRE should understand what these terms refer to. Although the term “normal range” has been historically used in the DEC Program, we now use the term “average range” or “expected range” to provide a better description of what we observe.

To avoid the defense argument of “what is ‘normal’ for my client?,” DREs need to be prepared to explain the meaning and use of the term as it relates to the DEC Program.

A Healthcare Practitioner can determine what is “normal” for a person based on their training, experience, and a combination of additional data. They can also determine this through ordered tests and their results, what has been usual for the person over time, if the specific result is getting better, worse, or staying stable, if the disease process being evaluated is getting better, worse, or staying stable, how abnormal the test result is, and if it may represent an error in the test itself. A DRE does not have any of the above healthcare information available during the time the DRE evaluation is performed.



Another way to look at Average versus Normal:

- The *average* length (number) of a pregnancy is 40 weeks
- The *average* length (range) of a pregnancy is 38 to 42 weeks
- If a woman is *two weeks* past her "due date," she is still not necessarily *late*
- Being past the due date is not itself a problem, but:
 - There is a greater risk of problems
 - There may be other observable signs and reported symptoms of potential problems

What DREs Need to Know About "Average"—General Rules:

- The closer the test finding is to the Average value for the majority of healthy, non-impaired people, the more likely the person is not exhibiting impairment in that function
- The farther away from the Average and the closer to the edge of the "Average Range" or "Expected Range" for the majority of healthy, non-impaired people, the more possible the person is going to be exhibiting impairment in that function
- The farther outside the Average Range for the majority of healthy, non-impaired people in the test, the greater the likelihood the person is exhibiting impairment in that function

Opinion versus Diagnosis

- **Opinion – Judgment based on special knowledge and experience**
- **Diagnosis – Legal and medical conclusion reached by someone with medical experience and expertise**

-
- An Opinion is a judgment based on special knowledge and experience
 - A Diagnosis is a legal and medical conclusion reached by someone with medical experience and expertise
 - DREs do not make a diagnosis
 - The DRE's goal is to determine the presence of impairment and the probable cause(s) of the observed impairment

As a DRE, when you complete an evaluation and decide whether the person is impaired, whether the impairment is a result of a medical problem or drugs, and if drugs, what drug category or categories is/are causing the impairment, you are rendering an OPINION. You are NOT making a diagnosis.

Opinion vs. Diagnosis

	DRE	Doctor
Reason for Assessment	LEGAL: Non voluntary Arrest Impaired driving and need to determine possible reason for impairment Medical care is offered and decided in beginning	MEDICAL: Voluntary visit with symptoms or complaints
Compliance	Unpredictable and may be limited or refused since it involves evidence and rights	Full with history and tests to lead to proper diagnosis and treatment
Time	Single One-Time contact and limited time	Multiple visits and time
Outcome Goal	Presence of Impairment not due to alcohol Opinion based on Possibilities as to cause of impairment Verification is unpredictable Treatment is not the outcome goal	Differential Diagnosis with multiple tests leading to treatment goal

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 regards 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).

Session 6 - Physiology and Drugs: An Overview

Physiology:

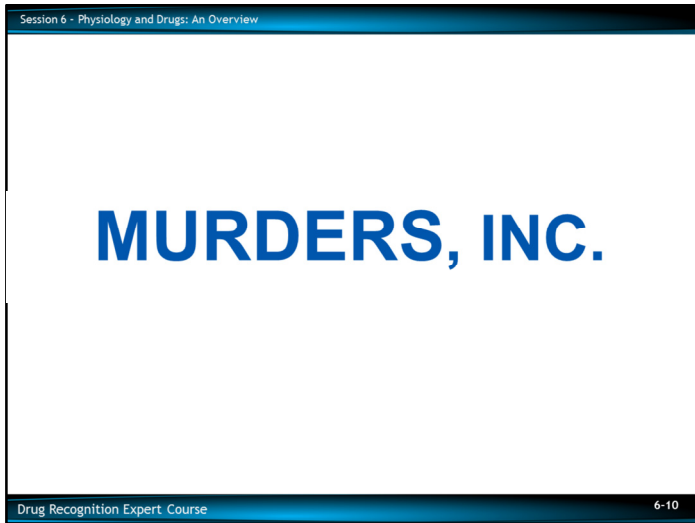
Study of functions of living organisms and their parts



Drug Recognition Expert Course 6-9

B. Body Systems

For the purposes of this training course, physiology is the study of the functions of living organisms and their parts.



A convenient way of discussing human physiology is to list the ten major systems of the body. The phrase "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.



Muscular System

M stands 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.

- 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

All three types of muscles are examined at various stages of the drug influence evaluation.

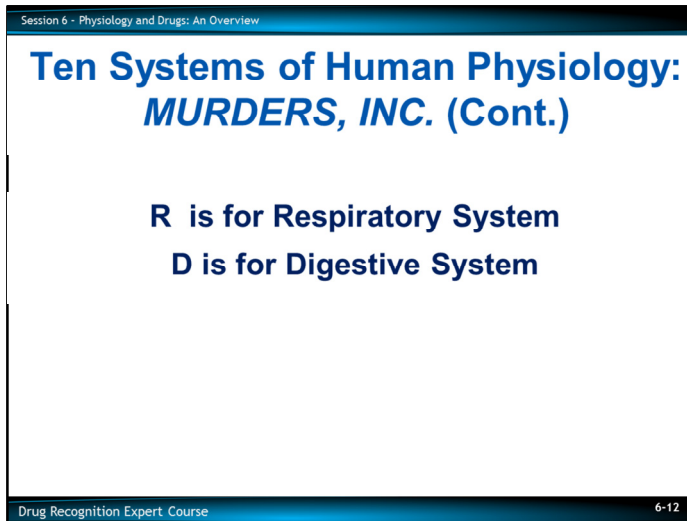
Urinary System

U is for the URINARY SYSTEM.

Drugs can usually be detected in the urine and collection of a urine specimen or other suitable bodily substance is an important part of the drug influence evaluation.

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 dump these waste products into the bladder.



Respiratory System

The first R in “MURDERS INC” stands for the RESPIRATORY SYSTEM.

Some drugs cause the user to breath 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.

Digestive System

D stands 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.

Ten Systems of Human Physiology: *MURDERS, INC. (Cont.)*

E is for Endocrine System

R is for Reproductive System

S is for Skeletal System

Endocrine System

E is for the ENDOCRINE SYSTEM.

The Endocrine System is made up of a number of different glands that secrete hormones. 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.

Reproductive System

The second R in "MURDERS INC" stands for the REPRODUCTIVE SYSTEM.

The functions of the reproductive system fall into two categories:

- self-producing (cytogenic)
- hormone producing (endocrinic)

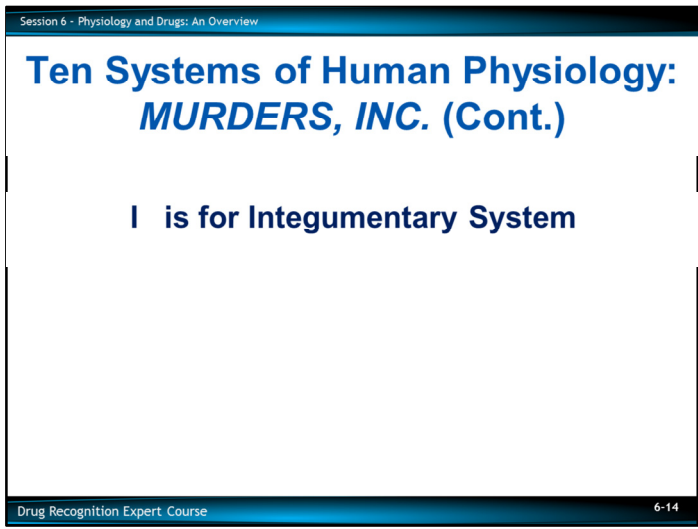
We are primarily concerned with hormone production since the hormones produced by the reproductive system aid the nervous system in its regulatory role.

The Reproductive and Skeletal Systems are the only major components of physiology and are not directly involved in the drug influence evaluation.

Skeletal System

S is for the SKELETAL SYSTEM.

Consists of bones, cartilage, and ligaments. The Skeletal System provides support to the body, permits movement, and forms blood cells.

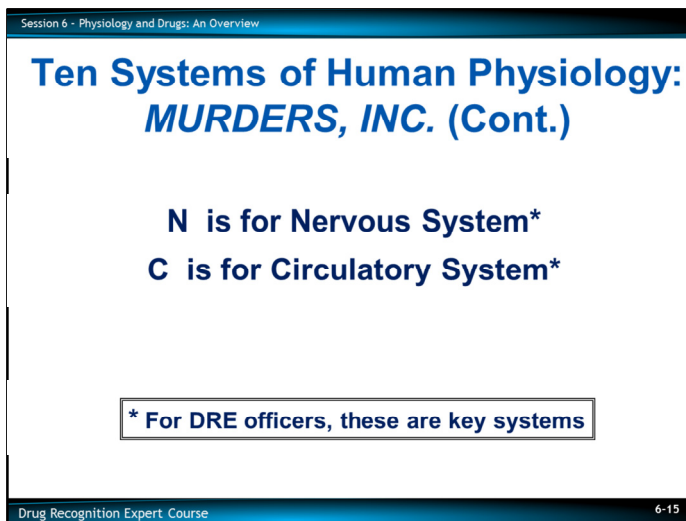


Integumentary System

The I in "INC" stands for the INTEGUMENTARY SYSTEM.

Consists of the skin, hair, finger nails and toe nails, and accessory structures.

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.



Nervous System

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 also 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.

Circulatory System

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.

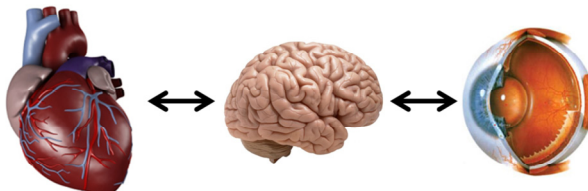
Blood is also primarily responsible for carrying heat throughout the body.

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.

Session 6 - Physiology and Drugs: An Overview

Interrelated Body Systems



The diagram illustrates the interconnectedness of three vital body systems. On the left is a 3D model of a human heart, showing its major blood vessels. In the center is a 3D model of the human brain, showing its complex, folded surface. On the right is a 3D model of a human eye in cross-section, revealing its internal structures. Each of the three models is connected to the others by a double-headed black arrow, indicating bidirectional communication and interdependence between the heart, brain, and eye.

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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.

Bodily Functions affected by CNS




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
- Body Temperature

Session 6 - Physiology and Drugs: An Overview

Homeostasis

Dynamic balance, or steady state, involving levels of salts, water, sugars and other material in the body's fluids.



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C. The Concept of Homeostasis

Homeostasis is “the dynamic balance, or steady state, involving levels of salts, water, sugars, and other materials in the body’s fluids.”

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.

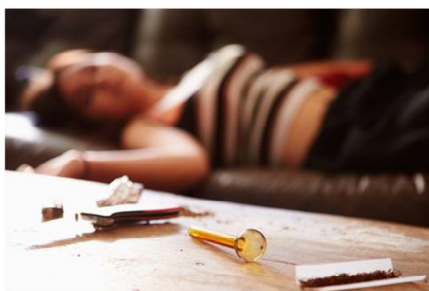
“Out of Balance”



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.

Someone who abuses drugs wants the side effects...



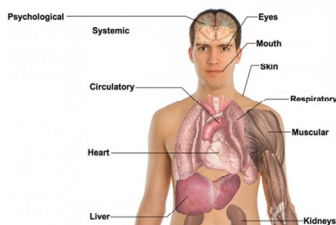
Drug abusers put themselves “out of balance” in their Nervous System to get “high.” They typically show signs of impairment in the drug influence evaluation. In effect, they want to change their consciousness; they WANT to experience these effects.

This is why we NEED TO KNOW physiology and drug effects.

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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*



	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	DISSOCIATIVE ANESTHETICS	BARBITIC ANALGESICS	INHALANTS	CANNABIS
HORIZONTAL NYSTAGMUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE
VERTICAL NYSTAGMUS	NONE	NONE	NONE	NONE	NONE	NONE	NONE
LACK OF CONSCIOUSNESS	NONE	NONE	NONE	NONE	NONE	NONE	NONE
PUPIL SIZE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
REACTION TO LIGHT	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
PULSE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
BLOOD PRESSURE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
SOOP TEMPERATURE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL
MUSCLE TONE	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL	NORMAL

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

MURDERS, INC.

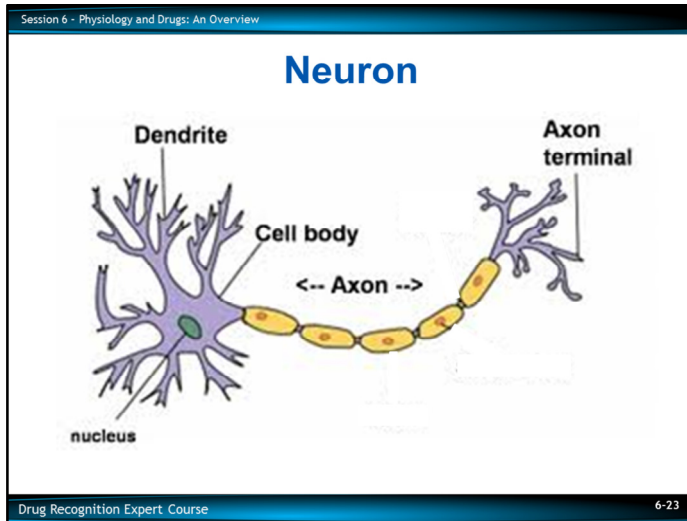
Adverse (negative) effects of Methamphetamine

Psychological					Eyes
- Insomnia					- Dilated pupils
- Aggressive behavior	Systemic			Mouth	
- Paranoia	- Hyperthermia			- Grinding of teeth	
- Incessant conversations	- Malnutrition			Skin	
- Decreased appetite	- Impaired immune system			- Sweating	
- Increased alertness	Circulatory			- Numbness	Respiratory
- Irritability	- High blood pressure				- Shortness of breath
- Slurred speech	- Vessel damage in brain			Muscular	- Jerky movements
- Dizziness	- Clotting and stroke			- Increased activity	- Convulsions
- Confusion	Heart			- Loss of coordination	
- Hallucinations	- Chest pain			Kidneys	
- Obsessive behaviors	- Rapid heart rate			- Damage	
- Depression	Liver				
- Panic attacks	- Damage				

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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.



Each neuron, or “wire segment” has three main parts:

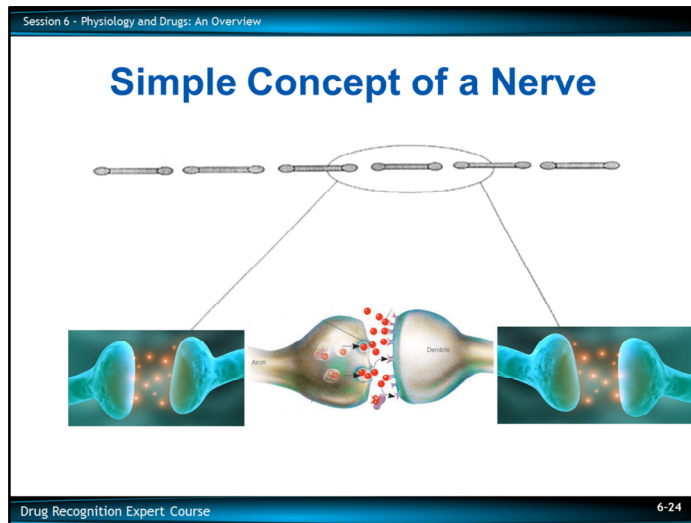
- the cell body
- the axon
- the dendrite

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.

The dendrite is the part that receives the neurotransmitter.

The gap between two neurons is called a synapse, or synaptic gap.

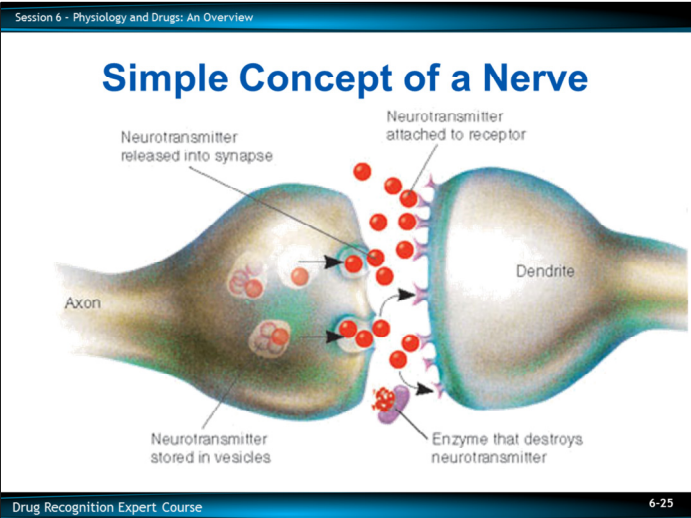


D. A Simplified Concept of the Nervous System

CLARIFICATION: Nerves are often pictured as telephone or telegraph wires.

The nerves that carry messages to and from the brain often are pictured as “wires” that carry electrical signals.

A more accurate, but still simplified concept would envision a nerve as a series of broken wire segments, with the segments separated by short spaces, or gaps.

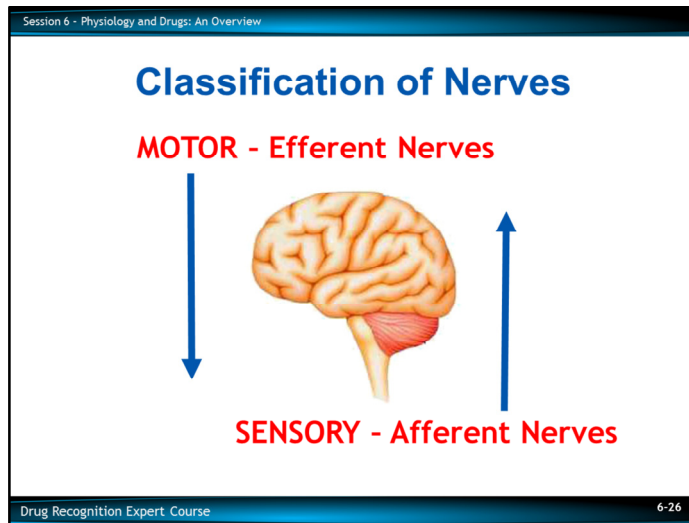


We can imagine messages running along the “wire segments” in much the same manner electrical impulses run along telephone wires.

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.



Classification of Nerves

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.

Session 6 - Physiology and Drugs: An Overview

Sub-Systems of Motor Nerves

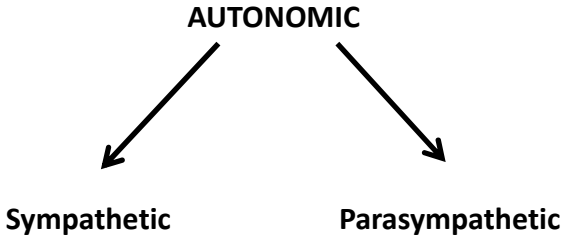
- Voluntary
- Autonomic

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There are two sub-systems of motor nerves:

- The voluntary nerves send messages to the striated muscles that we consciously control
- The autonomic nerves send messages to the muscles and organs that we do not consciously control, i.e., smooth muscle and cardiac muscle.

The Autonomic sub-system is divided into two groups.



Autonomic Sub-Systems

- Sympathetic nerves – control body’s “fight or flight” responses



- Parasympathetic nerves – produce relaxed and tranquil activities



- 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.

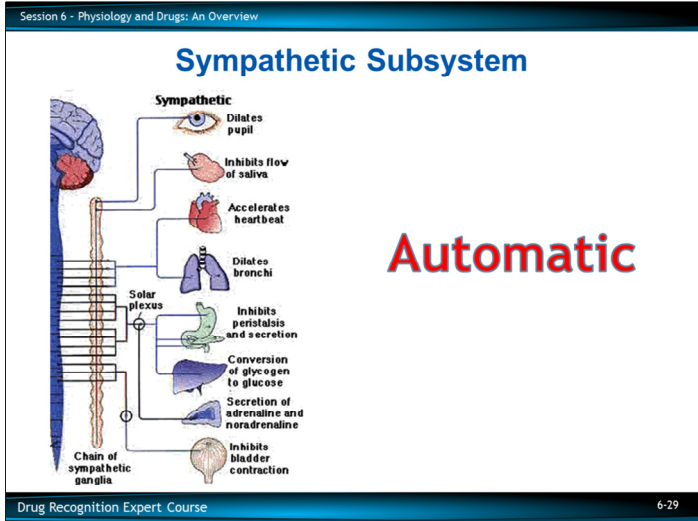
Certain neurotransmitters (i.e., chemical messengers) aid in the transmission of messages along sympathetic and parasympathetic nerves.

Drugs that mimic the neurotransmitter associated with sympathetic nerves are called sympathomimetic drugs.

Drugs that mimic neurotransmitters associated with parasympathetic nerves are called parasympathomimetic drugs.

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.

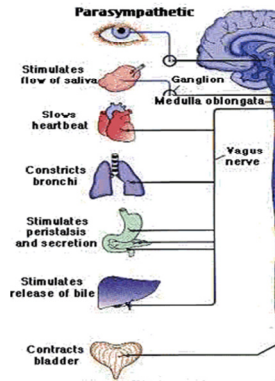
Sympathomimetic drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.



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 which tends to speed up the body's processes. Some of the sympathetic responses include: pupil dilation, inhibits flow of saliva (dry mouth), increased heartbeat, dilates bronchial.

Parasympathetic Subsystem



Parasympathetic subsystem of the autonomic nerve 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 flow of saliva, slowing heartbeat, and constricting bronchial tubes (slows breathing).

How a Neurotransmitter Works

1. Neuron makes a neurotransmitter
2. Synaptic vesicles are small membrane bound structures in the axon that contain neurotransmitters
3. These vesicles release neurotransmitters into the synaptic gap
4. Neurotransmitter crosses the gap to bind to receptor site and performs a function
5. Neurotransmitter is removed or taken up out of the synaptic gap
6. Restore or Remake—for future reuse

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:

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

Session 6 - Physiology and Drugs: An Overview

How Drugs Work

**Artificially creating natural body reactions
generally associated with the work of
neurotransmitters and hormones**

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E. How Drugs Work

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.

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 ingests a drug and artificially simulates the natural action of hormones and neurotransmitters, the body's dynamic balance is disrupted.

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.

Session 6 - Physiology and Drugs: An Overview

How Drugs Work

Example One:
Person ingests a drug that speeds up bodily functions.

Example Two:
Person ingests a drug that slows down bodily functions.

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Example Number One

If a person ingests 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 ingested 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

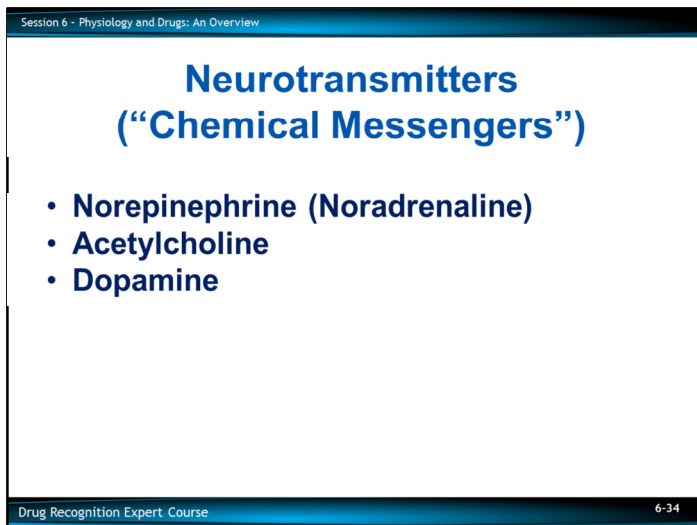
If a person ingests a drug that depresses some bodily function, the body may pour out one of its natural chemicals that stimulate that same function.

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.



Neurotransmitters

Although there are more than 100 chemicals in the brain, only about two dozen probably are true neurotransmitters.

Among the primary neurotransmitters identified are:

- Norepinephrine (also called Noradrenaline)
- Acetylcholine – Plays a role in muscle control and affects neuromuscular or myoneural junctions
 - Acetylcholine also plays an important role in learning and memory
 - Produced by cholinergic neurons and bind to either nicotinic receptors (named after one of their most potent activators, nicotine, and the reason tobacco is so addictive) or muscarinic receptors
- Dopamine – Plays a role in mood control and is used in treating Parkinson’s Disease
 - 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

Session 6 - Physiology and Drugs: An Overview

Neurotransmitters ("Chemical Messengers")

- **Serotonin**
- **Gamma Amino Butyric Acid (GABA)**
- **Glutamate**

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- 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

Endorphins and Enkephalins

- Body’s natural pain relievers
- Many drugs artificially induce the effects of neurotransmitters and hormones

Endorphins and Enkephalins

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.

“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.”

It is not uncommon for a DRE to encounter someone on the “downside.”

Definition:

“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.”

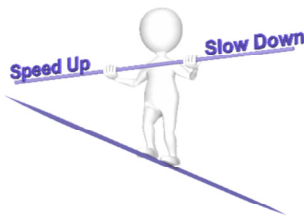
The neurotransmitters and hormones persist in the body longer than the drug they are responding to, resulting in the demonstration of opposite findings after the drug is gone from the body until the hormones and neurotransmitters are eliminated.

We call this situation being on the “downside” of the drug.

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“Downside Effect”

EXAMPLE: Cocaine or Meth



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One example of the downside effect can be seen with an individual abusing Stimulant drugs, such as Cocaine or Methamphetamine.

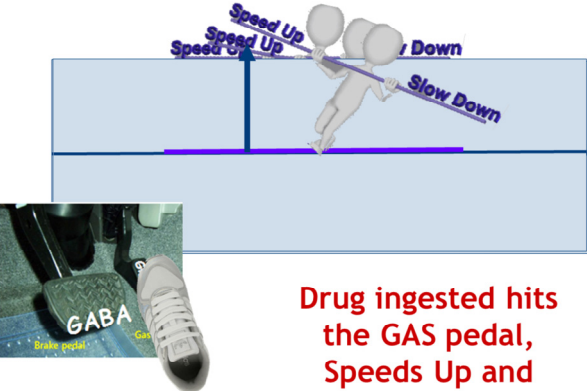
Example: with Cocaine (a drug metabolized, or broken down by the body fairly quickly) the user may be exhibiting drowsiness and general depression by the time the DRE is called to the scene.

The concept of “downside” will be especially important to us when we discuss the effects of CNS Stimulants and drug combinations.

Then the body attempts to “counteract” the Stimulant effects. When the effects of the drug diminish, the results may mimic a Narcotic Analgesic, for example.

This is the body’s response to return to homeostasis after the introduction of a drug.

Session 6 - Physiology and Drugs: An Overview



Drug ingested hits the GAS pedal, Speeds Up and Brakes Not Working!

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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.

Session 6 - Physiology and Drugs: An Overview

The diagram shows a person balancing a horizontal beam on their head. The left side of the beam is labeled 'Speed Up' and the right side is labeled 'Slow Down'. An upward-pointing blue arrow is positioned in the center of the beam. Below this diagram is a photograph of a person's foot on a car's gas pedal, labeled 'Gas', and another foot on the brake pedal, labeled 'Brake pedal'.

Body takes counter-measures to apply brakes and start to slow down, while drug having effect but wearing off!

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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.

Lined area for student notes:

Session 6 - Physiology and Drugs: An Overview

Drug metabolized and gone, Brakes overworking to slow down!


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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 (Depressant).

Session 6 - Physiology and Drugs: An Overview

Downside Effect Example

	CNS Stimulants		Narcotic Analgesics
HGN	None	<p>Looks Like</p> 	None
VGN	None		None
LOC	None		None
Pupil Size	Dilated		?
Reaction to Light	Slow		?
Pulse	Up		?
Blood Pressure	Up		?
Body Temperature	Up		?
Muscle Tone	Rigid		?

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With this example, the downside of CNS Stimulants can mimic **Narcotic Analgesics** and vice versa.

In effect, the drug(s) have worn off, however, the body is still continuing to produce neurotransmitters and hormones that counteract the effects of the drug(s). With the drug(s) now not having an affect on the body, these neurotransmitters and hormones are adversely affecting the body, causing signs and symptoms opposite of those of the prior drug effects. Keep in mind a subject may not exhibit all of the opposite indicators. For example, a person on the "downside" of CNS Stimulants may not have ptosis and/or they may not have facial itching. With drug impairment, the DRE may not observe every indicator of a particular drug category.

Session 6 - Physiology and Drugs: An Overview

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.)**

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Even tolerant drug users, when impaired, usually exhibit clinical evidence (i.e., in the vital signs and eye signs – such as Horizontal Gaze Nystagmus (HGN)).

Physical Dependence

Another result may be physical dependence, or addiction.

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, and negative feedback develops, the user finds he or she can only achieve those feelings and moods if the drug is taken 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

“Negative Feedback”

When the brain accommodates the routine presence of a drug by turning off the supply of natural chemicals that correspond to the drug.

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Negative Feedback

Another interesting effect drugs can produce is called Negative Feedback.

By taking the drug, the person artificially simulates the action of certain hormones and/or neurotransmitters.

If the person continues to take the drug, the body may simply cease producing the natural chemicals the drug simulates.

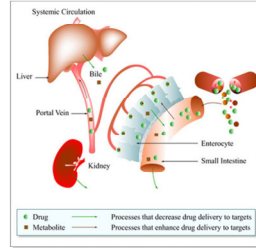
In effect, the body comes to rely on the drug to supply itself with those chemicals.

Example of Negative Feedback: when people regularly use Heroin, Cocaine, or Marijuana, their bodies may cease producing the neurotransmitters and hormones known to be crucial for proper pain relief, stress reduction, mental stability, and motivation.

One result of this may be increased tolerance to the drug. Since the body isn't producing its own natural chemicals, it can more easily stand the drug.

Metabolite

A chemical product formed by the reaction of a drug with oxygen and/or other substances in the body, usually during the process of elimination from the body.



Metabolite

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.

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.

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.

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F. Medical Conditions That May Mimic Drug Impairment

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 DRE drug evaluation report documenting his or her findings and indicating the opinion they support medical impairment as the possible source 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 evaluation, if considered appropriate.

Session 6 - Physiology and Drugs: An Overview

Medical Conditions That May Mimic Drug Impairment

- **Bipolar Disorder**
- **Conjunctivitis**
- **Diabetes**
- **Head Trauma**
- **Multiple Sclerosis/similar conditions**



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- **Bipolar Disorder (Manic Depression)** – a condition characterized by the alteration of manic and depressive states

- **Conjunctivitis** – inflammation of the conjunctiva
Conjunctivitis is a condition caused by infection, allergy, or irritation of the mucous membrane lining of the eyes, resulting in a “pink eye” appearance. A casual observer might mistake this for the bloodshot conditions associated with Cannabis or alcohol.

- **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

The most common problem with diabetics arises when they take too much insulin, so their blood sugar levels become extremely low. They may be very confused, sweat profusely, and exhibit increased pulse rate and increased blood pressure.

- **Head Trauma** – normally due to a severe blow or bump to the head
Head trauma may injure the brain and create disorientation, confusion, lack of coordination, slowed responses, and speech impairment.

- **Multiple Sclerosis (MS)** – a degenerative muscular disorder
MS is a progressive disease in which the nerve fibers of the brain and spinal cord lose their myelin cover. Some signs and symptoms are abnormal sensations in the face or extremities, weakness, double vision, etc.

Medical Conditions That May Mimic Drug Impairment

- Shock
- Stroke
- Others

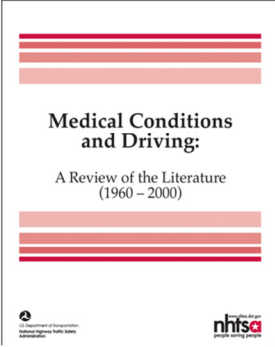


- Shock – a sudden or violent disturbance in the mental or emotional faculties
A shock victim may be dazed, uncoordinated, non-responsive.
Other indicators include extremely low blood pressure, fast but weak pulse, dizziness, moist clammy skin, profuse sweating, rapid shallow breathing, blue lips and fingernails.
- Stroke – a medical condition caused by a rupture or obstruction (as if by clot) of an artery of the brain
- Others – Carbon Monoxide poisoning, Seizures, Endocrine disorders, Neurological conditions, Psychiatric conditions, and infections

Normal conditions can affect vital signs: Exercise, Excitement, Fear, Anxiety, Depression, Other

Session 6 - Physiology and Drugs: An Overview

Medical Conditions



Medical Conditions and Driving:
A Review of the Literature
(1960 – 2000)

Department of Transportation
National Highway Traffic Safety Administration

nhtsa
National Highway Traffic Safety Administration

Section 1: Introduction

Section 2: Vision

Section 3: Hearing

Section 4: Cardiovascular

Section 5: Cerebrovascular

Section 6: Peripheral Vascular

Section 7: Nervous System

Section 8: Respiratory

Section 9: Metabolic

Section 10: Renal

Section 11: Musculoskeletal

Section 12: Psychiatric

Section 13: Drugs

Section 14: Aging Driver

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Other Medical Conditions

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. Almost all medical conditions present signs suggesting it is polydrug use.

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 INCOMPATIBLE or conflicting signs in the DRE evaluation (“mismatched” signs) — particularly the BACKGROUND (eating, work, hobbies, etc.), following directions, compliance, and time prediction.

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

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

The Preliminary Examination Overview

The preliminary examination consists of:

- Questions
- Observations of face, breath, and speech
- Initial checks of the eyes
- The initial check of the subject’s pulse

Preliminary Examination Questions

- 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's or dentist's care?
- Are you taking any medications or drugs?

Preliminary Examination Questions

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

- 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.

Medical Impairment

“An opinion made by a DRE based on the evaluation that the state 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 Medical Impairment Definition

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 DRE drug evaluation 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 state 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.

The International Association of Chiefs of Police (IACP) has a resource entitled, “Improving Officer Response to Persons with Mental Illness and Other Disabilities” that can be accessed at www.theiacp.org/publications. Other recommended Web sites and links for further information that may be beneficial for DREs and other police officers include www.samhsa.gov, www.nami.org, www.citiinternational.org, www.mentalhealthfirstaid.org/cs, www.ncmhr.org, or www.nasmhpd.org/index.aspx.



G. Summary

Basic understanding of how the body works is necessary to:

- Understand the general concept of human physiology
- Understand purposes and functions of major systems in the body (nervous system, circulatory system, respiratory system, etc.)

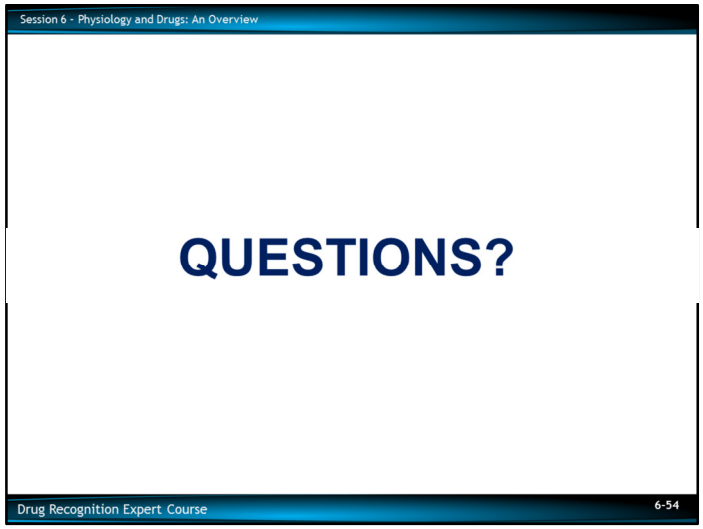
This limited overview will not qualify participants as medical specialists. The knowledge gained during this session must be supplemented by additional reading and/or instruction. The body of knowledge in this area is being constantly expanded.

The body maintains homeostasis (equilibrium) by constantly adjusting to changes in the external and internal environment:

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
- some combination of the above

The effects of drugs can be detected and/or observed in the drug influence evaluation.



Test Your Knowledge

1. What is a neurotransmitter? What is a hormone?
2. What is a dendrite? What is an axon? What is a synapse?
3. What are the two types of nerves that make up the Autonomic Nervous Sub-System?

Test Your Knowledge

1. What is a neurotransmitter? What is a hormone?

2. What is a dendrite? What is an axon? What is a synapse?

3. What are the two types of nerves that make up the Autonomic Nervous Sub-System?

Test Your Knowledge

4. Is Cocaine sympathomimetic or parasympathomimetic? What about Heroin?
5. Explain the concept of the “downside effect” and “Negative Feedback.”
6. What do we call the nerves that carry messages away from the brain? What do we call the nerves that carry messages toward the brain?

4. Is Cocaine sympathomimetic or parasympathomimetic? What about Heroin?

5. Explain the concept of the “downside effect.” Explain the concept of “Negative Feedback.”

6. What do we call the nerves that carry messages away from the brain? What do we call the nerves that carry messages toward the brain?

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**

Upon successfully completing this session the participant will be able to:

- 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

CONTENT SEGMENTS

- A. Purpose of the Examinations
- B. Procedures and Clues
- C. Demonstrations
- D. Documentation Procedures
- E. Practice

LEARNING ACTIVITIES

Instructor-Led Presentations

Instructor-Led Demonstrations

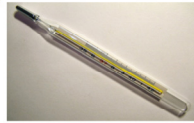
Participant-Led Demonstrations

Participants' Hands-On Practice

Reading Assignments

Drug Influence Evaluation Vital Signs

- Pulse Rate
- Blood Pressure
- Temperature



A. Purposes of the Examinations

The vital signs relevant to the drug influence evaluation include:

- Pulse Rate
- Blood Pressure
- Temperature

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.

Definitions Concerning “Pulse”

- **Pulse**
- **Pulse Rate**
- **Artery**
- **Vein**



B. Procedures and Clues

- **Pulse:** The rhythmic dilation and relaxation of an artery that results from the beating of the heart
- **Pulse Rate:** The number of pulsations in an artery per minute
- **Artery:** A strong, elastic blood vessel that carries blood from the heart to the body tissues
- **Vein:** A blood vessel that carries blood back to the heart from the body tissues

Measurement of Pulse Rate

- An 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
- 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

By keeping your fingers on the artery and counting the number of pulses that occur in one minute, you will measure the pulse rate.

Pulse is easy to measure, once you locate an artery close to the surface of the skin.

Radial Artery Pulse Point

- Subject's wrist position can be up or down



Radial Artery Pulse Point

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.

Place the tips of your right hand's index finger and middle finger into the crease of your wrist and exert a slight pressure.

You should be able to feel the pulse in your radial artery.

Brachial Artery Pulse Point



Brachial Artery Pulse Point

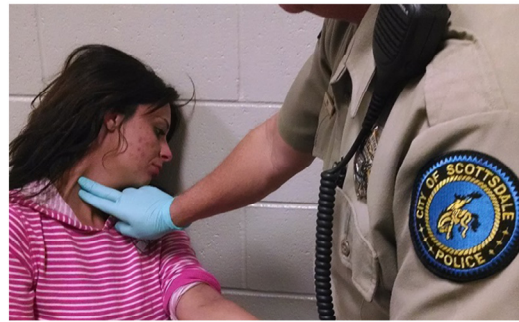
Another pulse point involves the brachial artery.

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.

Place the tips of your right hand's index and middle fingers into the crook of your left arm, close to the body, and exert a slight pressure.

You should be able to feel the pulse in your brachial artery.

Carotid Artery Pulse Point



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.

Place the tips of your right hand's index and middle fingers alongside the right side of the center of your throat.

You should be able to feel the pulse in your carotid artery.

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

Proper Procedures of Measuring Pulse

- Don't use your thumb to apply pressure while measuring a subject's pulse
- If you use the carotid artery pulse point, don't apply pressure to both sides of the center of the throat: this can cut off the supply of blood to the brain
- When measuring the pulse rate, use time intervals of 30 seconds

Pulse Rate Technical Terms

- **Tachycardia – abnormally rapid heart rate**
- **Bradycardia – unusually slow heart rate**
- **Arrhythmia – abnormal heart rhythm**

Some Technical Terms Associated with Pulse Rate

- Tachycardia: abnormally rapid heart rate
- Bradycardia: unusually slow heart rate
- Arrhythmia: abnormal heart rhythm

Session 7 - Examination of Vital Signs

Blood Pressure

Millimeters of Mercury = mmHg

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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.

Definitions

- **Blood Pressure**
- **Systolic Pressure**
- **Diastolic Pressure**

Measurement of Blood Pressure

- Blood Pressure is the force the circulating blood exerts on the walls of the arteries
- Blood pressure is measured in millimeters of 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

Sphygmomanometer



Sphygmomanometer

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.

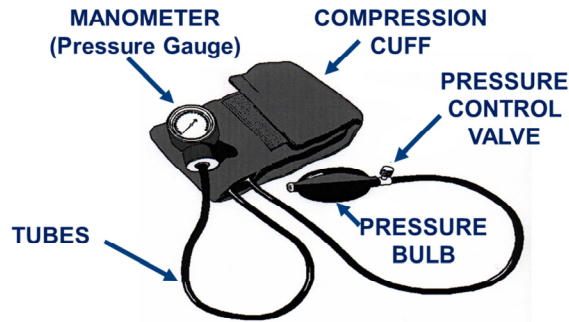
As the pressure in the cuff increases, the cuff squeezes tightly on the arm.

Wrap the cuff around the participant volunteer's arm and inflate it.

When the pressure gets high enough, it will squeeze the artery completely shut.

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.

Sphygmomanometer



Familiarization with the Sphygmomanometer

The compression cuff contains an inflatable rubber bladder.

A tube connects the bladder to the manometer, or pressure gauge.

Clarification: the manometer displays the air pressure inside the bladder. In the DEC Program, we use an aneroid (without fluid) pressure gauge.

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.

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.

Session 7 - Examination of Vital Signs

Sphygmomanometer



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If we slowly release the air in the cuff, the pressure on the arm and on the artery will start to drop.

Release the pressure in the cuff on the participant volunteer's arm.

Eventually, the pressure will drop enough so blood will once again start to flow 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.

Once the air pressure in the cuff drops down to the diastolic level, the blood will flow continuously through the artery.

The Basics of Blood Pressure Measurement

- Apply enough air pressure to cut off flow of blood through the artery
- Slowly release air pressure, 2 mmHg per second, until blood just begins to spurt through the artery: systolic pressure
- Continue to release air pressure until blood flows continuously: diastolic pressure

Overview of Procedures for Measuring Blood Pressure

Apply enough air pressure to the cuff to cut off the flow of blood through the artery.

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.

Apply the stethoscope to the skin directly above the artery.

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.

Inflate the cuff on the participant volunteer's arm.

Slowly release the air from the cuff, letting the pressure start to drop.

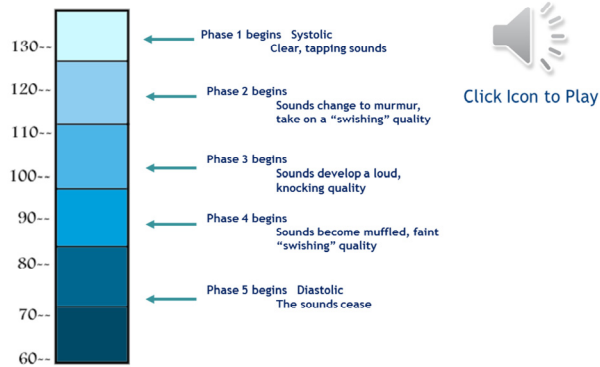
Release the air in the cuff.

When we drop to the systolic pressure, we start to hear a spurting sound.

As we continue to allow the air pressure to drop, the surges of blood become steadily longer.

When we drop to the diastolic pressure, the blood flows steadily and all sounds cease.

Korotkoff Sounds



Click Icon to Play

Korotkoff Sounds

The sounds we listen to are called Korotkoff Sounds. They are divided into 5 phases:

- Phase 1 – the first appearance of clear, tapping sounds that gradually increase in intensity
- 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

Details of Blood Pressure Measurement

- **Position cuff on bicep so tubes extend down middle of arm**
- **Wrap cuff snugly around bicep**
- **Clip manometer to subject's sleeve**
- **Twist pressure control valve all the way to the right**
- **Put stethoscope earpieces in your ears**

Details of Blood Pressure Measurement

If it proves difficult to hear the Korotkoff sounds, simply have the subject elevate the arm and squeeze the fist several times, to drain the arm: the Korotkoff sounds 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.

Details of Blood Pressure Measurement

- Place stethoscope over brachial artery
- Rapidly inflate bladder to 180 mmHg
- Twist the valve slightly to the left
- Keep your eyes on the gauge and listen for the Korotkoff sounds

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.

Twist the pressure control valve slightly to the left to release the pressure slowly.

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.

Proper Procedures of Blood Pressure Measurement

- Wait 3 minutes to repeat measurement, if needed
- Don't re-inflate cuff once you start releasing pressure



Proper Procedures of Blood Pressure Measurement

If you inflate the bladder and then need to repeat the measurement, wait at least three minutes to allow the subject's artery's to return to normal.

- Do wait 3 minutes to repeat the measurement if a second measurement is needed
- Don't re-inflate cuff once you start releasing the pressure

Blood Pressure Technical Terms

- **Hypertension** – abnormally **high** blood pressure
- **Hypotension** – abnormally **low** blood pressure

Some Technical Terms Associated with Blood Pressure

- Hypertension: abnormally high blood pressure
- Hypotension: abnormally low blood pressure

Measurement of Temperature



Measurement of Temperature

Body temperature is measured using a oral digital thermometer.

Session 7 - Examination of Vital Signs

Demonstrations

- Pulse Rate
- Blood Pressure

Drug Recognition Expert Course 7-22

C. Demonstrations

Pulse Rate Measurement

Radial Artery Pulse Point

Carotid Artery Pulse Point

Blood Pressure Measurement

D. Documentation Procedures

QUESTIONS?

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?

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?

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. Which of the seven categories of drugs generally will cause blood pressure to be elevated?

5. What is Diastolic pressure?

6. When do the Korotkoff Sounds begin?

7. Name and describe the major components of a Sphygmomanometer.

8. Which of the seven categories of drugs generally will cause blood pressure to be elevated?

Session 8

Demonstrations of the Evaluation Sequence



Learning Objective

- Describe the sequence in which examinations and other activities are performed during the drug influence evaluation procedure

Upon successfully completing this session the student will be able to:

- Describe the sequence in which examinations and other activities are performed during the drug influence evaluation procedure

CONTENT SEGMENTS


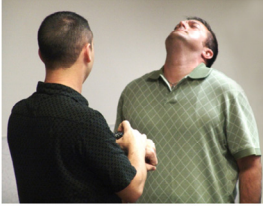
- A. Live Demonstrations
- B. Video Demonstrations

LEARNING ACTIVITIES

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

Session 8 - Demonstrations of the Evaluation Sequence

Live Demonstrations Preliminary Examinations



Drug Recognition Expert Course 8-4

A. Live Demonstrations

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.

Preliminary Examinations

Preliminary eye checks:

- Equal Tracking
- Equal Pupil Size
- Resting Nystagmus
- Blindness
- Eyelids

Live Demonstrations Eye Examinations, Psychophysical Tests, Vital Signs Examinations



Eye Examinations.

- Horizontal Gaze Nystagmus (HGN); Vertical Gaze Nystagmus (VGN); Lack of Convergence (LOC)

Psychophysical Tests.

- Modified Romberg Balance (MRB); Walk and Turn (WAT); One Leg Stand (OLS); Finger to Nose (FTN)

Vital Signs Examinations

- Blood Pressure
- Temperature
- Second Check of Pulse

Live Demonstrations

- **Pupil Size Estimations**
 - **Room Light**
 - **Near Total Darkness**
 - **Direct Light**

Dark Room Examinations

Pupil Size Estimations:

- Room light
- Near Total Darkness
- Direct light

Live Demonstrations Reaction to Light, Nasal Area, Oral Cavity, Muscle Tone, Injection Sites, 3rd Pulse Check




Reaction to Light

Check of Nasal Area

Check of Oral Cavity

Session 8 - Demonstrations of the Evaluation Sequence

Live Demonstrations Subject Interview, Opinion of the Evaluator



Drug Recognition Expert Course 8-8

Subject Interview

- Statements made by subject
- Behavior during entire evaluation

Opinion of the Evaluator

QUESTIONS?

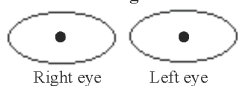

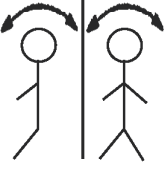
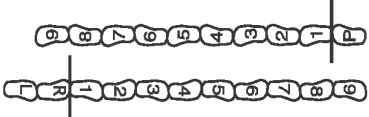
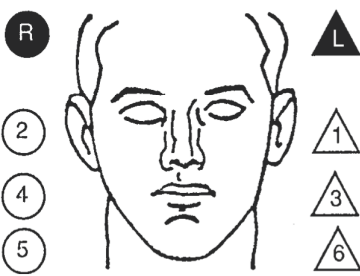
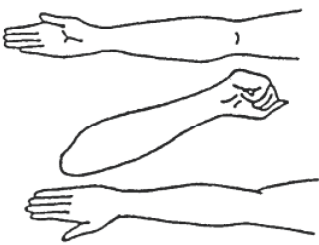
International Association of Chiefs of Police

Drug Evaluation and Classification Program

Drug Influence Evaluation Checklist

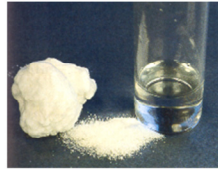
- _____ 1. Breath alcohol test
- _____ 2. Interview of arresting officer
- _____ 3. Preliminary examination and first pulse
(Note: Gloves must be worn from this point on.)
- _____ 4. Eye examinations
- _____ 5. Divided attention tests:
 - _____ Modified Romberg Balance
 - _____ Walk and Turn
 - _____ One Leg Stand
 - _____ Finger to Nose
- _____ 6. Vital signs and second pulse
- _____ 7. Dark room examinations and ingestion 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

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 1. ___ / ___ 2. ___ / ___ 3. ___ / ___	HGN	Left Eye	Right Eye	Convergence  Right eye Left eye		/30 One Leg Stand /30  L R Sways while balancing Uses arms to balance Hopping Puts foot down																				
	Lack of Smooth Pursuit																									
	Maximum Deviation																									
	Angle of Onset																									
Modified Romberg Balance Approx. Approx. 	Walk and Turn Test 		Cannot keep balance _____		<table border="1" style="width: 100%; text-align: center;"> <tr> <td>1st Nine</td> <td>2nd Nine</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> <tr><td> </td><td> </td></tr> </table>		1 st Nine	2 nd Nine																		
			1 st Nine	2 nd Nine																						
Starts too soon _____		Stops walking _____																								
Misses heel-toe _____		Steps off line _____																								
Raises arms _____		Actual steps taken _____																								
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)	Nasal area:																				
		Left Eye				Oral cavity:																				
		Right Eye																								
		Rebound Dilation: <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"/> 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																										

Session 9

Central Nervous System Depressants



Learning Objectives

- **Explain a brief history of CNS Depressant drugs**
- **Identify common drug names and terms**
- **Identify common methods of administration**

Upon successfully completing this session, the participant will be able to:

- Explain a brief history 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

Learning Objectives

- Describe signs, symptoms, and other effects
- Explain typical time parameters
- Describe indicators likely to emerge

- 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 clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs.

CONTENT SEGMENTS

- A. Overview of the Category
- B. Possible Effects
- C. Onset and Duration of Effects
- D. Overdose Signs and Symptoms
- E. Expected Results of the Evaluation
- F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Reading Assignments
Video Presentations
Slide Presentations

Alcohol Most Familiar CNS Depressant



A. Overview of the Category

CNS Depressants

CNS Depressants slow down the operations of the brain.

- 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.

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

Chloral Hydrate

The first non-alcohol CNS depressant



Chloral Hydrate

Non-alcohol CNS Depressants have been around for more than 150 years.

The first non-alcohol CNS Depressant was Chloral Hydrate.

It was developed in 1832 and utilized clinically in 1869.

Chloral Hydrate was derived from alcohol.

Chloral Hydrate is still produced and, but not widely, prescribed today. It is a sedative used in the short-term treatment of insomnia and to relieve anxiety and induce sleep before surgery.

“Noctec” is a registered brand name of Chloral Hydrate.

Major Types of Sub Categories of CNS Depressants

- **Barbiturates**
- **Non-Barbiturates**
- **Anti-Anxiety Tranquilizers**

Sub Categories of CNS Depressants

There are six major subcategories of CNS Depressants other than alcohol.

Barbiturates

More than 250 different barbiturates have been produced; of these, about 50 have been accepted for medical use.

- Derivatives of Barbituric Acid
- First produced in 1864
- Very common in use and abuse today

Non-Barbiturates

Chloral Hydrate belongs to the non-barbiturate subcategory.

- Synthetic compounds with a variety of chemical structures
- Prescribed to help with some of the unintended side effects of barbiturates including sleepiness or drowsiness
- Still produce physical and psychological dependence

Anti-Anxiety Tranquilizers

The Anti-Anxiety Tranquilizers are also known as the “minor tranquilizers.” They include the group of drugs known as the “Benzodiazepines” examples of which are Valium, Xanax, and Librium.

- First produced in 1950
 - In very wide spread use
 - Frequently abused
-
-
-
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Major Types of Sub Categories of CNS Depressants

- Antidepressants
- Anti-Psychotic Tranquilizers
- Combinations

Antidepressants

Sometimes called the “mood elevators.”

Anti-Psychotic Tranquilizers

Sometimes called the “major tranquilizers.”

Anti-psychotic tranquilizers were first introduced in the early 1950’s. They provide a way to manage schizophrenia and other mental disorders and allow psychiatric patients to be released from hospitals and to lead fairly normal lives.

The most familiar Anti-Psychotic Tranquilizer is “Thorazine.”

Combinations

This subcategory includes a small class of depressants involving various combinations of the other five subcategories.

Specific Barbiturates Examples

Drug	Brand Name
Amobarbital	Amytal
Amosecobarbital	Tuinal
Pentobarbital	Nembutal
Phenobarbital	Luminal
Secobarbital	Seconal

The Barbiturates

- Amobarbital (Trade name "Amytal")
- Amosecobarbital (Trade name "Tuinal")

This is a combination of Amobarbital and Secobarbital.

- Pentobarbital (Trade name "Nembutal") (Street names "Yellows"; "Yellow Jackets")
- Phenobarbital (Includes Luminal and other trade names)
- Secobarbital (Trade name "Seconal")

Specific Non-Barbiturates Examples

Drug	Brand Name
Carisoprodol	Soma
Chloral hydrate	Noctec, Somnote
Diphenhydramine Hydrochloride	Benadryl, Sominex
Diphenylhydantoin Sodium	Dilantin
Eszopiclone	Lunesta

The Non-Barbiturates

The absence of street names implies only that illicitly-manufactured versions of these drugs are not common. The legally-manufactured versions are abused, however.

- Carisoprodol (Trade name “Soma”)
 - Chloral Hydrate (Trade names “Noctec” and “Somnote”)
 - Diphenhydramine Hydrochloride (Trade names “Benadryl”; “Sominex”; and “Nytol”)
 - Diphenylhydantoin Sodium (Trade name “Dilantin”)
 - Eszopiclone (Trade names “Eszopiclone”, “Estorra” and “Lunesta”)
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Specific Non-Barbiturates Examples

Drug	Brand Name
Ethchlorvynol	Placidyl
Gamma Hydroxybutyrate	Xyrem
Methypylon	Noludar
Methaqualone	Parest, Quaalude, Sopor, Optimil, Mandrax
Paraldehyde	Paral
Zolpidem	Ambien, Edular, Stilnoct

- Ethchlorvynol (Trade name “Placidyl”)
- Gamma Hydroxybutyrate (Street name “GHB”; “Liquid X”; “1,4-Butanediol”)
- Methaqualone (Trade names “Parest”; “Quaalude”; “Sopor”; “Optimil”; “Mandrax”)
- Paraldehyde (Trade name “Paral”)
- Zolpidem (Trade names “Ambien”, “Edluar” and “Stilnoct”)

Specific Anti-Anxiety Tranquilizers Examples

Drug	Brand Name
Alprazolam	Xanax
Chlordiazepoxide	Librium
Clonazepam	Klonopin
Diazepam	Valium
Estazolam	ProSom

The Anti-Anxiety Tranquilizers

- Alprazolam (Trade names “Xanax”, “Niravam”)
- Chlordiazepoxide (Trade name “Librium”)
- Clonazepam (Trade name “Klonopin”)
- Diazepam (Trade name “Valium”)
- Estazolam (Trade name “ProSom”)

Specific Anti-Anxiety Tranquilizers Examples

Drug	Brand Name
Flunitrazepam	Rohypnol
Flurazepam	Dalmadorm, Dalmane
Lorazepam	Ativan, Temesta
Meprobamate	Equanil, Miltown
Oxazepam	Serax
Temazepam	Restoril
Triazolam	Halcion

- Flunitrazepam (Trade name “Rohypnol”)
- Flurazepam (Trade names Dalmadorm”, “Dalmane”)
- Lorazepam (Trade names “Ativan” and “Temesta”)
- Meprobamate (Trade names “Equanil”, “Miltown”)
- Oxazepam (Trade name “Serax”)
- Temazepam (Trade name “Restoril”)
- Triazolam (Trade name “Halcion”)

Specific Antidepressants

Drug	Brand Name
Amitriptyline Hydrochloride	Elavil, Endep
Citalopram	Celexa
Desipramine Hydrochloride	Norpramin, Pertofrane
Doxepin Hydrochloride	Adapin, Sinequan
Duloxetine	Cymbalta

The Antidepressants

- Amitriptyline Hydrochloride (Trade names "Elavil"; "Endep")
- Citalopram (Trade name "Celexa")
- Desipramine Hydrochloride (Trade names "Norpramin"; "Pertofrane")
- Doxepin Hydrochloride (Trade names "Adapin"; "Sinequan")
- Duloxetine (Trade name "Cymbalta")

Specific Antidepressants

Drug	Brand Name
Escitalopram	Lexapro
Fluoxetine	Prozac, Sarafem
Fluvoxamine	Luvox
Imipramine	Tofranil
Paroxetine	Paxil

- Escitalopram (Trade name "Lexapro")
- Fluoxetine (Trade names "Prozac"; "Sarafem")
- Fluvoxamine (Trade name "Luvox")
- Imipramine (Trade name "Tofranil")
- Paroxetine (Trade name "Paxil")

Specific Antidepressants

Drug	Brand Name
Phenelzine Sulfate	Nardil
Sertraline	Zoloft
Trazodone	Desyrel
Venlafaxine	Effexor

- Phenelzine Sulfate (Trade name “Nardil”)

- Sertraline (Trade name “Zoloft”)

- Trazodone (Trade name “Desyrel”)

- Venlafaxine (Trade name “Effexor”)

Antidepressants Exceptions

Some antidepressants may cause an elevated pulse rate and pupil dilation. Antidepressants may also cause dry mouth, sore throat, blurred vision, urinary retention, muscle twitching, restlessness, and increased anxiety.

Specific Anti-Psychotic Tranquilizers Examples

Drug	Brand Name
Aripiprazole	Abilify
Chlorpromazine	Thorazine
Droperidol	Inapsine, Innovar
Haloperidol	Haldol
Lithium Carbonate	Lithane
Quetiapine	Seroquel

The Anti-Psychotic Tranquilizers

- Aripiprazole (Trade name "Abilify")
 - Chlorpromazine (Trade name "Thorazine")
 - Droperidol (Trade name "Inapsine")
 - Haloperidol (Trade name "Haldol")
 - Lithium Carbonate (Trade name "Lithane")
 - Quetiapine (Trade name "Seroquel")
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Some Combinations of Depressants

- Chlordiazepoxide in combination with Amitriptyline (Trade name: "Limbitrol")
- Chlordiazepoxide Hydrochloride in combination with Clidinium Bromide (Trade name: "Librax")
- Perphenazine in combination with Amitriptyline Hydrochloride (Trade name: "Trilafon" and "Etrafon")

The Combinations

- Chlordiazepoxide in combination with Amitriptyline (trade name "Limbitrol")
- Chlordiazepoxide Hydrochloride in combination with Clidinium Bromide (Trade name "Librax")
- Perphenazine in combination with Amitriptyline Hydrochloride (Trade name "Trilafon" and "Etrafon")

Common Methods of Ingestion CNS Depressants



Orally



Insufflation



Injection

Common Methods of Ingestion of CNS Depressants

- Most common and easiest method is orally
- There are reports of subjects crushing Xanax and Soma tablets, snorting the powder and getting an effect
 - This method results in a slow, but long, absorption process producing depressant symptoms for some time
- Some abusers prefer to use intravenous injection for Barbiturates
- Some abusers experience a “flash” or “rush” from intravenous injection of Barbiturates they do not experience from oral ingestion

Injection Paraphernalia of CNS Depressants



The injection paraphernalia used for Barbiturates are very similar to those used for Heroin. Examples:

- Spoon, for heating and dissolving the Barbiturate
- Cotton, for filtering the solution when drawing it into the needle
- Hypodermic syringe
- Tourniquet

However, the Barbiturate abuser will use a larger hypodermic needle because the barbiturate solution is thicker than the heroin solution.

The injection sites on the skin of a Barbiturate abuser appear quite different from those of a Heroin addict. For example, large swelling, about the size of a quarter or fifty cent piece, will frequently appear at the Barbiturate injection site.

Necrosis may occur: i.e., a decaying of the body's tissue at the injection site.

The dead tissue may begin to separate from the living tissue producing ulcerations.

The Barbiturate user who injects the drug usually will not display the same type of track marks as the heroin addict who uses repeated injections along the same vein.

Barbiturate abusers often will inject in parts of the body other than the forearm and will commonly exhibit the characteristic swellings at random locations on the extremities.

Possible Effects of CNS Depressants

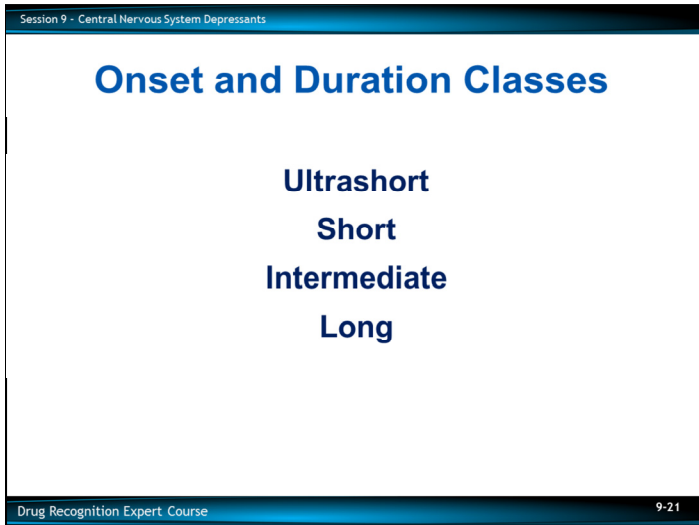
- Reduced inhibitions
- Divided attention impairment
- Slowed reflexes
- Impaired judgment and concentration
- Impaired vision
- Lack of coordination
- Slurred, mumbled or incoherent speech
- Emotional instability

B. Possible Effects

CNS Depressants produce impairments of the human mind and body that essentially mirror alcohol impairment.

- Reduced social inhibitions
- Divided attention impairment
 - Clarification: impede the person's ability to concentrate on more than one thing at a time
- Slowed reflexes
- Impaired judgment and concentration
- Impaired vision
 - Ability to focus eyes may be impaired; "double vision" may develop (Diplopia)
- Lack of coordination
- Slurred, mumbled, or incoherent speech
- Produce a variety of emotional effects, such as euphoria, depression, suicidal tendencies, laughing or crying without provocation, etc.

Generally speaking, a person under the influence of CNS Depressants will look and act drunk.



C. Onset and Duration Effects

Depressant drugs can be grouped loosely into four classes based on how quickly they take effect and how long their effects last.

Ultrashort:

- Very fast acting, very brief effects
- Take effect in a matter of seconds
- Effects last only a few minutes
- Very rarely are the “drugs of choice” for drug abusers

Ultrashort depressants are sometimes used at the beginning of a surgical operation, in conjunction with an inhaled anesthetic.

- Clarification: to provide a momentary sedation to ease the patient’s anxiety and allow for the proper administration of the anesthetic
- Psychiatrists sometimes use ultrashort depressants at the beginning of a session, to reduce the client’s inhibitions and foster a free and open communication

An example of an ultra short depressant is Brevital Sodium (Methohexital), which is a rapid, injectable barbiturate anesthetic mainly used in hospital settings.

Session 9 - Central Nervous System Depressants

Short Acting CNS Depressants

- Produce effects reasonably quickly
- Effects last long enough to “enjoy” the effects
- Most commonly abused class of CNS Depressants

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Short Acting

Short: fairly fast acting; effects last for approximately 4 hours.

- They produce effects reasonably quickly
- The effects last long enough to “enjoy” the effects
- Generally takes effect in 10 to 15 minutes
- This is the most commonly abused class of CNS Depressants

Short Acting Depressants frequently are prescribed as a treatment for insomnia. They also may be used as a pre-anesthetic medication to calm a patient prior to surgery.

A common example of a short acting Depressant, Secobarbital, Brand name “Seconal.”

Intermediate Acting CNS Depressants

- **Relatively slow acting, but prolonged effects**
- **Generally take effect in about 30 minutes**
- **Effects typically last about 6 – 8 hours**

Intermediate Acting

Intermediate: relatively slow acting, but prolonged effects.

- Generally take effect in about 30 minutes
- Effects typically last about 6 – 8 hours
- Fairly often abused, especially by users who desire a longer lasting state of intoxication
 - Medical use of this class of drugs is similar to that of short acting Depressants (i.e., treat insomnia, etc.)
 - Common example of an intermediate Depressant: Amobarbital, brand name “Amytal”

Short-to-Intermediate CNS Depressant Examples

Non-barbiturates

- Chloral Hydrate
- Methaqualone
- Placidyl
- Soma
- GHB
- Ambien

Non-Barbiturates

- Chloral Hydrate ("Mickey Finn") (Noctec)
- Methaqualone (Quaalude) ("Ludes")
 - Removed from U.S. market in 1984
 - Mainly produced illicitly
- Placidyl (Ethchlorvynol)
- Soma (Carisoprodol)
- GHB (Gamma Hydroxybutyrate)
- Ambien (Zolpidem)

Short-to-Intermediate CNS Depressant Examples

Anti-anxiety tranquilizers

- Valium
- Librium
- Xanax
- Serax
- Klonopin
- Ativan
- Rohypnol

Anti-Anxiety Tranquilizers

- Valium (Diazepam)
- Librium (Chlordiazepoxide)
- Xanax (Alprazolam)
- Serax (Oxazepam)
- Klonopin (Clonazepam)
- Ativan (Lorazepam)
- Rohypnol (Flunitrazepam)

Long Acting CNS Depressants

- **Generally take effect about one hour after ingestion**
- **Effects typically last 8 – 14 hours**
- **Phenobarbital (Luminal), and Flurazepam (Dalmane) are examples**

Long Acting: delayed but long lasting effects.

- Generally take effect about one hour after ingestion
- Effects typically last 8 – 14 hours
- Generally not the “drugs of choice” for abusers, however, some people will abuse the long acting Depressants if the more popular short and intermediate types 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.

Two examples of a long acting depressant are Phenobarbital (Luminal) and Flurazepam (Dalmane), both used primarily as a daytime sedative and anticonvulsant.

Session 9 - Central Nervous System Depressants

**How would you classify Alcohol
in terms of the onset and
duration of its effects?**

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Alcohol as a Specific Example

Overdose Signs and Symptoms

- **Subject will become extremely drowsy and may pass out**
- **Heartbeat (pulse) will be rapid and weak**
- **Respiration will become shallow**
- **Skin may feel cold and clammy**

D. Overdose Signs and Symptoms

Overdoses of the CNS Depressants produce symptoms essentially identical to those of alcohol overdoses.

- Subject will become extremely drowsy and may pass out
- The heartbeat (pulse) will be rapid and weak
- Respiration will become shallow
- Skin may feel cold and clammy
- One major danger with CNS Depressant overdoses is death from respiratory failure
- A sufficiently high dose of CNS Depressant will suppress the portions of the brain that control respiration

This situation only rarely occurs from alcohol intoxication: usually, a drinker will pass out before he or she consumes enough alcohol to suppress respiration completely. With other depressants, it is relatively easy to take a fatal overdose.

Danger

- **CNS Depressants combined with Alcohol**
- **More than an additive effect**



Another major danger with CNS Depressants occurs when they are combined with alcohol.

- Clarification: 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.

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.

Session 9 - Central Nervous System Depressants

Evaluation of Subjects Under the Influence of CNS Depressants

- HGN – Present
- VGN – Present (with high doses for that individual)
- LOC – Present
- Psychophysical Impairment – Present

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E. Expected Results of the Evaluation

Observable Evidence of Impairment

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.

Evaluation of Subjects Under the Influence of CNS Depressants

Vital Signs

- **Pulse – Down⁽²⁾**

⁽²⁾ Quaaludes, ETOH and possibly some antidepressants may elevate

- **Blood pressure – Down**
- **Body temperature – Normal**

Muscle Tone – Flaccid

Vital Signs

- Pulse will be Down ⁽²⁾
- ⁽²⁾ Quaaludes, ETOH and possibly some antidepressants may elevate
- Blood pressure will be Down
- Body temperature generally will be in the Normal Range (98.6 plus or minus one degree)

Muscle Tone

- Muscle tone will be Flaccid

Evaluation of Subjects Under the Influence of CNS Depressants

Dark Room Examinations

- **Pupil size – Normal⁽¹⁾**

⁽¹⁾ Soma, Quaaludes and some antidepressants usually dilate pupils

- **Pupillary reaction to light – Slow**

Dark Room Examinations

- Pupil sizes will generally be normal
- ⁽¹⁾ Soma, Quaaludes and some antidepressants usually dilate pupils
- Pupillary reaction to light will be slowed

Session 9 - Central Nervous System Depressants

Evaluation of Subjects Under the Influence of CNS Depressants

General Indicators:

- Disoriented
- Droopy eyelids (ptosis)
- Drowsiness
- Drunk-like behavior
- Unsteady walk
- Slow, sluggish reactions
- Thick, slurred speech
- Uncoordinated

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General Indicators

- Disoriented
- Droopy eyelids (ptosis)
- Drowsiness
- Drunk-like behavior
- Unsteady walk
- Slow, sluggish reactions
- Thick, slurred speech
- Uncoordinated

NOTE:

- With Methaqualone, pulse will be elevated and body tremors may be evident
- Quaaludes, Alcohol, and some antidepressants elevate the pulse
- Soma, Quaaludes, and some antidepressants usually dilate pupils

Antidepressant Exceptions:

- As a reminder, some Antidepressants may cause elevated pulse rate and pupil dilation

Antidepressants may cause sore throat, dry mouth, blurred vision, urinary retention, muscle tremors, restlessness, and increased anxiety.

CNS Depressant Symptomatology Chart

HGN	Present
VGN	Present (High dose for that individual)
LOC	Present
Pupil Size	Normal ⁽¹⁾
Reaction to Light	Slow
Pulse Rate	Down ⁽²⁾
Blood Pressure	Down
Temperature	Normal
Muscle Tone	Flaccid

⁽¹⁾ Soma, Quaaludes and some antidepressants usually dilate pupils

⁽²⁾ Quaaludes, ETOH and some antidepressants may elevate

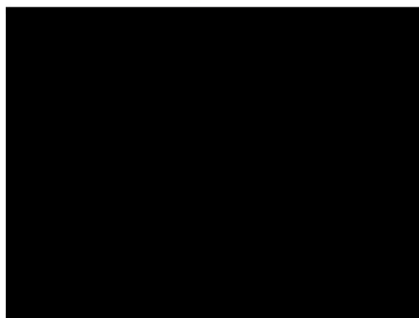
Drug Evaluation and Classification

Exemplar Demonstrations

F. Classification Exemplars

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

CNS Depressants



Session 9 - Central Nervous System Depressants

QUESTIONS?

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Test Your Knowledge

1. Name the six major subcategories of CNS Depressants.
2. Name the four groups of Depressants based on onset and duration time factors.
3. To which subcategory of Depressants does Thorazine belong? To which subcategory does Chloral Hydrate belong? To which subcategory does Xanax belong?

Test Your Knowledge

1. Name the six major subcategories of CNS Depressants.

2. Name the four groups of Depressants based on onset and duration time factors.

3. To which subcategory of Depressants does Thorazine belong? To which subcategory does Chloral Hydrate belong? To which subcategory does Xanax belong?

Test Your Knowledge

4. Name a CNS Depressant drug that usually causes the pupils to dilate.
5. What is the generic name for the drug that has the trade name "Prozac"?
6. What is a trade name for the generic drug "Alprazolam"?
7. What is the name of the subcategory of CNS Depressants that is also known as the "Minor Tranquilizers"?

4. Name a CNS Depressant drug that usually causes the pupils to dilate.

5. What is the generic name for the drug that has the trade name "Prozac"?

6. What is a trade name for the generic drug "Alprazolam"?

7. What is the name of the subcategory of CNS Depressants that is also known as the "Minor Tranquilizers"?

DRUG INFLUENCE EVALUATION

Evaluator <i>Officer Bradley Johnson</i>		DRE # <i>22607</i>	Rolling Log # <i>17-08-155</i>	Evaluator's Agency <i>Manheim PD</i>	Case # <i>17-445788</i>	Session IX-#1	
Recorder/Witness <i>Trooper Craig Johnson, PA SP State</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <i>PA State Police</i>			
Arrestee's Name (Last, First, Middle) <i>Ludes, Lucy</i>		Date of Birth <i>04/12/82</i>	Sex <i>F</i>	Race <i>W</i>	Arresting Officer (Name, ID#) <i>Trooper Frank Cichra #13886</i>		
Date Examined / Time / Location <i>08/06/17 0145 Harrisburg SP Barracks</i>		Breath Test: Results: <i>0.00</i>		Test Refused <input type="checkbox"/> Instrument #: <i>22445</i>		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: <i>Tpr Cichra</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? <i>Soup About 4 pm</i>		What have you been drinking? How much? Time of last drink? <i>Nothing N/A N/A</i>			
Time now/ Actual <i>"midnight"/0150</i>	When did you last sleep? <i>Last night</i>	How long? <i>6-7 hours</i>	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 <i>"Some pills from my brother"</i>		Attitude: <i>Cooperative</i>		Coordination: <i>Poor, Staggering</i>			
Speech: <i>Slurred at times</i>		Breath odor: <i>Normal</i>		Face: <i>Normal</i>			
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"/> Yes <input checked="" type="checkbox"/> No		
Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy		Pulse/ Time		HGN		Convergence	
1. <i>56 / 0202</i>		Lack of Smooth Pursuit		Right Eye		22/30	
2. <i>58 / 0218</i>		Maximum Deviation		Left Eye		One Leg Stand 25/30	
3. <i>58 / 0240</i>		Angle of Onset		35			
Modified Romberg Balance Approx. 2" 2" 2" 2"		Walk and Turn Test		Cannot keep balance <input checked="" type="checkbox"/>		L R	
				Starts too soon <input checked="" type="checkbox"/>		All All	
				Stops walking		Sways while balancing	
				Misses heel-toe		Uses arms to balance	
				Steps off line		Hopping	
				Uses arms		Puts foot down	
				Actual steps taken			
Time Estimation <i>46</i> estimated as 30 seconds		Describe turn <i>Staggered, took five steps</i>		Cannot do test (explain) <i>N/A</i>		Type of footwear: <i>Lace-up athletic shoes</i>	
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: <i>Clear</i>
		Left Eye		4.0	6.0	3.5	Oral cavity: <i>Clear</i>
		Right Eye		4.0	6.0	3.5	
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <i>Slow</i>			
		RIGHT ARM		LEFT ARM			
Blood Pressure <i>110 / 66</i>		Temperature <i>98.2 °F</i>		Nothing observed			
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>Don't know. Something brother gave me.</i>		How much? <i>A couple of pills</i>		Time of use? <i>About 10 pm</i>		Where were the drugs used? (Location) <i>At my brother's house</i>	
Date / Time of arrest: <i>08/06/17 / 0015</i>	Time DRE was notified: <i>0130</i>	Evaluation start time: <i>0145</i>	Evaluation completion time: <i>0300</i>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation			
DRE/Officer's Signature: <i>Bradley Johnson</i>		Reviewed/approved by / date:				DRE# <i>22607</i>	
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"/> Narcotic Analgesic	
						<input type="checkbox"/> Inhalant	
						<input type="checkbox"/> Cannabis	

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Ludes, Lucy

1. **Location:** The drug influence evaluation was conducted in the Interview Room at the Harrisburg State Police Barracks in Harrisburg, PA. 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 inside a restroom at that location.
2. **Witnesses:** Trooper Craig Johnson of the Pennsylvania State Police was observed and recorded the entire evaluation.
3. **Breath Alcohol Test:** A breath test was administered to the suspect prior to my arrival with the results of 0.00 and 0.00 BAC.
4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to contact Trooper Frank Cichra of the PA State Police for a drug evaluation. I contacted Trooper Cichra at the Harrisburg Barracks where it was determined he had stopped the suspect on Interstate 283 for driving 40 mph and in violation of the minimum speed limit. While speaking with the suspect, Trooper Cichra noted that she was disoriented and exhibited drunk-like behavior. However, Trooper Cichra did not detect an odor of an alcoholic beverage on her breath. Trooper Cichra determined that the suspect did not have any injuries or physical problems. He administered SFSTs at roadside and observed all six clues of Horizontal Gaze Nystagmus (HGN), four clues on the Walk and Turn (W&T) test, and three clues on the One Leg Stand (OLS) test. According to Trooper Cichra, the suspect appeared intoxicated and displayed poor balance and coordination throughout the contact and several times used the side of her vehicle to steady herself. She told Trooper Cichra that she was not drunk, just tired. Trooper Cichra arrested the suspect for DWI, and transported her to the Harrisburg Barracks for breath testing. After obtaining a .00 BAC result, Trooper Cichra requested a DRE to assist with the investigation.
5. **Initial Observation of the Suspect:** I first observed the suspect in the Interview Room of the Harrisburg Barracks. She appeared 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 tried to walk, she staggered and several times used the wall to steady herself. I introduced myself and advised her that I had been requested to conduct a drug evaluation and asked if she would consent to the evaluation. She responded, "Okay, but I'm not drunk. I'm just really tired." I asked if she had been advised of her Miranda rights and she said, "Yes. When I got arrested. But I don't why. I'm not drunk." I noted that the suspect was wearing blue jeans, a Steelers tee-shirt, and white lace-up athletic shoes without socks.
6. **Medical Problems and Treatment:** Ludes 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."
7. **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 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, as well as a side to side sway of approximately two inches in each direction.

Walk and Turn: For this test, a line in the tile flooring was used. The suspect lost her balance one time during the instructions stage. She also attempted to start the test too soon one time. During the walking stage, she missed 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, raised her arms for balance twice on the first nine steps and once on the second nine steps. She also took an incorrect number of steps, taking eleven steps instead of nine as directed. During the turn, she staggered and required five steps to regain her balance and resume the test.

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, hopped once, and put her foot down at count 1,020. She counted slowly and 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, hopped, and put her foot down at 1,007. She counted to 1,025 at the conclusion of the 30 seconds.

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.

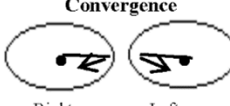
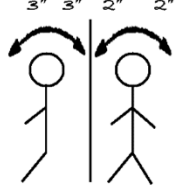
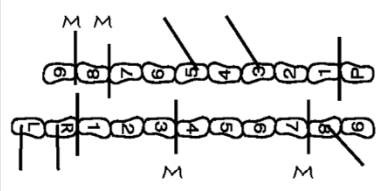

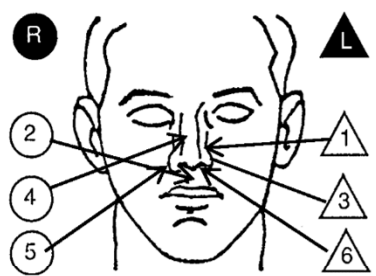
8. Clinical Indicators of Impairment:

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. During the pupil size examinations, the suspect's 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 reaction to light.

Vital Signs: Her pulse rates were checked three times during the evaluation: 1) at 0202 hours - 56 beats per minute (bpm); 2) at 0218 hours - 58 bpm; and 3) at 0240 hours it was 58 bpm. All three were below the DRE average range of 60 - 90 bpm. Her blood pressure was measured at 110/66, which was also 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:** Trooper Cichra advised the suspect of her Miranda rights and she agreed to waive her rights and answer questions. She stated she had received a couple of pills from her brother to help her with some anxiety issues she was having. She stated she had taken them at about 10 pm (approximately two hours before arrest). 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 medication.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Ludes is under the influence of a CNS Depressant and is unable to operate a vehicle safely.
12. **Toxicological Sample:** After the evaluation, Trooper Cichra transported the suspect to the Pinnacle Health Hospital in Harrisburg where a blood sample was collected at 0335 hours. Trooper Cichra submitted the blood sample as evidence pending analysis by the PA State Laboratory.
13. **Miscellaneous:** Refer to Trooper Cichra's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator Officer Russ Kenney		DRE # 9296	Rolling Log # 17-03-55	Evaluator's Agency Milford PD	Case # 17-2235	Session IX-#2														
Recorder/Witness Sgt Wesley Stought OH SP		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Ohio State Patrol																
Arrestee's Name (Last, First, Middle) Downers, Dudley R.		Date of Birth 04/02/86	Sex M	Race W	Arresting Officer (Name, ID#) Trooper Christopher Ellison #22367															
Date Examined / Time / Location 03/16/17/2130 / Clermont Office		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #: 44612	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: Tpr Ellison	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? Ham sandwich & chips 6 pm		What have you been drinking? How much? Time of last drink? Water N/A N/A																
Time now/ Actual 11pm / 2135	When did you last sleep? Last night	How long? About 7 hours		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 Sleeping pills		Attitude: Cooperative		Coordination: Poor, Unsteady																
Speech: Slurred, Thick		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																
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"/> Yes <input checked="" type="checkbox"/> No		Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal																
Pulse/Time	HGN	Left Eye	Right Eye	Convergence																
1. <u>54</u> / <u>2145</u>	Lack of Smooth Pursuit	Present	Present																	
2. <u>52</u> / <u>2155</u>	Maximum Deviation	Present	Present																	
3. <u>54</u> / <u>2210</u>	Angle of Onset	30	30																	
Modified Romberg Balance Approx. 3" 3" 2" 2" 		Walk and Turn Test  <i>Slow, deliberate steps</i>		25/30 One Leg Stand 24/30 																
		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>																		
		Starts too soon																		
		Stops walking																		
		Misses heel-toe																		
		Steps off line																		
		Uses arms																		
		Actual steps taken																		
				<table border="1" style="width: 100%;"> <tr> <td>L</td> <td>R</td> <td></td> </tr> <tr> <td>1</td> <td>All</td> <td>Sways while balancing</td> </tr> <tr> <td>1</td> <td>1</td> <td>Uses arms to balance</td> </tr> <tr> <td>0</td> <td>0</td> <td>Hopping</td> </tr> <tr> <td>1</td> <td>2</td> <td>Puts foot down</td> </tr> </table> <p style="text-align: center;"><i>Counted slowly</i></p>		L	R		1	All	Sways while balancing	1	1	Uses arms to balance	0	0	Hopping	1	2	Puts foot down
L	R																			
1	All	Sways while balancing																		
1	1	Uses arms to balance																		
0	0	Hopping																		
1	2	Puts foot down																		
Time Estimation <u>38</u> estimated as 30 seconds		Describe turn Lost balance		Cannot do test (explain) N/A																
Type of footwear: Lace-up shoes		Nasal area: Clear		Oral cavity: Clear																
Reaction to Light: Slow		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																		
Finger to Nose (Draw lines to spots touched)  <i>Slow hand and arm movements</i>		PUPIL SIZE		Room light (2.5-5.0)																
		Left Eye		Darkness (5.0-8.5)																
		Right Eye		Direct (2.0-4.5)																
		4.5		6.5																
		4.5		3.5																
		4.5		6.5																
		4.5		3.5																
		Nothing observed																		
Blood Pressure 118/58		Temperature 98.0 °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? Some medicine to help me sleep		How much? 1 pill		Time of use? About 9 pm																
Where were the drugs used? (Location) At work																				
Date / Time of arrest: 03/16/17 / 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: Russ Kenney		Reviewed/approved by / date:		DRE# 9296																
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: Downers, Dudley R.

- 1. Location:** The drug evaluation was conducted in the Interview Room at the Clermont Ohio State Highway Patrol Office. The surface in the Interview Room was level and free of obstructions, and there was adequate lighting for conducting the evaluation. The darkroom examinations were conducted inside the staff restroom.
- 2. Witnesses:** Sergeant Wes Stought of the Ohio State Patrol observed and recorded the evaluation.
- 3. Breath Alcohol Test:** A breath test was administered to the suspect prior to my arrival with a 0.00% result.
- 4. Notification and Interview of the Arresting Officer:** I was off duty and contacted by the OHP Dispatch Center and requested to conduct a drug evaluation for Trooper Ellison. I responded to the Clermont Ohio HP Office and contacted 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 and slow, unsteady movements. Trooper Ellison administered SFSTs at roadside and observed all 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 a pill to help him sleep prior to leaving work. Trooper Ellison arrested the suspect for OVI and transported him to Clermont OHP 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 OHP Office. He was cooperative, but at times was slow to respond to questions. His speech was slurred and thick. There was no 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 often 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 long-sleeve shirt and black 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. He admitted to being "just tired."
- 7. Psychophysical Indicators of Impairment:** Prior to administering the psychophysical tests, each test was explained and demonstrated to the suspect. After each demonstration, the suspect 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. During the time estimation, 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.

Walk and Turn: A line on the floor was used for this test. The suspect lost his balance two times during the instructions stage. During the walking stage, the suspect missed 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 raised his arms for balance twice during each of the nine steps. When attempting the turn, the suspect lost his balance. Throughout the test, the suspect took slow, deliberate steps. He was wearing lace-up dress shoes and was given the opportunity to remove them. However, he wanted to leave them on for the test.

One Leg Stand: This test was conducted twice, once with the suspect standing on his left foot and once standing on his right foot. When standing on his left foot, the suspect swayed while balancing, used his arms for balance once, and put his foot down at count 1,009. He counted slowly, reaching 1,025 at the conclusion of the 30 seconds. While standing on his right foot, the suspect swayed while balancing throughout the test, used his arms for balance once, and put his foot down at 1,011 and at 1,017. He counted 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. On one attempt (#2), he missed his nose entirely and touched his upper lip.

8. Clinical Indicators of Impairment:

Eyes Signs: The suspect exhibited all six clues of HGN with an angle of onset of approximately 30 degrees. Vertical Gaze Nystagmus was not present. He was unable to converge his eyes as instructed. 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. The suspect had a slow 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 below the DRE average range. 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.

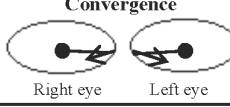
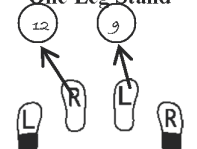
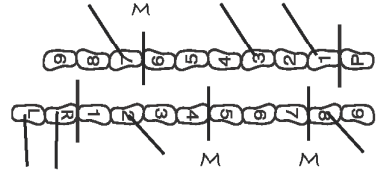
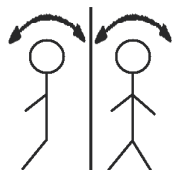
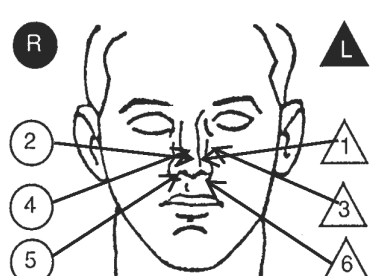

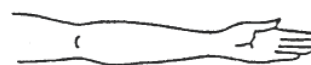
10. Suspect's Statements: Trooper Ellison advised Downers of his Miranda rights and he agreed to waive his rights and answer questions. He stated he had taken a sleeping pill to help him sleep at "around 9 pm" when he left work. The suspect mentioned numerous times how sleepy and tired he was.

11. DRE's Opinion: It is my opinion as certified Drug Recognition Expert that Downers 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 at 2300 hours. The blood draw was witnessed by Trooper Ellison, who submitted it into evidence pending delivery to the state crime laboratory for analysis.

13. Miscellaneous: Downers was disoriented with the time throughout the evaluation. At the beginning of the evaluation he believed it was 11 pm (actual time was 2130), 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 Sergeant Elicer Ayala		DRE # 11472	Rolling Log # 17-09-35	Evaluator's Agency New Jersey State Police	Case # 17-88972	Session IX-#3											
Recorder/Witness Sgt. Michael Gibson New		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency West Long Branch PD													
Arrestee's Name (Last, First, Middle) Flynn, Mickey		Date of Birth 03/11/80	Sex M	Race W	Arresting Officer (Name, ID#) Officer Jeffrey Hanlon #14172												
Date Examined / Time / Location 09/06/17 1910 West Long		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/>	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 Hanlon		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? Cheeseburger & fries 6		What have you been drinking? How much? Time of last drink? Diet Coke N/A N/A												
Time now/ Actual 7:30 PM / 1915		When did you last sleep? How long? Last night 4-5 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No Dr. Smith (for stress)													
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Xanax			Attitude: Cooperative		Coordination: Poor, Slow												
Speech: Slurred, Thick 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No											
Eyelids <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Droopy		Pulse/Time		HGN		Left Eye		Right Eye		Convergence		25/30		One Leg Stand		24/30	
1. 54 / 1930		Lack of Smooth Pursuit		Present		Present				Right eye		Left eye					
2. 58 / 1942		Maximum Deviation		Present		Present											
3. 56 / 2000		Angle of Onset		40		40											
Modified Romberg Balance Approx. 3" 3" 3" 3"		Walk and Turn Test				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"/>		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		9		9							
Time Estimation 50 estimated as 30 seconds		Describe turn Lost balance		Cannot do test (explain) N/A		Type of footwear: Slip-on dress 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							
		Left Eye		4.0		6.5		2.5		Oral cavity: Clear							
		Right Eye		4.0		6.5		2.5		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Slow					
Swayed forward. Slow movements.		RIGHT ARM				LEFT ARM											
Blood Pressure 106 / 68		Temperature 98.0 °F															
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Nothing observed															
Comments:		What drugs or medications have you been using? "Just some Xanax"		How much? "One or two. Can't"		Time of use? 6 pm		Where were the drugs used? (Location) McDonald's									
Date / Time of arrest: 09/06/17 / 1820		Time DRE was notified: 1845		Evaluation start time: 1910		Evaluation completion time: 2020		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation									
DRE/Officer's Signature: Elicer Ayala		Reviewed/approved by / date:														DRE# 11472	
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: Flynn, Mickey

- Location:** The drug evaluation was conducted in the 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 tile floor with no obstructions.
- Witnesses:** Sergeant Michael Gibson of the New Jersey State Police observed and recorded the drug evaluation. Arresting officer, Officer Jeffrey Hanlon observed the psychophysical tests.
- Breath Alcohol Test:** A breath test was administered to the suspect by Officer Hanlon at 1835 hours. The result of the breath test was a 0.00.
- Notification and Interview of the Arresting Officer:** While on duty and part of a special DWI enforcement operation in the Monmouth County area, I was requested to contact Officer Hanlon for a drug evaluation. Upon my arrival to the Long Branch Police Department, Officer Hanlon advised he had located the suspect's vehicle stopped partially in the southbound lane of Cedar Avenue. The suspect was slumped over the steering wheel and appeared to be unconscious. Further investigation revealed the suspect had been operating the vehicle. After determining that the suspect was not injured and not experiencing a medical emergency, Officer Hanlon conducted a DUI investigation, which included administering SFSTs to the suspect. According to Officer Hanlon, the suspect exhibited six clues of Horizontal Gaze Nystagmus (HGN), four clues on the Walk and Turn (W&T) test, and three clues on the One Leg Stand (OLS) test. The suspect was arrested for DUI and transported to the West Long Branch PD. Based upon the breath test results, Officer Hanlon requested a DRE to assist with the investigation. According to Officer Hanlon, the suspect stated several times that he was not drunk and admitted taking a medication for stress.
- Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the Long Branch PD where he was slumped over in a chair and had a "drunk-like" appearance. He was cooperative and was answering questions. His speech was slurred and thick. His coordination was poor and his movements were unusually slow. I introduced myself to the suspect and informed him that I had been requested to conduct a drug evaluation, which he agreed to do, by stating, "Well, okay. I'm not drunk. You know that don't you?" He was slow to respond to my questions. His pupils appeared normal in size, and his eyelids were droopy. I confirmed that the suspect had been advised of his Miranda rights and the suspect agreed to answer my questions. I noted that the suspect was wearing dress pants, an opened collared dress shirt and black slip-on dress shoes. He advised me that he had just gotten off work and was on his way home, and had a very stressful day at work.
- Medical Problems and Treatment:** The suspect was asked about any injuries or physical defects. He stated he was seeing a doctor for treatment of stress. He stated he was taking a medication that sometimes made him very tired. He stated he did not have any other physical or medical problems, and none were mentioned or observed during the evaluation.
- Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect confirmed he understood the instructions and agreed to do the tests. The following tests were administered:

Modified Romberg Balance: During this test, Flynn's time estimation was slow as he estimated 30 seconds in 50 seconds. When asked how he had estimated the 30 seconds, he stated, "I just tried to count in my head." During the test, the suspect had a side to side and front to back sway of approximately three inches in each direction.

Walk and Turn: For this test, a line on the tile floor was used. The suspect lost his balance two times during the instructions stage. During the walking stage, he missed heel to toe two times on the first nine steps and once on the second nine steps. He also stepped off the line twice during the first nine steps and three times on the second nine steps. He raised his arms for balance three times on each set of nine steps. He made an improper turn losing his balance and staggering to the right. Throughout the test, the suspect took slow steps. He was given the opportunity to remove his shoes prior to the test and he preferred to keep them on.

One Leg Stand: This test was conducted twice, once standing on the left foot and once standing on the right foot. While standing on his left foot, the suspect swayed while balancing, used his arms for balance once, and put his foot down at count 1,012. The suspect reached 1,025 when the test was stopped after 30 seconds. While standing on his right foot, the suspect swayed while balancing throughout the test, used his arms for balance once, and put his foot down at 1,009. The suspect reached 1,024 when the test was stopped after 30 seconds. After the test was completed, he staggered to the right and used the wall to balance himself.

Finger to Nose: During this test, the suspect swayed forward on each attempt. He failed to touch the tip of his nose with the tip of his index finger as directed all six attempts. His arm and hand movements were slow and deliberate, and he searched for the tip of his nose on all the attempts.

8. Clinical Indicators of Impairment:

Eye Signs: The suspect displayed all six clues of HGN with an angle of onset of approximately 40 degrees. Vertical Gaze Nystagmus was not present. He was not able to converge his eyes as instructed. During the pupil size examinations, his pupils were estimated at 4.0 mm in both eyes in Room Light, 6.5 mm in both eyes in Near Total Darkness, 2.5 mm in both eyes in Direct Light. All were within the DRE average ranges. Rebound dilation was not present. He had a slow reaction to light.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation with the following results: 54 beats per minute (bpm) at 1930, 58 bpm at 1942 hours, and 56 bpm at 2000 hours. All three were below the DRE average range of 60-90 bpm. His blood pressure was measured at 106/68, which was below the DRE average range. His body temperature was 98.0 degrees, which is in 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 rights when arrested and he agreed to waive his rights and answer questions. He stated he had taken Xanax several times during the day for stress, but could not recall how many he had taken. He thought he took the last one when he stopped for a meal at McDonald's around 6 pm while on his way home.

11. DREs Opinion: It is my opinion as a certified Drug Recognition Expert that Flynn is under the influence of a CNS Depressant and is unable to 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."

Session 10

Central Nervous System Stimulants



Learning Objectives

- **Explain a brief history of CNS Stimulant drugs**
- **Identify common drug names and terms**
- **Identify common methods of administration**

Upon successfully completing this session the participant will be able to:

- Explain a brief history of the Central Nervous System (CNS) Stimulant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category

Learning Objectives

- **Describe signs, symptoms, and other effects**
- **Explain typical time parameters**
- **Describe indicators likely to emerge**

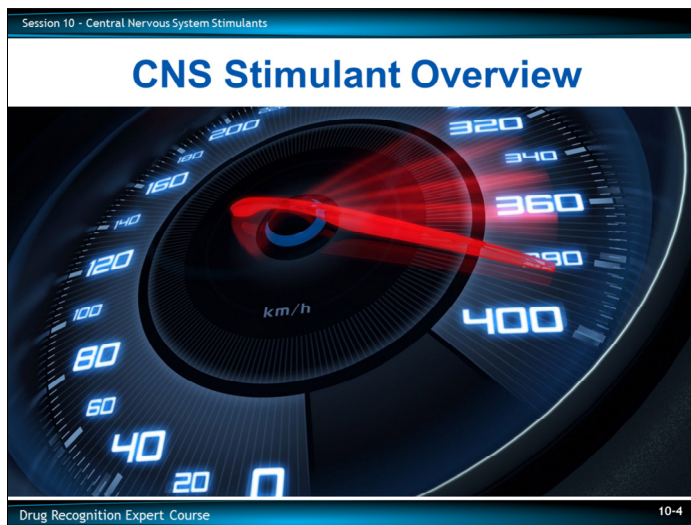
- Describe the symptoms, observable signs, and other effects associated with this category
- Describe typical time parameters, i.e., onset and duration of effects, associated with this category
- List the clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this category of drugs

CONTENT SEGMENTS

- A. Overview of the Category
- B. Possible Effects
- C. Onset and Duration Effects
- D. Overdose Signs and Symptoms
- E. Expected Results of the Evaluation
- F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Review of the DEC Program Exemplars
Reading Assignments
Video Presentations
Slide Presentations



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) – 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, Dexedrine, and Ritalin
- Methamphetamine – Illegally-produced drug, with the exception of Desoxyn, which is a prescription drug used to treat narcolepsy and ADHD
- Caffeine, Herbal Ecstasy, Ephedrine, Pseudoephedrine, and various energy drinks
- 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
- However, Robert Louis Stevenson wrote “The Strange Case of Dr. Jekyll and Mr. Hyde” while under the influence of Cocaine
 - He wrote 60,000 words in six days

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.

Subcategories of CNS Stimulants

Cocaine



Subcategories of CNS Stimulants

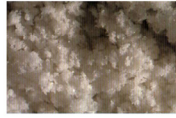
There are three major subcategories of CNS Stimulants.

Cocaine

Subcategories of CNS Stimulants

Amphetamines

- Methamphetamine
- Amphetamine Sulfate
- Desoxyn



NDC 0555-0787-02
Adderall®
 (Dextroamphetamine Saccharate,
 Amphetamine Aspartate,
 Dextroamphetamine Sulfate and
 Amphetamine Sulfate Tablets)
 (Mixed Salts of a Single Entity
 Amphetamine Product)
20 mg
 PHARMACEL: Dispense the accompanying
 Medication Guide to each patient.
Rx only
100 TABLETS
TEVA

Amphetamines

Examples:

- Methamphetamine
- Amphetamine Sulfate
- Desoxyn
 - Also includes (d-Methamphetamine) (d-Desoxyephedrine) and Methedrine
 - Desoxyn was first developed in 1919 and has been used clinically since 1930
 - Mainly used for the treatment of obesity, narcolepsy, and attention disorder

Subcategories of CNS Stimulants

Others

- Ritalin
- Ephedrine
- Caffeine



Others

There are many “other” CNS Stimulants (i.e., non-Cocaine and non-Amphetamines); the ones listed on the visual are only a few of those.

- Ritalin (Methylphenidate Hydrochloride)
 - Also brand names of Concerta, Daytrana
 - Used in the treatment of depression, narcolepsy, and ADHD
 - Ephedrine –(Primatene, Quadrinal)
 - Can be found in some naturally-occurring plants such as the Chinese herb Ma Huang
 - Used as a nasal decongestant and bronchodilator
 - Contained in numerous over-the-counter (OTC) supplements and energy products

- Caffeine
 - Contained in coffee and numerous energy drinks
 - Some “Monster drinks” contain as much as 240 milligrams of Caffeine
 - Can be fatal at about 10 grams

Coca Plant

“*Erythroxylon Coca*”



Cocaine

Coca plant: Scientific name “*Erythroxylon Coca*.”

Cocaine derives from the Coca plant.

- The plant is native to South America
- Cocaine is made from the leaves of the Coca plant
- 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

Amphetamines



Amphetamines

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

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.

Medical Uses of Amphetamines

- **Control appetite, symptoms of narcolepsy, and hyperactivity in children**
- **Relieve or prevent fatigue**
- **Treat mild depression**

Present-day medical purposes for Amphetamines include:

- Control appetite
 - Many OTC appetite control products contain CNS Stimulants as their active ingredient
- Control symptoms of narcolepsy
 - Narcolepsy is an extremely rare disorder that causes the individual to fall asleep compulsively, often several hundred times per day
- Control certain hyperactive behavioral disorders
 - Example: Ritalin is commonly prescribed for children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) or similar disorders
- Relieve or prevent fatigue to allow persons to perform essential tasks of long duration
 - 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
- Treat mild depression

Commonly Prescribed Pharmaceutical Amphetamines

- **Dexedrine**
Dextroamphetamine Sulfate
- **Adderall**
Dextroamphetamine and Amphetamine
- **Benzedrine**
Amphetamine Sulfate
- **Desoxyn**
Methamphetamine Hydrochloride

Examples of common pharmaceutical Amphetamines:

- Dexedrine (Dextroamphetamine Sulfate) used to treat narcolepsy, hyperkinetic behavior, and for weight control
- Adderall (Combination of Dextroamphetamine and Amphetamine Sulfate) is used for the treatment of ADHD and narcolepsy
- Benzedrine (Amphetamine Sulfate) is used to treat narcolepsy, hyperkinetic behavior, and weight problems
- Desoxyn (Methamphetamine Hydrochloride, also known as Desoxyephedrine) is used in weight reduction

Commonly Abused Illicit Amphetamines

Methamphetamine



Large quantities of Amphetamines are also illegally manufactured in this country.

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.

Medicinally, forms of Methamphetamine can be used in the treatment of:

- Narcolepsy
- ADHD

Methamphetamine is also known as Methedrine or Methamphetamine Hydrochloride. Its more common street names are "Speed," "Crank," "Ice," "Crystal," "Meth," and "Water."

Other CNS Stimulants

- **Ritalin**
Methylphenidate Hydrochloride
- **Ephedrine**
- **Cathine and Cathinone**
- **Methcathinone**



Other CNS Stimulants

There are some other CNS Stimulants, apart from Cocaine or Amphetamines.

Ritalin

Ritalin is a manufactured, non-Amphetamine CNS Stimulant:

- Generic name Methylphenidate Hydrochloride
- Used to treat mild depression, hyperkinetic behavior, narcolepsy, and drug-induced lethargy produced by CNS Depressants
- 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-Sahara regions of Africa. Also known as “Cat.”

Methcathinone is illicitly manufactured from common household chemicals. Effects are very similar to Methamphetamine.

Other CNS Stimulants

- Energy drinks
- OTC



Other CNS Stimulants

Energy Drink Phenomenon

In the 1980's, the marketing and use of energy drinks changed dramatically with the advent of Red Bull. With 80 mg of Caffeine, Red Bull contains more than twice the amount of Caffeine found in a 12-ounce can of Coca-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.

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.

Methods of Ingesting Stimulants



Common Methods of Ingestion of CNS Stimulants

There are a variety of ways in which the different CNS Stimulants may be ingested.

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”
- Legally-manufactured Amphetamines are taken orally, in the form of tablets, capsules, and liquid elixirs

Common Methods of Ingesting Stimulants

- **Methamphetamine**

- ✓ **Injection**



- ✓ **Orally**

- ✓ **Snorting**

- ✓ **Smoking**



- **Other Amphetamines**

- ✓ **Orally**



- 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: Drug Identification Bible 2014-2015**

- Amphetamine Sulfate usually is produced in tablet form (called “Mini Bennies”) and is taken orally

Possible Effects of CNS Stimulants

- Euphoria
- Hyperactivity
- Release of inhibitions
- Misperception of time and distance
- Inability to concentrate
- Bruxism (Grinding of the teeth)



B. Possible Effects

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 and the dulling of pain may contribute to the euphoria

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 release 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 lose the ability to concentrate or to think clearly for any length of time.

Cocaine Time Factors

- **Smoked (freebase) • Injected**
 - **Virtually immediate effects**
 - **Very intense “rush”**
 - **Effects last 5-10 minutes**
- **Effects are felt within seconds**
 - **Very intense “rush”**
 - **Effects generally last 5-15 minutes**



C. Onset and Duration of Effects

The onset and duration of effects are quite different for Cocaine as compared to Amphetamines.

- Generally speaking, Cocaine’s effects are much briefer than are Amphetamine’s
- The time parameters of Cocaine vary with the method of ingestion

Cocaine: Smoked

When Cocaine is smoked, or “freebased,” the drug goes immediately to the lungs and is absorbed into the blood stream very rapidly.

- The smoker begins to feel the effects of the Cocaine virtually immediately
- The “rush” or euphoria is reported to be very intense
- However, the euphoric effect only last 5 – 10 minutes after the Cocaine is smoked

Cocaine: Injected

When Cocaine is injected, the drug is passed directly to the blood stream, where it is carried swiftly to the brain.

- The effects are felt within seconds
- The onset of effects is very intense

Injection sites will be discussed in Narcotic Analgesics

- The effects generally last 5 - 15 minutes

Cocaine Time Factors

- **Snorted (insufflated)**
 - **Effects are felt within 30 seconds**
 - **Intense "rush"**
 - **Effects last 30-90 minutes**



Cocaine: Snorted

When Cocaine is snorted (insufflated), the onset of effects is not quite as rapid as with smoking or injecting.

Snorting remains a very popular method of ingesting Cocaine.

- The user typically feels the onset of effects within 30 seconds after snorting the drug
- Although the "rush" occurs, it is not quite as intense as it is when the Cocaine is smoked or injected
- The effects from snorting usually last from 30 – 90 minutes

Cocaine Time Factors

- **Oral Ingestion**

- **Effects last 45-120 minutes**
- **Effects begin within 3-5 minutes**
- **Effects are less intense**



Cocaine: Oral Ingestion

- Oral ingestion of Cocaine usually is the least preferred method
- The effects of Cocaine taken orally may last from 45 – 120 minutes
- The user generally does not begin to feel the effects for 3 – 5 minutes
- The effects are not as intense as they are with other methods of ingestion
- However, the effects may last 15 – 30 minutes longer than with other methods

With all methods of ingestion, the duration of Cocaine’s effects tend to be briefer than the effects of most other drugs.

- 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

Methamphetamine Time Factors

- Effects are felt within seconds
- “Rush” is very intense for 5-30 seconds
- Effects can last up to 12 hours

Methamphetamine: Injected

When Methamphetamine is injected, the initial effects are very similar to the injection of Cocaine.

- The user begins to feel the effects within a few seconds
- The “rush” is very intense and lasts at a high level of intensity for 5 – 30 seconds
- Unlike Cocaine, Methamphetamine’s effects are longer and may last up to 12 hours after injection

Methamphetamine: Smoked

- When Methamphetamine is smoked, the rush is very intense
- The user stays “high” for 4 – 8 hours with residual effects lasting up to 12 hours

Methamphetamine: Snorted and Orally

When taken orally the onset of effects is delayed, the rush is much less intense, and the effects last longer.

Overdose Signs and Symptoms

Cocaine Psychosis or Cocaine Delirium:

- **Convulsions, faint, or pass into a coma**
- **Heartbeat (pulse) increases**
- **Hallucinations may occur**



D. Overdose Signs and Symptoms

Overdose of Cocaine or Amphetamines can cause the pleasurable effects to turn into panic and often violent behavior. If the overdose is caused by Cocaine, it is commonly referred to as Cocaine Psychosis or Cocaine Delirium.

- Subject may suffer convulsions, faint, or pass into a coma
- Heartbeat (pulse) will increase, possibly dramatically
- Hallucinations may occur
 - Example: The feeling that bugs are crawling under the skin is also known as “Coke Bugs”
 - The medical term for this condition is formication

Death from Sudden Respiratory Failure



- 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

Evaluation of Subjects Under the Influence of CNS Stimulants

- HGN or VGN – None
- LOC – None
- Psychophysical Impairment – Present

E. Expected Results of the Evaluation

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

- 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

Evaluation of Subjects Under the Influence of CNS Stimulants

Vital Signs:

- **Pulse – Up**
- **Blood pressure – Up**
- **Body temperature – Up**

Muscle Tone – Rigid

Vital Signs

- Pulse generally will be increased
- Blood pressure will generally be elevated
- Body temperature generally will be elevated

Muscle Tone

- Muscle tone will be Rigid

Evaluation of Subjects Under the Influence of CNS Stimulants

Dark Room Examinations:

- Pupils – Dilated (Mydriasis)
- Pupillary Reaction to Light – Slow

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

Evaluation of Subjects Under the Influence of CNS Stimulants

General Indicators:

- Anxiety
- Body tremors
- Bruxism
- Dry mouth
- Euphoria
- Excited
- Exaggerated reflexes
- Eyelid and leg tremors
- Increased alertness
- Insomnia
- Irritability
- Restlessness
- Rigid muscle tone
- Talkative
- Redness to nasal area
- Runny nose

General Indicators

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- Talkative
- Redness to nasal area
- Runny nose

CNS Stimulant Symptomatology Chart

HGN	None
VGN	None
LOC	None
Pupil Size	Dilated
Reaction to Light	Slow
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid

Session 10 - Central Nervous System Stimulants

Drug Evaluation and Classification

Exemplar Demonstrations

Drug Recognition Expert Course 10-30

F. Classification Exemplars

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

CNS Stimulants



Session 10 - Central Nervous System Stimulants

QUESTIONS?

Drug Recognition Expert Course 10-32

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.

Test Your Knowledge

1. Why is it sometimes difficult for a DRE to obtain evidence of CNS Stimulant influence when examining a Cocaine user?

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3. Name two CNS Stimulants other than Cocaine or the Amphetamine compounds.

Test Your Knowledge

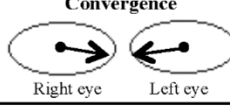
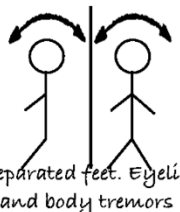
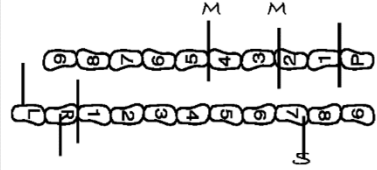
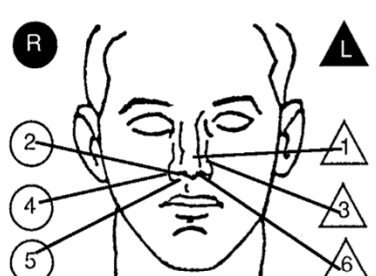
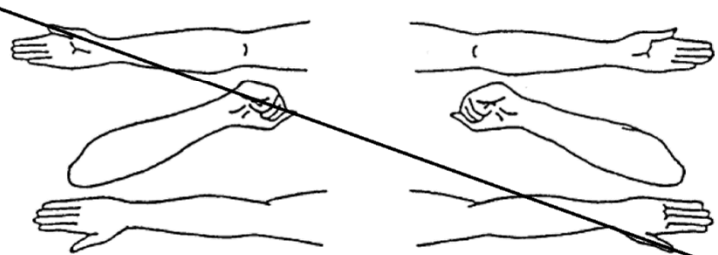
- 4. How do CNS Stimulants usually affect the blood pressure and pulse rate?
- 5. True or False: A person under the influence of a CNS Stimulant alone usually will not exhibit HGN.
- 6. What is “bruxism”?

4. 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”?

DRUG INFLUENCE EVALUATION

Evaluator Trooper scott Kedenburg		DRE # 16507	Rolling Log # 17-02-080	Evaluator's Agency New York State Police	Case # Session X-1
Recorder/Witness Deputy Brandon Flickner, LCSO		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Wyoming County SO	
Arrestee's Name (Last, First, Middle) Rocke, Crystal		Date of Birth 07/10/87	Sex F	Race W	Arresting Officer (Name, ID#) Deputy Aaron Chase #25141
Date Examined / Time / Location 02/08/17 / 2235 / Wyoming SO		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #:	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: Dep Chase	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Couple of candy bars"	When? 8 pm	What have you been drinking? How much? "Just some water" N/A	Time of last drink? About 2 pm
Time now/ Actual 2100 / 2245	When did you last sleep? Yesterday	How long? 2-3 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 "Nothing man" (Laughed)			Attitude: Cooperative/ animated	Coordination: Jerky/exaggerated	
Speech: Talkative, dry mouth, excited		Breath odor: Rancid		Face: Acne, open sores	
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	HGN	Left Eye	Right Eye	Convergence	
1. 102 / 0225	Lack of Smooth Pursuit	None	None		
2. 106 / 0230	Maximum Deviation	None	None	Right eye Left eye	
3. 104 / 0232	Angle of Onset	None	None		
Modified Romberg Balance Approx. 3" Approx. 3" 3" 3"	Walk and Turn Test		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
			Starts too soon <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Separated feet. Eyelid and body tremors	Quick steps. Rigid movements		Stops walking <input type="checkbox"/> <input type="checkbox"/>		
			Misses heel-toe <input type="checkbox"/> <input type="checkbox"/>		
			Steps off line <input type="checkbox"/> <input type="checkbox"/>		
			Raises arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
			Actual steps taken 9 9		
Time Estimation 12 estimated as 30 seconds	Describe turn Quick/spun around		Cannot do test (explain) N/A		Type of footwear: Socks
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	7.5	9.0	6.0
Rapid/jerky movements Eyelid tremors 2-3" circular sway		Right Eye	7.5	9.0	6.0
Blood Pressure 150 / 102		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Temperature 99.8 °F		Reaction to Light: Slow			
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		RIGHT ARM LEFT ARM			
Comments: None observed					
What drugs or medications have you been using? "Methamphetamine"		How much? "Don't remember"	Time of use? "Week ago, maybe"	Where were the drugs used? (Location) N/A	
Date / Time of arrest: 02/08/17 / 2140	Time DRE was notified: 2215	Evaluation start time: 2230	Evaluation completion time: 2330	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: Scott Kedenburg		Reviewed/approved by / date:			DRE # 16507
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"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: 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. Both areas are well illuminated and have a smooth concrete floor with no obstructions.
2. **Witnesses:** The evaluation was observed and recorded by Deputy Brandon Flickner from the Livingston County S.O. The arresting officer, Deputy Aaron Chase from the Wyoming County S.O. witnessed the psychophysical tests.
3. **Breath Alcohol Test:** The suspect provided a breath test to the arresting office prior to my arrival. The result of the breath test was 0.00%.
4. **Notification and Interview of the Arresting Officer:** On 2/8/17 at approximately 2215, I was dispatched to conduct a drug evaluation at the Wyoming County Jail. After arriving, I met with Deputy Chase who advised me that he had stopped the suspect's vehicle for exceeding the speed limit on Highway 19. Deputy Chase also stated that the suspect was operating her vehicle during hours of darkness without headlights. During the personal contact, Deputy Chase did not detect an odor of an alcoholic beverage on the suspect's breath. However, he did notice that she had fast and jerky movements, and was very animated, restless and excited. Her pupils were dilated and she appeared to be sweating despite the cool weather. Deputy Chase also noticed that her speech was repetitive and rapid. The suspect consented to doing the SFSTs and Deputy 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. After the SFSTs, Deputy Chase placed the suspect under arrest for DWI, and transported her to the county jail for processing. After obtaining a .00 BAC, he requested the assistance of a DRE.
5. **Initial Observation of the Suspect:** I first observed the suspect in the booking room inside the jail. She was seated and was continuously rocking back and forth in her chair. She was tapping both of her feet with sporadic head and body "twitching." She was wearing jeans, a black tee-shirt, and white, soiled socks. Her clothing was soiled and she appeared to have poor personal hygiene. Her pupils appeared to be dilated. I introduced myself and asked if she would consent to a drug evaluation. She stated, "Sure, whatever." I asked the suspect if Deputy Chase had informed her of her Miranda rights and she confirmed that he had. The suspect displayed moderate acne with open sores on her face. She told me that she was not under the care of doctor or dentist and did not have any injuries. She denied consuming any medications or drugs. I noticed her breath was rancid. Bruxism was also present. As we conversed, she continuously displayed sporadic jerky movements with her head, arms, and legs. She advised that she was not blind in either eye and did not wear corrective lenses. She stated that she last slept yesterday for approximately 2 – 3 hours and has difficulty sleeping. She indicated that she had not ate much, admitting to a couple of candy bars earlier in the day.
6. **Medical Problems and Treatment:** The suspect indicated she did not have any injuries or physical problems. None were observed or reported 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. After each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: While performing this test, the suspect had an approximate three-inch front to back and side to side sway. She also had eyelid and body tremors. During the test, she separated her feet and tapped her right foot. Her time estimation was fast, estimating 30 seconds in 12 seconds.

Walk & Turn: During this test, a painted line of the floor was used. The suspect stepped out of the instruction position twice. Twice she started the test before instructed to do so. During the walking stage, she walked rapidly with a straight legged manner. She stopped walking between steps seven and eight. She made an improper turn by making a quick turn to the left, spinning around. Twice the suspect raised both arms approximately eight-inches away from her sides. On the second nine steps, the suspect missed heel-to-toe between counts 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 the suspect raised her right foot, she had a continuous side to side sway. She also raised both arms for balance throughout the test. The suspect put her foot down on counts 1,010 and 1,016. She also had jerky movements with body and leg tremors and failed to look at feet throughout most of the test. When the suspect raised her left foot, she immediately started hopping from counts 1,001 to 1010. She again had a continuous side to side sway. She also raised both arms for balance from count 1,020 through 1,042 when the test was stopped. The suspect put her foot down on count 1,021, and had jerky movements with body and leg tremors. The suspect's counting was quick, reach 1,040 while raising her right foot and 1,042 when raising her right foot.

Finger to Nose: While attempting this test, the suspect missed the tip of her nose with the tip of her index finger as instructed on all attempts except for attempt #2. She also displayed a continuous 2 to 3-inch circular sway, and had rapid/jerky movements with eyelid tremors.

8. Clinical Indicators of Impairment:

Eyes Signs: The suspect exhibited equal tracking, had equal pupil size and did not exhibit resting nystagmus. HGN and Vertical Gaze Nystagmus was not present, and her eyes were able to converge. The suspect's pupil sizes were estimated in three lighting levels; Room Light, Near Total Darkness, and in Direct Light. All three estimations, 7.5 mm in Room light, 9.0 mm in Near Total darkness, and 6.0 mm 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: The suspect's pulse rates were elevated at 102, 106, and 104 beats per minute (BPM). All three were above the DRE average range. Additionally, her blood pressure of 150/102 mmHg, and her body temperature of 99.8 degrees Fahrenheit, were elevated and above the DRE average ranges.

9. Signs of Ingestion: The suspect's nasal area was clear and there were no indicators of injection sites on her arms and hands.

10. Suspect's Statements: The suspect indicated she was relatively healthy. She stated she has not seen a doctor in years. She initially denied consuming any medications or drugs, but later stated she had used methamphetamine about a week ago. She was adamant in her denial regarding any recent drug use.

11. DRE's Opinion: It is my opinion as certified Drug Recognition Expert that the suspect is under the influence of a Central Nervous System Stimulant and is unable to operate a vehicle safely.

12. Toxicological Sample: Rocke provided a blood sample at 2352 hours. The blood sample was submitted as evidence pending analysis by the State Crime Laboratory.

13. Miscellaneous: An inventory search of the suspect's jacket found in her vehicle, revealed a clear plastic packet containing a white crystalline powder. The suspect denied that the powder substance belonged to her and said her boyfriend must have put it in her jacket. The substance was seized and was submitted as evidence and will be forwarded to the crime laboratory for testing.

DRUG INFLUENCE EVALUATION

Evaluator Officer J. Mark Mims		DRE # 14840	Rolling Log # 17-08-022	Evaluator's Agency Florence PD	Case # 17-7752 (Session X-2)
Recorder/Witness Christopher Kendall, SCCJA		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) Tweeker, Ira		Date of Birth 08/24/78	Sex M	Race W	Arresting Officer (Name, ID#) Trooper Brian Bryson #19850
Date Examined / Time / Location 08/23/17 / 2317 / Florence PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 14330		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? Cold Cereal	When? 1100 am	What have you been drinking? How much? Red Bull & Water 2 cans	Time of last drink? 4 hrs ago
Time now/ Actual 0100 / 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		Breath odor: Bad breath		Face: Red, 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	
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	38/30 One Leg Stand 41/30 18 L R 1 1 Sways while balancing 1 All Uses arms to balance Hopping 1 Puts foot down Jerky movements. Fast count
Modified Romberg Balance Approx. 3" 3" 3" 3" Body tremors		Walk and Turn Test Quick/choppy steps		Cannot keep balance _____ Starts too soon 1 Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken 9 9	
Time Estimation 20 estimated as 30 seconds		Describe turn Stiff legged spin around in one motion		Cannot do test (explain) N/A	
Finger to Nose (Draw lines to spots touched) Jerky hand and arm movements. Eyelid and body tremors throughout.		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 	
		None Observed			
Blood Pressure 148 / 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 4-5 months"		How much? "Nothing bro"	Time of use? N/A	Where were the drugs used? (Location) N/A	
Date / Time of arrest: 08/23/17 / 2255	Time DRE was notified: 2255	Evaluation start time: 2315	Evaluation completion time: 08/24/17 0015	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during	
Officer's Signature: <i>Mark Mims</i>		Reviewed/approved by / date:			DRE # 14840
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"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Tweeker, Ira

1. **Location:** The evaluation was conducted in the Interview Room at Florence Police Department. The dark room examinations were conducted in a storage room next to the Interview Room. Both areas have adequate lighting for conducting a drug evaluation and have tile flooring with no obstructions.
2. **Witnesses:** The evaluation was observed and recorded by DRE State Coordinator Christopher Kendall from the South Carolina Criminal Justice Academy. The arresting officer, Trooper Brian Bryson witnessed the dark room examinations.
3. **Breath Alcohol Test:** The suspect was given a breath test by Trooper Bryson prior to my arrival with a 0.00% result.
4. **Notification and Interview of the Arresting Officer:** On 8/23/17 at approximately 2255 hours, I was dispatched to conduct a drug evaluation at the Florence Police Department. Upon arrival, I met with Trooper Bryson of the South Carolina Highway Patrol. Trooper Bryson advised me that he had stopped the suspect's vehicle for fail to drive within single lane of travel and failure to signal on I-20 near the 141B exist. Trooper Bryson stated he observed a small bindle (plastic baggie) with a white powdery substance on the passenger floor board of the suspect's vehicle. When asked about it, the suspect stated the "meth" belonged to his wife. Trooper Bryson told me that the suspect's pupils were dilated and he was very talkative. According to Trooper Bryson, the suspect's movements were abrupt and he appeared disoriented and excited. When asked about using meth, the suspect told Trooper Bryson that he had not used in the past six months. During the personal contact, Trooper Bryson did not detect an odor of an alcoholic beverage coming from the suspect's breath. According to Trooper Bryson, the suspect consented to roadside SFSTs. Trooper Bryson administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS), and the Modified Romberg Balance (MRB) tests. He reported observing no HGN clues, three clues on the W&T, and three clues on the OLS. The MRB test revealed that the suspect had a fast time estimation with body tremors and a jerky side-to-side sway. At the conclusion of the SFSTs, Trooper Bryson arrested the suspect for DWI and transported him to the Florence PD for processing.
5. **Initial Interview of the Suspect:** I first observed the suspect in the Florence PD Interview Room. He was seated 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. He looked at me and stated, "Okay man. Yeah, whatever." The suspect 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." The suspect told me that he last slept two days ago for approximately five hours. When I asked why, he told me it was due to his problems with his wife. He told he was not using any medications or drugs. When asked when he last ate, he stated he had eaten a waffle at the Waffle House around 11:00 am earlier in the day. He also told me he quit drinking alcohol about three years ago, and now drinks a lot of coffee and energy drinks.
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 the suspect. The suspect indicated he understood the instructions prior to each attempt. The following tests were administered to the suspect:

Modified Romberg Balance: During this test, the suspect had an approximate 3" front to back and side to side sway. He also had pronounced body tremors. His time estimation was fast, estimating 30 seconds in 20 seconds. I asked how he had estimated the 30 seconds, he stated, "I did one-Mississippi, two-Mississippi."

Walk & Turn: For this test, a line on the tile floor was used. The suspect had a rigid stance, and started the test before instructed to do so. Once he began the walking stage, he took quick and choppy steps. He also 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 look at his feet. On the first nine steps, he stepped off the line once and stopped while walking once. The suspect made an improper turn by spinning around in one motion. On the second nine steps, the suspect stepped off the line once and stopped while walking once.

One Leg Stand: During this test, when the suspect raised his right foot, he had a continuous jerky side to side sway. He raised both his arms for balance from counts 1,003 to 1,018. His counting was fast, and he had leg tremors. He also failed to look at his raised foot from counts 1,020 to 1,038 when the test was stopped at 30 seconds. When he raised his left foot, the suspect again had a continuous jerky side to side sway. He also raised both his arms for balance for the duration of the test. He again counted quickly and had leg tremors. He put his foot down once at count 1,018.

Finger to Nose: While attempting this test, the suspect failed to touch the tip of his nose with the tip of his index finger as directed on four of the six attempts, missing on attempts 1, 2, 4, and 5. Throughout this test, the suspect's hand and arm movements were quick and jerky, and he displayed body and eyelid tremors.

8. Clinical Indicators of Impairment:

Eye Signs: The suspect exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. No HGN clues or Vertical Gaze Nystagmus were present, and his eyes were able to converge. The suspect's pupils were dilated in all three lighting levels. They were estimated at 6.5 mm in both eyes in Room Light, 9.0 mm in both eyes in Near Total Darkness, and 6.0 mm in both eyes in Direct Light. All three were above the DRE average ranges for the three lighting levels. The suspect's pupillary reaction was slow, and he did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were elevated throughout the evaluation at 106, 108, and 108 beats per minute (bpm) and were above the DRE average ranges. Additionally, his blood pressure and body temperature were elevated and above the DRE average ranges. His blood pressure was checked at 148/100 mmHg, and his body temperature was checked at 99.8 degrees Fahrenheit. The suspect's muscle tone was rigid.

- 9. Signs of Ingestion:** The suspect had no injection sites on either arm. His oral cavity was clear. However, his right nostril was red with no hair. His left nostril appeared to be normal.
- 10. Suspect's Statements:** The suspect denied consuming drugs. He told me 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 I confronted him about his impairment, he stated, "I've used nothing, bro." When I asked him about the substance located in the vehicle, he stated, "I told the other officer, that belongs to my wife. It's not mine."
- 11. DRE's Opinion:** It is my opinion as a Drug Recognition Expert that the suspect is under the influence of a Central Nervous System Stimulant and is unable to operate a vehicle safely.
- 12. Toxicological Sample:** The suspect provided a urine sample, which was forwarded to the state crime laboratory pending toxicology testing.
- 13. Miscellaneous:** A field test was performed on the substance located in the suspect's vehicle. The test was positive for methamphetamine and will be sent to the crime lab for testing.

DRUG INFLUENCE EVALUATION

Evaluator Officer Jeramey Peters		DRE # 12368	Rolling Log # 17-09-076	Evaluator's Agency Auburn Hills PD	Case # 17-10170 (Session X-3)																																								
Recorder/Witness Officer Wes Evans, Grand Blanc Township		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Michigan State Police																																									
Arrestee's Name (Last, First, Middle) Crank, Christy		Date of Birth 10/09/85	Sex F	Race W	Arresting Officer (Name, ID#) Trooper Troy Meder #18754																																								
Date Examined / Time / Location 9/29/17 0130 Auburn Hills PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 90914	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: Tpr. Meder	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Nothing		When?	What have you been drinking? How much? Soda 12 oz																																								
Time now / Actual 0100 / 0135	When did you last sleep? Yesterday	How long? 3-4 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: Irritated		Coordination: Functional / Enhanced																																								
Speech: Rapid		Breath odor: Normal		Face: Pale / Sweaty and red sores																																									
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	Left Eye	Right Eye	Convergence																																								
1. $\frac{102}{98} / \frac{0150}{0210}$		Lack of Smooth Pursuit	None	None	 Right eye Left eye																																								
2. $\frac{98}{98} / \frac{0210}{0230}$		Maximum Deviation	None	None																																									
3. $\frac{98}{98} / \frac{0230}{0230}$		Angle of Onset	None	None																																									
Modified Romberg Balance Approx. 0" 0" Approx. 2" 2"		Walk and Turn Test		36/30 One Leg Stand 38/30																																									
 Body tremors		 Poor balance and leg tremors - jerky movements/failed to look at feet/raised arms throughout the test		 Jerky movements with leg tremors/raised arms throughout the test / circular sway																																									
<table border="1"> <tr><th>1st Nine</th><th>2nd Nine</th></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> <tr><td> </td><td> </td></tr> </table>		1 st Nine	2 nd Nine																			<table border="1"> <tr><th>L</th><th>R</th></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> <tr><td> </td><td> </td></tr> </table>		L	R																			Sways while balancing Uses arms to balance Hopping Puts foot down	
1 st Nine	2 nd Nine																																												
L	R																																												
Time Estimation 18 estimated as 30 seconds		Describe turn Stopped walking and spun around		Cannot do test (explain) N/A																																									
Type of footwear: Running Shoes		PUPIL SIZE		Nasal area: Clear																																									
Finger to Nose (Draw lines to spots touched) Used pad of finger on attempts 1, 2, and 6		Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Oral cavity: Clear																																								
		Left Eye	7.0	9.5		6.0																																							
		Right Eye	7.0	9.5		6.0																																							
Blood Pressure 158 / 96		Temperature 99.0 °F		Reaction to Light: Slow																																									
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		RIGHT ARM LEFT ARM 																																									
Comments:		Track Marks		Open Sores																																									
What drugs or medications have you been using? Meth and Cocaine		How much? Can't remember		Time of use? Four days ago																																									
Where were the drugs used? (Location) Residence		Date / Time of arrest: 9/29/17 / 0015		Time DRE was notified: 0015																																									
Evaluation start time: 0130		Evaluation completion time: 0250		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																																									
Officer's Signature: <i>Jeramey Peters</i>		Reviewed/approved by / date:			DRE# 12364																																								
Opinion of Evaluator:		<input type="checkbox"/> Not Impaired		<input type="checkbox"/> Alcohol																																									
<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input checked="" type="checkbox"/> CNS Stimulant																																									
<input type="checkbox"/> Dissociative Anesthetic		<input type="checkbox"/> Narcotic Analgesic		<input type="checkbox"/> Inhalant																																									
<input type="checkbox"/> Cannabis		<input type="checkbox"/> Hallucinogen		<input type="checkbox"/> Cannabinoids																																									

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Crank, Christy

- 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 Officer Wes Evans of the Grand Blanc Township Police Department. The arresting officer, Trooper Troy Meder, of the Michigan State Police witnessed the darkroom examinations.
- 3. Breath Alcohol Test:** The suspect's breath test was administered by Trooper Meder prior to my arrival. The result was 0.00% BAC.
- 4. Notification and Interview of the Arresting Officer:** On 09/27/17 at approximately 0015, I was dispatched to conduct a drug evaluation at the Auburn Hills Police Department. Upon arrival, I met with the arresting officer, Trooper Meder of the Michigan State Police. He advised that he stopped the suspect (Christy Crank) for speeding and failure to drive within a single traffic lane on Interstate 75. During the personal contact, Trooper Meder 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 he noticed what appeared to injection marks on her left arm. While talking to the suspect, she was very animated and her speech was fast, and she had a dry mouth. According to Trooper Meder, the suspect consented to SFSTs at roadside. Trooper Meder administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS) tests, and also administered the Finger to Nose (FTN) test. No HGN clues were observed, but six clues on the W&T and three clues on the OLS were observed. He indicated that the suspect had difficulty with the FTN test, and had quick, jerky movements. Trooper Meder arrested the suspect for DWI and after obtaining a 0.00 BAC on the breath test, 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 very restless. She displayed poor personal hygiene and her appearance was disheveled. There were fresh and older track 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 the suspect if she was informed of her Miranda rights and she indicated she had. I asked the suspect 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 that she had not eaten anything today and only ingested a can of soda (Mountain Dew). She denied consuming any medications or drugs. When asked when she last slept, she stated, "Yesterday." I asked her for how many hours and she stated, "About 3 or 4 hours because of stress." The suspect told me she was stressed because she had lost her job. I asked why she lost her job, she responded with, "It's none of your business." At times, the suspect was grinding her teeth (bruxism).
- 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 each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:

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 think I just counted."

Walk and Turn: For this test, a line on the tile floor was used. The suspect stepped out of the instruction position with her right foot and twice started the test before instructed to do so. During the walking stage, she had poor balance and leg tremors were present. The suspect missed heel to toe on steps two, six, and seven on the first nine steps. She made an improper turn by stopping and spinning to her left. On the second nine steps, the suspect missed heel to toe on steps three and six. She also stepped off the line on step eight. She also raised both arms approximately six-inches 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 an approximate three-inch circular sway. She also raised both arms, approximately six-inches for balance throughout the entire test. The suspect put her foot down on counts 1,004 and 1,007. Leg tremors with jerky movements were observed throughout the test. When the suspect raised her right foot, an approximate three-inch circular sway was observed. She also raised both arms approximately six-inches to maintain her balance. She put her foot down at 1,021. She again had body and leg tremors throughout the test.

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 one, two, and six. On attempt five, she initially raised her left hand then corrected and used her right hand as instructed. During the test, eyelid tremors, and jerky movements were present.

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 or Vertical Gaze Nystagmus were observed and her eyes were able to converge. The suspect's pupils were examined 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 8.5 mm, and in Direct Light, her pupils were estimated at 6.0 mm. All three estimates were above the DRE average ranges for the lighting conditions. Her pupillary reaction 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 158/96 was elevated and above the DRE average range. Her body temperature was above the DRE average range, measured at 100 degrees Fahrenheit using an oral thermometer. She did indicate that she was hot and complained about the heat several times during the evaluation.

9. Signs of Ingestion: The suspect's nasal and oral cavities were clear; however, there were multiple track marks on the inside of both arms. She also had multiple open and red sores on her arms. When asked about the marks and sores, she advised that she was very upset and nervous, and has been scratching herself a lot.

10. Suspect's Statements: I the suspect about drug use. At first, she denied using drugs but later admitted she used methamphetamine four days ago. She denied using any methamphetamine within the last 12 hours. She stated, "I use, 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 Central Nervous System Stimulant and is unable to operate a vehicle safely.

12. Toxicological Sample: The suspect voluntarily submitted to providing a blood sample, which was collected at 0312 hours. The blood sample was entered into evidence by Trooper Meder 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, Trooper Meder located several used syringes under the seat and in the side door compartment.

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Session 11

Practice: Eye Examinations



Learning Objectives

- Describe eye examination procedures
- Conduct pupil size and reaction to light exams
- Document results of eye exams

Upon successfully completing this session, the participant will be able to:

- 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

CONTENT SEGMENTS

- A. Procedures for this Session
- B. Room Light Examinations
- C. Dark Room Examinations

LEARNING ACTIVITIES

Instructor-Led Presentations
Participants' Hands-On Practice
Instructor-Led Coaching
Participant-Led Coaching

Procedures

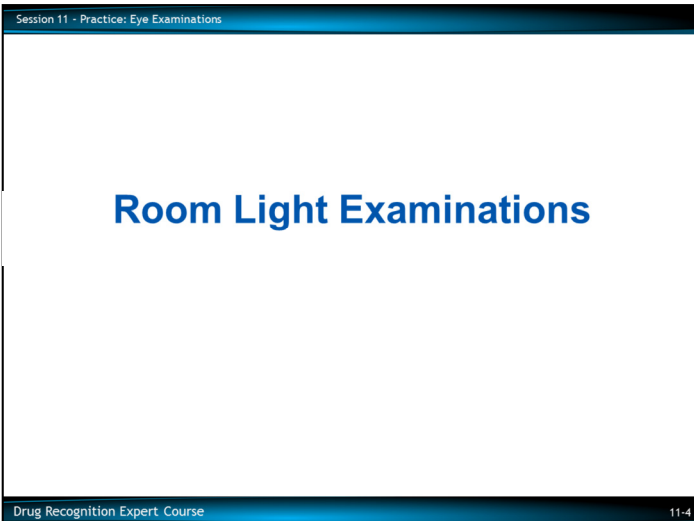
- **Team Assignments**
- **Member(s) will help coach/critique**



A. Procedures for this Session

Team Assignments

- Participants will work in three- or four-member teams
- 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



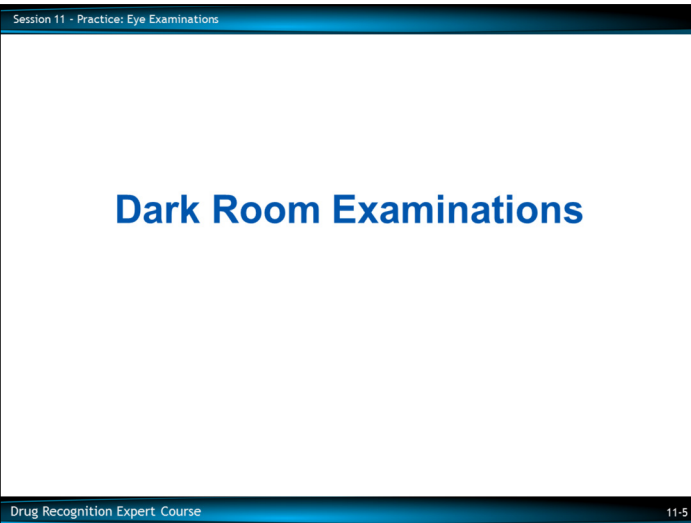
B. Room Light Examinations

Pupil Size Estimation

- Pupil size estimation under room light

Sequence of roles should be as follows:

- Test Administrator
- Test Subject
- Coach
- Test Administrator (continue cycle)



C. Dark Room Examinations

Pupil Size Estimation

- Pupil size estimation under near total darkness
- Pupil reaction and size estimation under direct light

Sequence of roles should be as follows:

- Test Administrator
- Test Subject
- Coach
- Test Administrator (continue cycle)

Session 11 - Practice: Eye Examinations

QUESTIONS?

Drug Recognition Expert Course 11-6

EYE EXAMINATIONS DATA SHEET

<p>Subject: _____</p> <p style="text-align: center;">Left Right</p> <table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr> <td style="width: 50px; text-align: right;">Room Light</td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: right;">NTD</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Direct Light</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Reaction</td> <td></td> <td></td> <td></td> </tr> </table> <p>_____</p>	Room Light				NTD				Direct Light				Reaction				<p>Subject: _____</p> <p style="text-align: center;">Left Right</p> <table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr> <td style="width: 50px; text-align: right;">Room Light</td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: right;">NTD</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Direct Light</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Reaction</td> <td></td> <td></td> <td></td> </tr> </table> <p>_____</p>	Room Light				NTD				Direct Light				Reaction				<p>Subject: _____</p> <p style="text-align: center;">Left Right</p> <table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr> <td style="width: 50px; text-align: right;">Room Light</td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: right;">NTD</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Direct Light</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Reaction</td> <td></td> <td></td> <td></td> </tr> </table> <p>_____</p>	Room Light				NTD				Direct Light				Reaction			
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<p>Subject: _____</p> <p style="text-align: center;">Left Right</p> <table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr> <td style="width: 50px; text-align: right;">Room Light</td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: right;">NTD</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Direct Light</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Reaction</td> <td></td> <td></td> <td></td> </tr> </table> <p>_____</p>	Room Light				NTD				Direct Light				Reaction				<p>Subject: _____</p> <p style="text-align: center;">Left Right</p> <table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr> <td style="width: 50px; text-align: right;">Room Light</td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: right;">NTD</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Direct Light</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Reaction</td> <td></td> <td></td> <td></td> </tr> </table> <p>_____</p>	Room Light				NTD				Direct Light				Reaction				<p>Subject: _____</p> <p style="text-align: center;">Left Right</p> <table border="1" style="width: 100%; height: 150px; border-collapse: collapse;"> <tr> <td style="width: 50px; text-align: right;">Room Light</td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: right;">NTD</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Direct Light</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: right;">Reaction</td> <td></td> <td></td> <td></td> </tr> </table> <p>_____</p>	Room Light				NTD				Direct Light				Reaction			
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Session 12

Alcohol Workshop



Learning Objectives

- Properly administer eye examinations
- Properly administer psychophysical tests
- Observe and record subject's performance
- Determine level of impairment

Upon successfully completing this session, the participant will be able to:

- 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 preliminary examinations and psychophysical tests
- Determine the level of impairment based on the results of the subject's eye examinations and psychophysical tests

CONTENT SEGMENTS

- A. Procedures
- B. Hands-On Practice
- C. Session Wrap-Up

LEARNING ACTIVITIES

Instructor-Led Presentations
Participant-Led Practice
Instructor Discussion

Examinations and Tests Conducted

- Pupil Size Estimation (Room Light)
- HGN
- VGN
- LOC
- MRB
- WAT
- OLS (Both Legs)
- FTN
- Pulse Rate

A. Procedures

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).

Session 12 - Alcohol Workshop

Team Member Duties

- One team member will administer tests
- One team member will record results
- Other team member(s) will assist

Drug Recognition Expert Course 12-4

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.

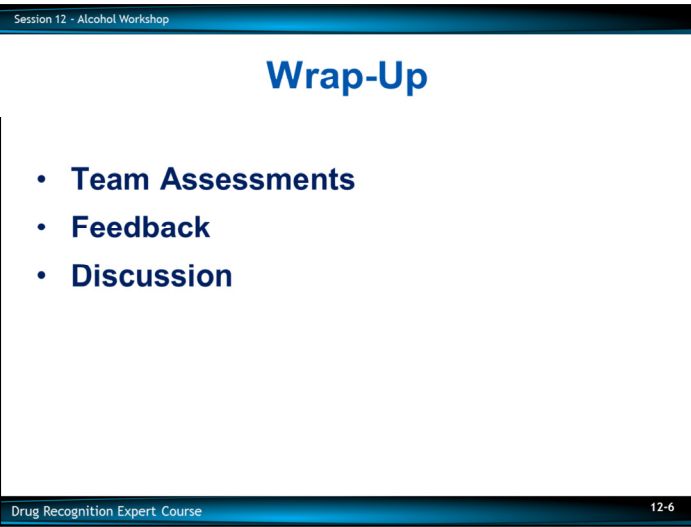
The following safety precautions will be strictly enforced:

- No weapons will be present
- Volunteers will not be left unattended at any time



B. Hands-On Practice

Test Administration



C. Session Wrap-Up

Feedback of Teams' Assessments

Feedback of Volunteers' BACs

Discussion

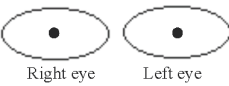

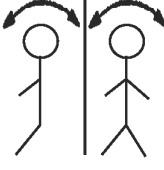
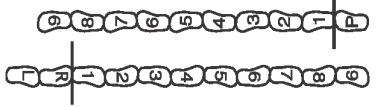
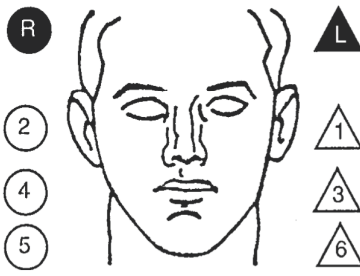






Session 12 - Alcohol Workshop									
Name	HGN/VGN	Angle Onset	LOC	MRB/WAT OLS/FTN	Pulse	Est. BAC	Act. BAC	# of drinks	

Session 12 - Alcohol Workshop

QUESTIONS?

Drug Recognition Expert Course 12-8

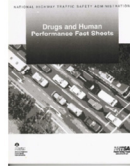
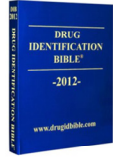
DRUG INFLUENCE EVALUATION

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	Left Eye	Right Eye	Convergence  Right eye Left eye		/30 One Leg Stand /30 																				
	Lack of Smooth Pursuit																									
	Maximum Deviation																									
Modified Romberg Balance Approx. Approx. 	Walk and Turn Test 		Cannot keep balance _____ 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>1st Nine</td> <td>2nd Nine</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> <table border="1" style="width: 100%; text-align: center;"> <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> <tr> <td> </td> <td> </td> </tr> </table> Sways while balancing Uses arms to balance Hopping Puts foot down		1 st Nine	2 nd Nine									L	R								
	1 st Nine	2 nd Nine																								
L	R																									
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)	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																				

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Session 13

DRE Reference Sources



Learning Objectives

- **Discuss print resources available to assist DREs**
- **Learn about other resources available to assist DREs**

Upon successfully completing the session, the participant will be able to:

- Discuss print resources available to assist Drug Recognition Experts (DREs)
- Learn about other resources available to assist DREs

CONTENT SEGMENTS

A. Resources Available

LEARNING ACTIVITIES

Instructor-Led Presentation

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

A. Resources Available

Suggested criteria to identify a Drug Reference Source

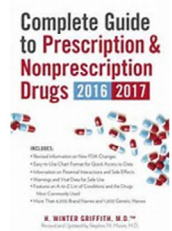
When selecting an acceptable drug reference, DRE's should consult references that meet the below criteria:

- 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.

Written Sources

- The Complete Guide to Prescription and Non-prescription Drugs
- The Pill Book
- Nursing Drug Handbook
- Nurse Pocket Drug Guide
- Drug Identification Bible



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>)

Other Written Sources

- **Davis’ Drug Guide for Nurses**
- **Tarascon Pocket Pharmacopoeia**
- **The Monthly Prescriber’s Reference (MPR)**
- **Disposition of Toxic Drugs and Chemicals in Man**



Acceptable written examples include:

- 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 (see attachment at end of this Session)

Session 13- DRE Reference Sources

Electronic Sources

- **Drugs.com**
- **RxList.com**
- **WebMD.com/Drugs/Index-drugs.aspx**
- **Epocrates.com**

Drug Recognition Expert Course 13-6

Acceptable electronic examples include:

- **Drugs.com**
- **RxList.com**
- **WebMD.com/Drugs/Index-drugs.aspx**
- **Epocrates.com**

Electronic Sources

- **iMeds – Medical Reference for Android**
- **Monthly Prescriber’s Reference (MPR)**
- **PDR.net**
- **www.streetdrugs.org**
- **info@streetdrugs.org**

- iMeds – Medical Reference for Android
- Monthly Prescriber’s Reference (MPR)
- PDR.net
- www.streetdrugs.org
- info@streetdrugs.org

Other Information Sources

- **National Highway Traffic Safety Administration, Enforcement and Justice Services Division**
- **Office of National Drug Control Policy**
- **State DEC Program Coordinator**
- **Governor's Office of Highway Safety**

Other Information Sources

- 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)

Other Information Sources

- The National Traffic Law Center (NTLC)
- The National Sobriety Testing Resource Center
- Poison control center
- Medical dictionary

-
- The National Traffic Law Center (NTLC)
 - NTLC is part of the American Prosecutors Research Institute (APRI)
 - The National Sobriety Testing Resource Center <http://dredata.nhtsa.gov>
 - Poison control center (www.aapcc.org)
 - Medical dictionaries
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Session 13- DRE Reference Sources

Other Information Sources

- **Drugs and Human Performance Fact Sheets**
- **Various textbooks, newspaper and magazine articles**
- **IACP DEC Program**

Drug Recognition Expert Course 13-10

- Drugs and Human Performance Fact Sheets
- 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>.

Session 13- DRE Reference Sources

Identify this pill

Drug Recognition Expert Course 13-11


Session 13- DRE Reference Sources



Identify this pill

Drug Recognition Expert Course 13-12

Session 13- DRE Reference Sources




Identify this pill

Drug Recognition Expert Course 13-13



Session 13- DRE Reference Sources



Identify this pill

Drug Recognition Expert Course 13-15

Session 13- DRE Reference Sources

QUESTIONS?

Drug Recognition Expert Course 13-16

**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, Seventh Edition, Gilman, A.; Goodman, I.; MacMillan Publishing Co. 1985, Barbiturates, pages 546-547:

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, 8 Ed. 1997.

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989. P.19.

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
Unsteady gait

Incoordination
Impairment in attention or memory

CNS STIMULANTS:

DRE Symptomatology:

Dilated pupils
Increased temperature
Body tremors
Excited
Talkative
Anxiety
Redness to nasal area
Loss of appetite
Increased alertness

Increased pulse rate
Increased blood pressure
Restlessness
Euphoric
Exaggerated reflexes
Grinding teeth
Runny nose
Insomnia

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
Restlessness
Irritability
Tremor
Diaphoresis
Nausea
Pallor

Hyperreflexia
Talkativeness
Insomnia
Flushing
Combativeness
Vomiting
Dry mucous membranes

Moderate:

Hyperactivity
Hypertension
Tachycardia
Chest discomfort
Abdominal pain
Mild temperature
Repetitive behavior
Panic reactions

Confusion
Tachypnea
Premature ventricular contraction
Vomiting
Profuse diaphoresis
Elevation
Impulsivity
Hallucinations

Serious:

Delirium
Hyperreflexia
Hypotension
Cocaine, page 650-659

Marked Hypertension/Tachycardia
Convulsions
Coma

Early Stimulation:

Euphoria
Excitement
Irritable behavior
Sudden headache
Vomiting
Twitching of small muscles
Tremor
Cocaine psychosis
Elevation of pulse

Garrulity
Apprehension
Mydriasis
Nausea
Dizziness
Tics
Jerks
Hallucinations
Increased respiration

Advanced:

Convulsions
Decreased consciousness

Hyperreflexia
Increased pulse and blood pressure

Later Stages:

Hypotension
Dyspnea et al

Hypothermia

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
Slight tremor
Agitation

Increased blood pressure
Restlessness
Possibly hallucinations

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd Ed. , Schuckit, M.D., Mark A. Plenum Medical Book Co, New York 1989, page 99:

CNSS cause:

Dilation of pupils
Elevation of blood pressure
Increased body temperature

Rapid heart rate
Tremor in hands
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
Blood pressure
Teeth grinding
Tremors
pages 64, 100, 121:
Dilation of pupils
Increased temperature

Increase heart rate
Flushing
Dry mouth
Lack of coordination

Increased heartbeat
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
Poor 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, (3rd 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, (3rd 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
Changes in body awareness
Violent behavior

Hallucinations
Speech difficulties
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
Nystagmus
Loss of muscle control
Memory loss drooling

Increased blood pressure
Muscle rigidity
Incoherent speech
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
Hallucination
Loss of motor control
Automated speech
Nystagmus at rest

Disorientation
Extreme agitation
Disassociation from
Environment

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
Muscular hypertonicity
Ptosis
HGN, VGN, and Rotary Nystagmus
Mood swings

Tremors
Hyperreflexia
Tachycardia
Elevated blood pressure

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
Numbness or diminished responsiveness to pain
Dysarthria (slurred speech)
Seizures

Increased blood pressure or heart rate
Ataxia
Muscle rigidity
Hyperacusis

NARCOTICS:

DRE symptomatology:

Constricted pupils

Decreased blood pressure

Ptosis (droopy eyelids)

Drowsiness

Low, raspy speech

Facial itching

Fresh puncture marks

Decreased pulse rate

Decreased temperature
"on the nod"

Depressed reflexes

Dry mouth

Euphoria

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

Drowsiness

Mental clouding

Depressed respiration

Euphoria

Decreased blood pressure

Dysphoria

Sedation

Analgesia

Drug and Alcohol Abuse, A Clinical Guide to Diagnosis and Treatment, (3rd 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

Analgesia

Euphoria

Reduced heart rate

Depressed appetite

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

Dreamy state

Euphoria

"nodding off"

Pain suppression

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, (3rd 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, (3rd 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, 3rd Edition, September 26, 2003.

A Recognized Clinical Trial of Treatment for Convergence Insufficiency in Children, Scheiman, Cotter, Cooper, et al, Arch Ophthalmology, Jan 2005.

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Session 14

Hallucinogens



Learning Objectives

- **Explain brief history of Hallucinogen category**
- **Identify common drug names and terms**
- **Identify common methods of administration**

Upon successfully completing this session the participant will be able to:

- Explain a brief history of the Hallucinogen category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category

Learning Objectives

- Describe symptoms, observable signs and other effects
- Describe typical time parameters
- List indicators likely to emerge during the drug influence evaluation

- 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

CONTENT SEGMENTS

- A. Overview of the Category
- B. Possible Effects
- C. Onset and Duration Effects
- D. Overdose Signs and Symptoms
- E. Expected Results of the Evaluation
- F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments
Video Presentations
Slide Presentations
Review of DEC Program Exemplars

Session 14 - Hallucinogens

Overview

Hallucinogens are drugs that affect a person's perceptions, sensations, thinking, self awareness and emotions



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A. Overview of the Category

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.

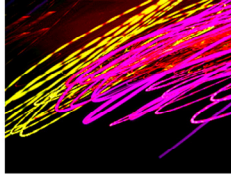
Having distorted sensory perceptions so things look, sound, smell, etc. differently than they really are.

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.

Synesthesia

A transposition of senses

- “Seeing sounds”
- “Hearing colors”



Synesthesia

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

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.

Sensory Perceptions

Delusion

- A false belief



Illusion

- A false perception



Delusion and Illusion


Remember Hallucinogens produce delusions, illusions, or both.

- A delusion is a false belief
 - Example: "I am an Elephant"
- An illusion is a false perception, i.e., a misrepresentation of what the senses are receiving
 - Example: "I see an Elephant"

Session 14 - Hallucinogens

Psychotomimetic

- “Something that mimics psychosis”
- **Psychosis** – a major mental disorder
- **Implies a loss of touch with reality**



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Because they often make the user appear to be psychotic, Hallucinogens are sometimes called psychotomimetic drugs.

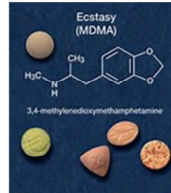
“Psychotomimetic” means “something that mimics psychosis.” A psychosis is a major mental disorder. It implies a loss of touch with reality.

Hallucinogens Sub-Categories

- **Natural**



- **Synthetic**



Hallucinogen Sub-categories

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.
- **Synthetic** – those made solely in a laboratory
 MDMA, LSD, DOM and 2CB are examples of synthetic Hallucinogens

Natural Hallucinogens



Peyote



Active Ingredient: Mescaline

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.

These mushrooms also 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 also 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



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 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.

Salvia Divinorum Effects

- Intense hallucinations
- Feelings of floating through space or flying
- Twisting and spinning
- Dizziness
- Nausea
 - Lack of coordination
 - Slurred speech
 - Confused sentence patterns
 - Chills

There are several methods of ingesting 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
- Salvinorin A can also be vaporized and inhaled by heating the leaves in a pipe of tin foil and the vapors inhaled through a glass pipe

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
 - Chills
-
-
-
-

Session 14 - Hallucinogens

Other Naturally-Occurring Hallucinogens

- **Nutmeg**
- **Jimson Weed**
- **Morning Glory seeds**
- **Bufofenerine**

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Other naturally-occurring Hallucinogens include:

- **Nutmeg**

Nutmeg contains Myristicin, a natural compound that has mind-altering effects if ingested in large doses. The buzz can last a long time and can be hallucinogenic, much like LSD.

- **Jimson Weed**

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 ingested in large doses. The buzz can last one to two days and can be hallucinogenic, much like LSD.

- **Morning Glory seeds**

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 ingested 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.

- **Bufofenerine**

Bufofenerine is a Hallucinogen found in frog or toad skins, most notably in the Colorado River Toad (*Bufo alvarius*).

Synthetically-Manufactured Hallucinogens

- Lysergic Acid Diethylamide (LSD)
- 25I-NBOMe and analogs
- Trimethoxyamphetamine (TMA)
- Dimethyltryptamine (DMT)



LSD, TMA, DMT, MDMA, MDA, and 2CB are examples of synthetically-manufactured Hallucinogens.

- Lysergic Acid Diethylamide (LSD)
- 25I-NBOMe: 2-(4-iodo-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine
 - This synthetic drug and analogs exhibit effects similar to LSD
 - Referred to as “N-Bomb” or “Smiles”
- Trimethoxyamphetamine (TMA)
- Dimethyltryptamine (DMT)

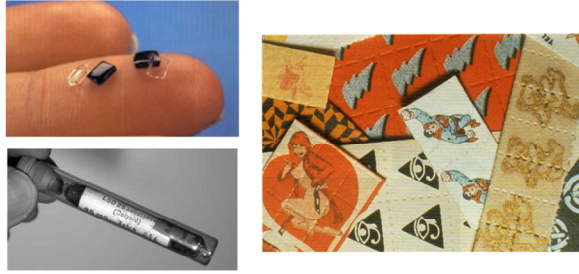
Synthetically-Manufactured Hallucinogens

- 3,4-Methylenedioxyamphetamine (MDA)
- 3,4-Methylenedioxyamphetamine (MDA)
- 2CB
- DOM (STP)



- 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
- DOM (2, 5-dimethoxy-4-methylamphetamine) is also known as STP
 - STP is an abbreviation for “Serenity, Tranquility, and Peace.”

LSD



LSD derived from Ergot, a Fungus

Lysergic Acid Diethylamide (LSD) is perhaps the most famous of the synthetically-manufactured Hallucinogens.

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.

In the Middle Ages, when people accidentally ate this fungus, their resulting bizarre behavior was thought to stem from possession by the Devil.

- Ergot is still used medically to treat migraine headaches
 - Sandoz Laboratories markets a combination of Caffeine and Ergot called Cafergot

Psychedelic Amphetamines

- MDA
- MDMA
- STP
- TMA



MDA, MDMA, STP, 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.”

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.

2CB

- **White powder usually found in pressed tablets or gel caps**
- **Sometimes referred to as “Venus”; “Nexus”; and “Bromo-Mescaline”**



2CB (4-Bromo-2, 5-Dimethoxyphenethylamine)

- 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”

Common Methods of Ingestion

- Orally
- Smoked
- Insufflation (“snorted”)
- Transdermally (absorbed)



Common Methods of Ingestion of Hallucinogens

The most common method of ingesting Hallucinogens is orally.

Some Hallucinogens can also be smoked. However, LSD cannot be ingested by smoking. LSD is usually ingested orally. It can also be absorbed by placing drops in the eye.

Officers should make it a practice to wear protective gloves when handling any suspected drugs.

MDA and many other Psychedelic Amphetamines can also be insufflated, or “snorted.”

Some Hallucinogens can be ingested and absorbed through the skin.

Session 14 - Hallucinogens

Hallucinogen Effects

- **Intensify whatever mood user is in at the time drug is taken**
- **Uncover mental or emotional flaws user was unaware of possessing**
- **Hallucination: distorted perception of reality**

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B. Possible Effects

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.”

Time Factors of Peyote

- 30 minutes: Onset
- 1 hour: Development of hallucinogenic effects
- 3 – 4 hours: Peak effects
- 10 hours: Gradual decline effects
- 12 hours: Nearly total recovery
- 24 hours: Elimination nearly completed



C. Onset and Duration Effects

Time Factors of Peyote

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.”

- 30 minutes: nausea, possibly leading to vomiting; mild rise in blood pressure, pulse, temperature, and heart rate; pupils dilate
- One hour: sensory changes begin; visual distortions accompanied by rich colors; objects take on new forms and begin to move; shapes “come alive”
- 3 – 4 hours: sensory changes reach their peak; synesthesia (transposition of senses) commonly occurs
- 10 hours: gradual decline in effects
- 12 hours: nearly total recovery from effects
- 24 hours: the majority of the Mescaline has been excreted from the body

Time Factors of Psilocybin

- **First 30 minutes: Onset**
- **30 – 60 minutes: Beginning of sensory effects**
- **60 – 90 minutes: Sensory effects intensify**
- **90 – 120 minutes: Peak effects**
- **120 – 180 minutes: Effects begin to diminish**



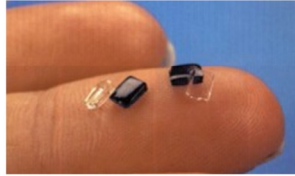
Time Factors of Psilocybin

Psilocybin also begins to exert its effects within one-half hour.

- First 30 minutes: dizziness; light headed feeling; giddiness; the extremities (hands, feet, etc.) may feel very light or very heavy
- 30 – 60 minutes: vision blurs; colors become brighter; leave longer lasting after images; objects take on sharp visual definition; hearing becomes more acute
- 60 – 90 minutes: color patterns and shapes start to develop; the surfaces of objects appear to develop waves and wave-like patterns; distance perception becomes impaired; feelings of euphoria develop
- 90 – 120 minutes: body sensations increase, along with mental perceptions; user commonly becomes introspective, with increased bodily sensations and mental perceptions
- 120 – 180 minutes: effects start to diminish
- 180 – 300 minutes: Nearly complete resolution of drug-induced effects

Time Factors of LSD

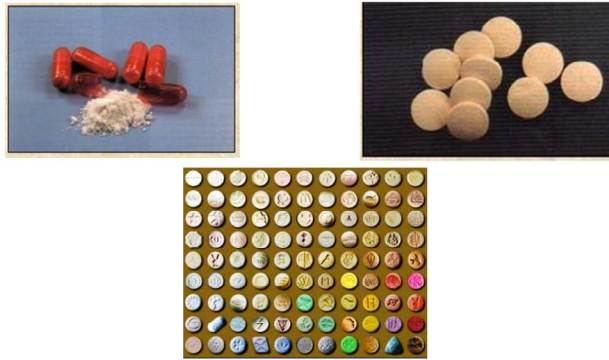
- **30 – 45 minutes: Onset**
- **4 – 6 hours: Peak effects**
- **7 – 9 hours: Effects diminish**
- **10 – 12 hours: Subject feels normal**



LSD's effects begin to be felt within 30 – 45 minutes.

- 30 – 45 minutes: blood pressure, pulse and temperature rise; pupils dilate; hair starts to stand on end (Piloerection); nausea, dizziness, and headache development
- 4 – 6 hours: effects reach their peak
- 7 – 9 hours: effects diminish
- 10 – 12 hours: user feels normal

Time Factors of MDMA and 2CB



MDMA’s effects usually begin within several minutes to a half hour if taken orally.

Psychological effects include confusion, depression, anxiety, and paranoia.

The duration effects can last from 1 – 12 hours depending on dosage.

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

Onset and duration of effects of other Hallucinogens vary widely from about 2 hours to about 24 hours.

Overdose Signs and Symptoms

- **Bad trip**
- **Hyperthermia**
- **Convulsions**



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.

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 hyperthermia, 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.

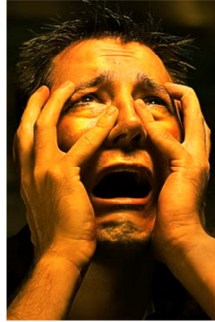
Sometimes Hallucinogens induce a perception of invulnerability in the user, leading to bizarre and very dangerous behavior and death.

- 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.

Three Types of Flashbacks

- Emotional
- Somatic
- Perceptual



Three Types of Flashbacks

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)

Session 14 - Hallucinogens

Evaluation of Subjects Under the Influence of Hallucinogens

- HGN and VGN – None
- Lack of Convergence – None
- Impaired performance generally evident on divided attention tests

Drug Recognition Expert Course 14-28

E. Expected Results of the Evaluation

Observable Evidence of Impairment

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.
- 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.

Evaluation of Subjects Under the Influence of Hallucinogens

Vital Signs:

- **Pulse – Up**
- **Blood Pressure – Up**
- **Body temperature – Up**

Muscle Tone – Rigid

Vital Signs

- Pulse will generally be elevated
- Blood pressure generally will be elevated
- Body temperature generally will be elevated

Muscle tone generally will be rigid.

Evaluation of Subjects Under the Influence of Hallucinogens

Dark Room Examinations:

- Pupils – Dilated (Mydriasis)
- Reaction to light – Normal ⁽³⁾

⁽³⁾ Certain psychedelic amphetamines may cause slowing

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

Evaluation of Subjects Under the Influence of Hallucinogens

General Indicators:

- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Hallucinations
- Memory loss

General Indicators

- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Hallucinations
- Memory loss

Evaluation of Subjects Under the Influence of Hallucinogens

General Indicators:

- Nausea
- Paranoia
- Perspiring
- Piloerection
- Altered perception of time and distance
- Synesthesia
- Uncoordinated

General Indicators

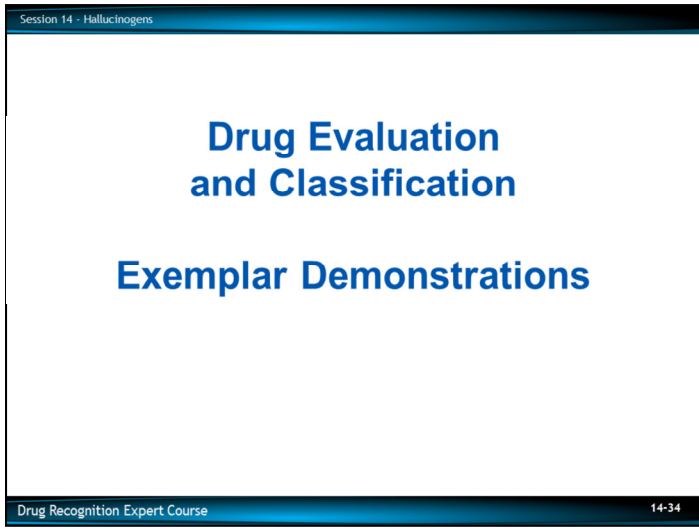
- Nausea
- Paranoia
- Perspiring
- Piloerection (hair standing on end, i.e. goosebumps)
- Altered perception of time and distance
- Synesthesia
- Uncoordinated

Hallucinogen Symptomatology Chart

HGN	None
VGN	None
LOC	None
Pupil Size	Dilated
Reaction to Light	Normal ⁽³⁾
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid

⁽³⁾ Certain psychedelic amphetamines may cause slowing

Symptomatology Chart



F. Classification Exemplars

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

Hallucinogens



Test Your Knowledge

1. What does “synesthesia” mean?
2. What is a “flashback”? What are the three types of “flashback”?
3. Name two naturally-occurring Hallucinogens.
4. What is a “bad trip”?

Test Your Knowledge

1. What does “synesthesia” mean?

2. What is a “flashback”? What are the three types of “flashback”?

3. Name two naturally occurring Hallucinogens.

4. What is a “bad trip”?

Test Your Knowledge

5. What does “psychotomimetic” mean?
6. What is an “illusion”? What is a “delusion”?
7. What is the difference between “hallucinations” and “pseudo-hallucinations”?
8. What is “piloerection”?

5. What does “psychotomimetic” mean?

6. What is an “illusion”? What is a “delusion”?

7. What is the difference between “hallucinations” and “pseudo-hallucinations”?

8. What is “piloerection”?

DRUG INFLUENCE EVALUATION

Evaluator Troeger Trent Heuretz		DRE # 14375	Rolling Log # 17-08-32	Evaluator's Agency South Dakota Highway Patrol	Case # Session 14-1	
Recorder/Witness Troeger Stuart Griffith South Dakota HP		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Sioux Falls Police Department		
Arrestee's Name (Last, First, Middle) Flipping, Condi R.		Date of Birth 6/19/86	Sex F	Race W	Arresting Officer (Name, ID#) Officer Christopher Treadway #10786	
Date Examined / Time / Location 08/10/17 / 1-2-10 / Sioux Falls Police Department		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: Intoximeter 9000	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: Off. Gelsin	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Muffin, eggs, kale sandwich	When? About noon	What have you been drinking? How much? Water 4 or 5 bottles	Time of last drink? n/a	
Time now/ Actual 4:00 PM / 2:15 PM	When did you last sleep? Last night	How long? 3 or 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No "Just a couple of Mollies"			Attitude: Cooperative, dazed	Coordination: Poor, staggering		
Speech: Rambling, slurred		Breath odor: Normal	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 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. 10 / 142 2. 10 / 143 3. 10 / 145	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None	Right Eye None	Convergence Right eye Left eye	n/a/30 One Leg Stand n/a /30 	
Modified Romberg Balance Approx. Approx. 3" 3" 3" 3" Body tremors	Walk and Turn Test Test stopped. Nearly fell 3 times. Claimed the line was moving.	Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken n/a n/a		L R <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Sways while balancing Uses arms to balance Hopping Puts foot down Tests stopped after nearly falling.		
Time Estimation 46 estimated as 30 seconds	Describe turn n/a	Cannot do test (explain) Nearly fell 3 times		Type of footwear: Bare feet		
Finger to Nose (Draw lines to spots touched) Used pads of fingers on attempts 2, 4, 6. Body tremors		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area: Clear
		Left Eye	7.5	9.0	6.0	Oral cavity: Clear
		Right Eye	7.5	9.0	6.0	Reaction to Light: Slow
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		RIGHT ARM LEFT ARM 		
Blood Pressure 146/98		Temperature 99.9 °F		No visible marks detected		
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:				
What drugs or medications have you been using? "Just a couple of Mollies"		How much? "just a couple"	Time of use? "don't remember"	Where were the drugs used? (Location) "in the park at a concert."		
Date / Time of arrest: 08/10/17 / 1:45 PM	Time DRE was notified: 1:55 PM	Evaluation start time: 2:10 PM	Evaluation completion time: 3:20 PM	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation		
DRE/Officer's Signature: Trent Heuretz		Reviewed/approved by / date:			DRE# 14375	
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 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: Flipping, Candi R.

1. **Location:** The evaluation was conducted in the Interview Room of 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 tile flooring free of obstructions.
2. **Witnesses:** The evaluation was observed and recorded by Trooper Stuart Griffith of the South Dakota HP.
3. **Breath Alcohol Test:** The suspect's breath test was administered by Officer Treadway prior to my arrival with a 0.00% BAC result.
4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to conduct a drug evaluation for Officer Treadway of the Sioux Falls PD. When contacted, Officer Treadway advised that he had observed the suspect driving her vehicle 20 miles under the posted speed limit and weaving within her lane on North Minnesota Avenue. According to Officer Treadway, the suspect's vehicle tires nearly struck the curb numerous times. After activating his emergency lights and siren, the suspect continued her poor driving until eventually pulling over about two blocks later. When contacted, the suspect was extremely disoriented and had difficulty speaking. According to Officer Treadway, the suspect indicated she was in the area for the Sturgis Motorcycle Rally. She indicated she had just left a concert and was on her way to her friend's campsite near Deadwood. Officer Treadway suspected the driver was impaired and tried to administer SFST's to the suspect. However, the suspect was unable to do the SFST's due to her poor balance and coordination. He attempted to administer the Horizontal Gaze Nystagmus (HGN) test, but he was unable to do so because the suspect could not focus on his penlight. He also attempted to administer the Walk & Turn (W&T) test, but the suspect could not maintain her position in the instructions stage. For this reason, he did not have the suspect attempt any other field sobriety tests. No alcoholic beverage was detected on the suspect's breath, but Officer Treadway did observe that the suspect's pupils were dilated. Officer Treadway arrested the suspect for DUI and transported her to the Sioux Falls 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 area at the Sioux Falls PD. She was seated on a bench and was perspiring heavily and had a flushed face. She appeared dazed and disoriented. I noted that she was wearing cut-off jeans, a Grateful Dead tee-shirt, and was bare foot. She responded slowly to my greeting, and at times appeared to be looking elsewhere. She was cooperative, and was responsive to my questions, but many of her responses were not relevant to my questions. When I asked her if she was feeling alright, she stated, "I am, but your hair is glowing." She did indicate that she felt okay, but had an upset stomach. She mumbled to herself and had rambling, slurred speech. She did tell me she believed it was about 4:00 pm when it was actually 2:15 pm. She stated she ate breakfast earlier, and had toast and some eggs. She also had a kale sandwich and 4 or 5 bottles of water during the day. She stated she slept the night before for about 3 or 4 hours. Her pupils were noticeably dilated. She agreed to submit to the evaluation.
6. **Medical Problems and Treatment:** Several times the suspect stated she felt nauseous. When asked, she told me she did not require any medical attention. She denied having any medical problems. She stated she was not epileptic or diabetic and does not take insulin. She indicated that she is in generally 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. She told me she understood the tests before each one was attempted. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: Three times the suspect asked me to repeat the instructions. After the third time, she told me she understood the instructions. The suspect swayed approximately 3" front to back and side to side. The suspect had a slowed time estimation, estimating 30 seconds in 46 seconds. She exhibited body tremors while attempting the test.

Walk & Turn: For this this test, a line on the tile floor was used. The suspect was unable to perform this test due to her extreme poor balance. Each time the suspect tried to get into the instruction position, she nearly fell and the test had to be stopped for her safety. She appeared to be upset because she could not do the test and told me that the line was moving.

One Leg Stand: On the first attempt while raising her right foot, she immediately swayed and used her arms for balance. She put her foot down immediately after raising it, then nearly fell three times. For her safety, the test was stopped and I did not attempt to administer the second part of test.

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. She also exhibited body tremors. She also laughed out loud throughout most of the test. Occasionally she would open her eyes, look at me then close them again.

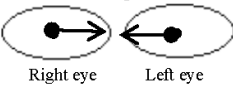
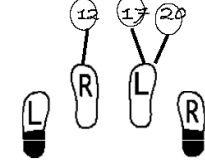
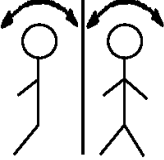
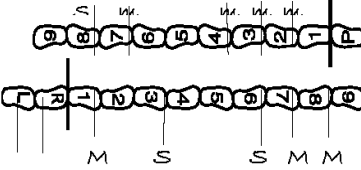
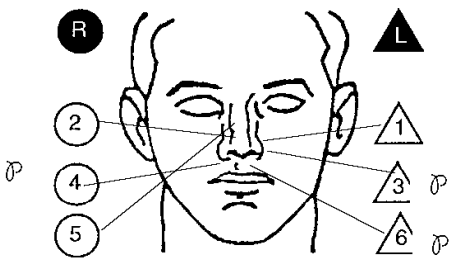
8. Clinical Indicators of Impairment:

Eye Signs: The subject exhibited equal tracking, had equal pupil size, and did not exhibit resting nystagmus. On the HGN test, the suspect had to be reminded numerous times to focus on my penlight. I was able to complete the test, and no clues were observed. She did not exhibit vertical gaze nystagmus in either eye. She did not exhibit lack of convergence, as her eyes were able to converge as instructed. The suspect's 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 146/98 millimeters of Mercury (mmHg), and her body temperature were elevated at 99.9° F. Both were above the DRE average ranges. Her muscle tone was rigid.

- 9. Signs of Ingestion:** There were no obvious signs of ingestion. Her nasal cavity was clear, as was her oral cavity. There were no obvious marks on her arms or hands.
- 10. Suspect's Statements:** The suspect stated she was healthy and did not take medications. 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 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 by Officer Treadway. The sample was submitted as evidence pending analysis by the state crime laboratory.
- 13. Miscellaneous:** "Molly" is a street name for MDMA (3,4-methylenedioxy-methamphetamine), also known as Ecstasy. Refer to Officer Treadway's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator <i>Sgt. Allan Kolak</i>		DRE #	Rolling Log # <i>17-05-109</i>	Evaluator's Agency <i>Cape Coral PD</i>	Case # <i>Session 14-2</i>
Recorder/Witness <i>Deputy Tim Cornelius, Collier Co SO</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <i>Cape Coral Police Department</i>	
Arrestee's Name (Last, First, Middle)		Date of Birth <i>07/18/88</i>	Sex <i>M</i>	Race <i>W</i>	Arresting Officer (Name, ID#) <i>Officer Heather Causser #16882</i>
Date Examined / Time / Location <i>5/17/17 / 2210 / Collier Co. jail</i>		Breath Test: Results: <i>0.00</i>	Test Refused <input type="checkbox"/> Instrument #: <i>Drager #12557</i>	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: <i>Officer Causser</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <i>Two hotdogs</i>	When? <i>5 pm</i>	What have you been drinking? How much? <i>Water w/a</i>	Time of last drink? <i>w/a</i>
Time now/ Actual <i>7 PM / 10:15 P</i>	When did you last sleep? <i>Yesterday</i>	How long? <i>6 hours</i>	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: <i>indifferent, distracted, paranoid</i>		Coordination: <i>Poor, staggering</i>	
Speech: <i>Rambling, incoherent at times</i>		Breath odor: <i>Normal</i>		Face: <i>Flushed, sweaty</i>	
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	HGN	Left Eye	Right Eye	Convergence	26/30 One Leg Stand 32/30
1. <i>112 / 2224</i>	Lack of Smooth Pursuit	<i>None</i>	<i>None</i>		
2. <i>110 / 2224</i>	Maximum Deviation	<i>None</i>	<i>None</i>		
3. <i>112 / 2248</i>	Angle of Onset	<i>None</i>	<i>None</i>		
Modified Romberg Balance Approx. 3" 3" 3" 3"	Walk and Turn Test		Cannot keep balance <input checked="" type="checkbox"/>		
			Starts too soon <input checked="" type="checkbox"/>		
	Leg tremors throughout		Stops walking <input checked="" type="checkbox"/>		
			Misses heel-toe <input checked="" type="checkbox"/>		
			Steps off line <input checked="" type="checkbox"/>		
			Raises arms <input checked="" type="checkbox"/>		
			Actual steps taken <i>9</i>		
			1 st Nine <input checked="" type="checkbox"/> 2 nd Nine <input checked="" type="checkbox"/>		
			Sways while balancing <input checked="" type="checkbox"/>		
			Uses arms to balance <input checked="" type="checkbox"/>		
			Hopping <input checked="" type="checkbox"/>		
			Puts foot down <input checked="" type="checkbox"/>		
			Body tremors <input checked="" type="checkbox"/>		
Time Estimation <i>16</i> estimated as 30 seconds	Describe turn <i>Lost balance, nearly fell</i>		Cannot do test (explain) <i>w/a</i>		Type of footwear: <i>sandals</i>
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	<i>6.0</i>	<i>9.0</i>	<i>5.5</i>
		Right Eye	<i>6.0</i>	<i>9.0</i>	<i>5.5</i>
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <i>Normal</i>
Blood Pressure <i>160 / 96</i>		Temperature <i>99.8 °F</i>		RIGHT ARM	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		No noticeable marks		LEFT ARM	
Comments: What drugs or medications have you been using? <i>"Nothing"</i>		How much? <i>w/a</i>		Time of use? <i>w/a</i>	
Date / Time of arrest: <i>5/17/17 / 2105</i>		Time DRE was notified: <i>2125</i>		Where were the drugs used? (Location) <i>w/a</i>	
Evaluation start time: <i>2210</i>		Evaluation completion time: <i>2305</i>		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <i>Allan Kolak</i>		Reviewed/approved by / date:			DRE# <i>8191</i>
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: Tripp, Brad

1. **Location:** The evaluation was conducted on 05/17/17 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 with no obstructions.
2. **Witnesses:** Deputy Timothy Corneilus from the Collier County S.O. witnessed and recorded the evaluation. The darkroom examinations were witnessed by the arresting officer, Officer Heather Causer.
3. **Breath Alcohol Test:** The suspect's breath test was 0.00%, and was administered by Officer 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 Officer 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 Officer Causer, the suspect was acting very strange and at times began talking to imaginary people. The suspect also claimed that the overhead lights on Officer Causer's patrol vehicle were burning his eyes and skin. According to Officer Causer, she 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. However, the suspect did very poorly on the W&T and OLS tests, and due to his poor balance and coordination, the tests had to be stopped for safety reasons. According to Officer 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, Officer 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. 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 also indifferent, distracted, and occasionally paranoid acting. He would ramble on 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. He stated he had eaten two hotdogs about 5:00 pm, and only had water to drink. He denied drinking alcohol. He stated he did not wear corrective lenses, and could see fine. He stated he slept yesterday for about six hours. I noted that the subject was wearing soiled green pants, a red tee-shirt and slip-on 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 problems, and was not taking any medication.
7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the subject prior to each test. He stated he understood the instructions for each one. The following tests were administered to the suspect:

Modified Romberg Balance: The suspect swayed approximately three inches front to back and side to side. His time estimation was fast, estimating 30 seconds in 16 seconds. When asked how he estimated the 30 seconds, he pointed to the ceiling and said, "I was watching the clock in the sky."

Walk and Turn: For this test, a line of the tile floor was used. The suspect lost his balance twice during the instructions stage and tried to start the test too soon once. He stopped while walking once and missed touching heel to toe four times on the first nine steps. He also used his arms for balance. He made an improper turn when he lost his balance and nearly fell. After regaining his position and starting the next nine steps, he missed touching heel to toe four times, stopped while walking once and again used his arms for balance on all nine steps. He was asked if he'd prefer to remove his sandals for the test and he looked at his feet for about 30 seconds, and said, "No, I have both my feet."

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 while standing on his left foot and counted to 1,026 in 30 seconds. While standing on his right foot, he swayed and used his arms for balance. He put his foot twice, at his count of 1,017 and 1,020. He exhibited body tremors throughout each test.

Finger to Nose: During this test, the suspect missed the tip of his nose on each attempt and used the pads of his fingers on attempts 3, 4 and 6. He exhibited quick jerky movements with his arms on each attempt. He also exhibited body tremors throughout the test. His legs tremored constantly, and his arms exhibited tremors throughout, particularly when each was at his side.

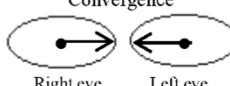

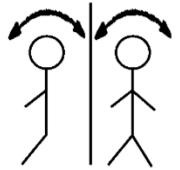

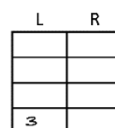
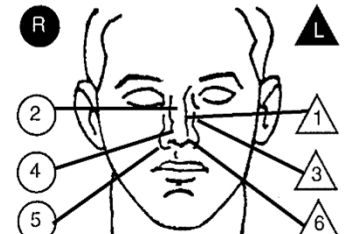
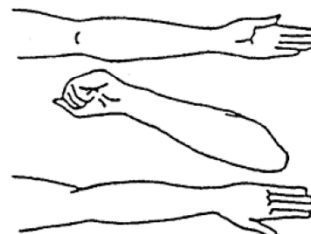
8. Clinical Indicators of Impairment:

Eye Signs: The subject's eyes tracked equally, his pupils were approximately equal in size, and he did not have resting nystagmus. No clues of HGN were detected and he did not exhibit VGN. He did not exhibit a lack of convergence, as his eyes were able to converge. The suspect's 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 normal. He did not exhibit rebound dilation.

Vital Signs: The subject's pulse rates were all above the DRE average range, at 112 beats per minute (bpm), 110 bpm and 112 bpm. The subject's blood pressure was above the average ranges at 160/96 millimeters of mercury (mmHg). His body temperature was above average range at 99.8° Fahrenheit (F). His muscle tone was rigid.

- 9. Signs of Ingestion:** No obvious signs of ingestion were observed. His nasal and oral cavities were clear and he had no obvious marks on his arms or hands.
- 10. Suspect's Statements:** The suspect denied any drug use. He made numerous rambling statements that were many times incoherent, and appeared to be talking to someone or something that was not real. He seemed to see objects that were not truly present and kept 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. It was turned over to the arresting officer for submission to the lab for analysis.
- 13. Miscellaneous:** Due to the suspect's periodic hallucinations and elevated vital signs, the suspect was put on a medical watch alert by the Jail staff and his condition was monitored by jail medical staff.

DRUG INFLUENCE EVALUATION

Evaluator <i>Cpl. Jay Penton</i>		DRE # <i>15465</i>	Rolling Log # <i>17-07-37</i>	Evaluator's Agency <i>Alabama State Police</i>	Case # <i>Session 14-3</i>														
Recorder/Witness <i>Deputy Ricky Thompson, Montgomery</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <i>Prattville Police Department</i>															
Arrestee's Name (Last, First, Middle) <i>Trumpet, Angel</i>		Date of Birth <i>01/23/92</i>	Sex <i>F</i>	Race <i>W</i>	Arresting Officer (Name, ID#) <i>Sgt. Brian Gentry #25218</i>														
Date Examined / Time / Location <i>07-29-17 / 1830 Prattville PD</i>		Breath Test: Results: <i>0.00</i>		Test Refused <input type="checkbox"/> Instrument #: <i>36642</i>	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: <i>Officer Belcher</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <i>"Nothing, I'm fasting"</i>	When? <i>N/A</i>	What have you been drinking? <i>"Just water"</i>	How much? <i>2 bottles</i>														
Time now/ Actual <i>10 pm / 1830</i>	When did you last sleep? <i>Last night</i>	How long? <i>8 hours</i>	Are you sick or injured? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>Upset stomach</i>	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>"I don't do drugs!"</i>		Attitude: <i>Argumentative, Excited</i>	Coordination: <i>Poor, Staggering, Falling</i>														
Speech: <i>Rapid, Incoherent at times</i>		Breath odor: <i>Rancid</i>		Face: <i>Flushed, Sweaty</i>															
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. <i>108 / 1834</i> 2. <i>106 / 1858</i> 3. <i>106 / 1912</i>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye <i>None</i>	Right Eye <i>None</i>	Convergence  Right eye Left eye	<i>5/30</i> One Leg Stand <i>N/A/30</i>  <i>w/a</i>														
Modified Romberg Balance Approx. <i>w/a</i> Approx. <i>w/a</i>  <i>unable to stand, test stopped</i>	Walk and Turn Test  <i>Lost balance 3 times and nearly fell. Stopped for safety reasons</i>	Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon <i>w/a</i> Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		1 st Nine 2 nd Nine <table border="1" style="display: inline-table;"><tr><td><i>w/a</i></td><td><i>w/a</i></td></tr><tr><td><i>w/a</i></td><td><i>w/a</i></td></tr><tr><td><i>w/a</i></td><td><i>w/a</i></td></tr><tr><td><i>w/a</i></td><td><i>w/a</i></td></tr><tr><td><i>w/a</i></td><td><i>w/a</i></td></tr></table>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<i>w/a</i>	<table border="1" style="display: inline-table;"><tr><td><i>L</i></td><td><i>R</i></td></tr><tr><td><i>3</i></td><td></td></tr></table> <i>Nearly fell, tests stopped for safety</i>	<i>L</i>	<i>R</i>	<i>3</i>	
<i>w/a</i>	<i>w/a</i>																		
<i>w/a</i>	<i>w/a</i>																		
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<i>w/a</i>	<i>w/a</i>																		
<i>L</i>	<i>R</i>																		
<i>3</i>																			
Time Estimation <i>w/a</i> estimated as 30 seconds	Describe turn <i>w/a</i>	Cannot do test (explain) <i>Nearly fell several times</i>		Type of footwear: <i>Lace-up work boots</i>															
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	<i>6.0</i>	<i>8.5</i>	<i>5.0</i>														
		Right Eye	<i>6.0</i>	<i>8.5</i>	<i>5.0</i>														
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <i>Normal</i>														
		RIGHT ARM 		LEFT ARM 															
		<i>No visible marks observed</i>																	
Blood Pressure <i>148/96</i>	Temperature <i>99.8 °F</i>	Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid																	
Comments: What drugs or medications have you been using? <i>"I told you, I don't do drugs!"</i>		How much? <i>"None!"</i>	Time of use? <i>w/a</i>	Where were the drugs used? (Location) <i>w/a</i>															
Date / Time of arrest: <i>07/29/17 / 1749</i>	Time DRE was notified: <i>1810</i>	Evaluation start time: <i>1830</i>	Evaluation completion time: <i>1916</i>	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation															
Officer's Signature: <i>Cpl. Jay Penton</i>		DRE # <i>15465</i>	Reviewed/approved by / date:																
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"/> Medical	<input type="checkbox"/> CNS Depressant	<input checked="" type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic														
				<input type="checkbox"/> Inhalant	<input type="checkbox"/> Cannabis														

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Trumpet, Angel

- 1. Location:** The drug evaluation was conducted in the booking 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 concrete floor with no obstructions.
- 2. Witnesses:** Deputy Ricky Thompson of the Montgomery CO. S.O. observed 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:** I was on duty and was contacted by Sergeant Brian Gentry of the Prattville Police Department requesting a drug evaluation. I contacted him at the PD where he advised he had located the suspect's vehicle stopped partially in the travel portion of East Main Street. The suspect appeared dazed and very disoriented. Several times she pointed to some lights near the area and told Sergeant Gentry she stopped because the lights were so bright. She was at times incoherent, and it took some time for Sergeant Gentry to get her to understand who he was. He was eventually able to get her to exit her vehicle to check on her condition. Sergeant Gentry determined that the suspect was not suffering from any injuries or medical condition and suspected that she was possibly impaired. He was able to get her to do the Horizontal Gaze Nystagmus (HGN) test, and no clues were observed. However, he did note that her pupils were very dilated. She was unable to complete the Walk & Turn (W&T) and the One Leg Stand (OLS) tests, as she nearly fell several times. She complained during the testing that a space ship was overhead and that was why she kept falling. Sergeant Gentry arrested the suspect for DUI and advised her of her Miranda rights. During transport to the jail, she was complaining that the street lights were too loud, and that she needed earmuffs because of the noise. She was able to comply with Sergeant Gentry's requests in regards to getting out of the patrol car, going into the police department, sitting down, and answering questions. Once completing the breath test and obtaining a .00 BAC, he requested the assistance of a DRE.
- 5. Initial Observation of the Suspect:** I first observed the suspect seated in the booking area at the PD. She was staring straight ahead. When I entered the room, she quickly turned and asked "Are you God?" I responded by giving her my name and asking for consent to conduct a drug evaluation. She replied, "They sent you, it must be okay." Her speech was rapid, and she stuttered at times, making her speech somewhat incoherent. She was perspiring heavily, and her face was flushed. She had a rancid breath odor. At times she acted very paranoid, was excited, and argumentative with other officers, although at other times she was cooperative. When asked about her condition, she stated, "I'm okay as long as my goddess is next to me." She stated she ate nothing and was "fasting" and drank two bottles of water. She estimated the time as 10 pm when it was actually 6:30 pm. She stated she could see fine, did not have any blindness or vision problems, and did not wear corrective lenses. Her eyelids appeared normal and her pupils were noticeably dilated. I noted that she was wearing cut-off levi's, a black tee-shirt with a marijuana leaf insignia on the front, and unlaced black work-type boots.
- 6. Medical Problems and Treatment:** The suspect indicated that she had an upset stomach from something she ate, but did not require medical assistance. She stated 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 problems.
- 7. Psychophysical Indicators of Impairment:** The psychophysical tests were explained and demonstrated to the suspect. Even though several had to be explained multiple times, she stated she understood them prior to attempting each test. The following tests were administered to the suspect:

Modified Romberg Balance: Due to the suspect's poor balance, and nearly falling several times when she closed her eyes, it was necessary to terminate this test for safety reasons.

Walk and Turn: A line of the floor was used for this test. The suspect started in the instructional position, but lost her balance three times, therefore the test was terminated 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. When she attempted to raise her left foot as directed, she lost her balance and used the wall to keep from falling. She then stated, "Everything moving." This part of the test was also stopped for safety reasons.

Finger to Nose: For safety reasons, this test was conducted while she was seated. She missed the tip of her nose on all six attempts, and got visibly upset when she could not touch her nose.

8. Clinical Indicators of Impairment:

Eye Signs: The suspect's eyes had equal tracking and she had equal pupil size. She did not exhibit any clues of HGN, and VGN was not present. She did not exhibit a lack of convergence, as her eyes were able to converge as instructed. The suspect's pupils were dilated and above the DRE average ranges. In Room Light her pupil sizes were estimated at 6.0 mm in both eyes, in Near Total Darkness her pupil sizes were estimated at 8.5 mm in both eyes, and in Direct Light her pupil sizes were estimated at 5.0 mm in both eyes. Her pupillary reaction to light was normal and she did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were above the DRE average range, at 108 beats per minute (bpm), 106 bpm and 106 bpm. Her blood pressure was also above the DRE average range at 148/96 millimeters of mercury (mmHg) blood pressure. Her body temperature was above the DRE average range at 99.8° Fahrenheit (F). Her muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal area was clear. Her breath was rancid smelling, and she had brownish coating on her tongue. She also had small pieces of brown vegetable matter in her teeth. When asked about the brown matter in her teeth, she indicated that she likes to eat healthy food and that she doesn't brush her teeth very often.
10. **Suspect's Statements:** The suspect first stated she was fasting for religious reasons, and is not allowed to use of alcohol or drugs. However, she then stated that she got hungry, so she purchased some "organic mushrooms" from a guy at a truck stop. She did not know who he was, and had not seen him before. She made numerous statements regarding things she saw and heard that no one else saw or heard. She would occasionally state that the overhead room lights were making too much noise, and that she could not lean on the table as it was a pool of water and she didn't want to fall in. When asked about drug use, she stated loudly, "I don't do drugs!" She became visibly upset that I asked her this question and stated she was "pure" and would never take drugs, or 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 from the suspect at 1953 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 report for additional details.

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Session 15

Practice: Test Interpretation



Learning Objectives

- **Analyze results of a drug influence evaluation**
- **Articulate basis for opinion**

Upon successfully completing this session, the participant will be able to:

- 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

CONTENT SEGMENTS

- A. Interpretation Demonstration
- B. Interpretation Practice

LEARNING ACTIVITIES

Instructor-Led Demonstrations
Small-Group Practice
Participant-Led Presentations

Interpretation Demonstrations

Case 1: Subject Adams

- Preliminary examination
- Eye examinations
- Psychophysical tests

A. Interpretation Demonstrations

Case One: Subject Adams

Preliminary Examination

Eye Examinations

Psychophysical Tests

Vital Signs Examinations

- **Pulse**
- **Blood pressure**
- **Temperature**

Vital Signs Examinations

Dark Room Examinations

- Room light
- Near-total darkness
- Direct light
- Check nasal area and oral cavity

Dark Room Examinations

Narrative Report

1. Location
2. Witness(es)
3. Breath Alcohol Test
4. Notification/Interview of A/O
5. Initial Observation of Suspect
6. Medical Problems and Treatment
7. Psychophysical Indicators
8. Clinical Indicators
9. Signs of Ingestion
10. Suspect's Statements
11. DRE's Opinion
12. Toxicology Specimen
13. Misc.

Narrative report

Opinion of Evaluator

Interpretation Demonstrations

Case 2: Subject Baker

- Preliminary examination
- Eye examinations
- Psychophysical tests

Case Two: Subject Baker

Preliminary Examination

Eye Examination

Psychophysical Tests

Interpretation Demonstrations

Case 2: Subject Baker

- Vital sign examinations
- Dark room examinations
- Other evidence and additional observations
- Narrative report
- Opinion of the evaluator

Vital Signs Examinations

Dark Room Examinations

Other Evidence and Additional Observations

Narrative Report

Opinion of the Evaluator

Session 15 - Practice: Test Interpretation

Interpretation Practice

- Work in teams
- Review exemplars
- Present conclusions to class

Drug Recognition Expert Course 15-9

B. Interpretation Practice

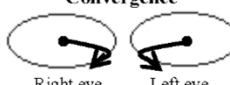
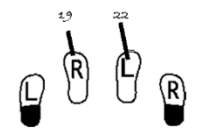
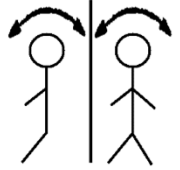
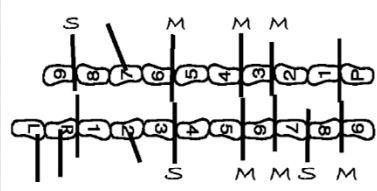
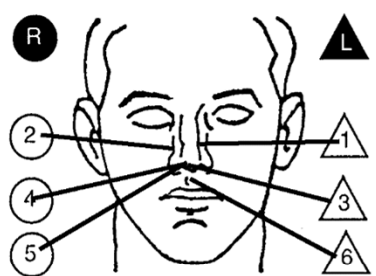
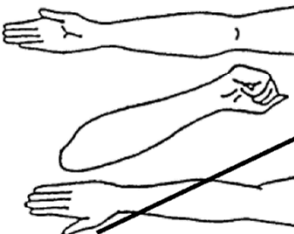
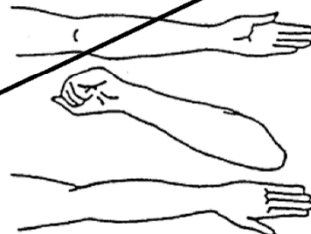
Team Practice

Teams will present their conclusions to the entire class.

- Subject Charles
- Subject Dodge
- Subject Edwards

QUESTIONS?

DRUG INFLUENCE EVALUATION

Evaluator Deputy Mark George Boulder Co. SO		DRE # 5696	Rolling Log # 14-10-125		Evaluator's Agency Thornton PD	Case # Session XV-#1														
Recorder/Witness Deputy Mark George Boulder Co. SO		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Denver PD																
Arrestee's Name (Last, First, Middle) Adams, Frank B.		Date of Birth 01/12/82	Sex M	Race ce	Arresting Officer (Name, ID#) Officer Alan Ma #15588															
Date Examined / Time / Location 10/06/14		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 44352		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: Officer Ma	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? Chicken Dinner 6pm		What have you been drinking? How much? "just some water" N/A		Time of last drink? N/A														
Time now/ Actual 9:30PM / 2220	When did you last sleep? Last night 7-8 hours	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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No Dr. Davis - sleeping problems																
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No "Something to help me sleep"			Attitude: Cooperative		Coordination: unsteady															
Speech: Thick, slow, slurred		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 checked="" type="checkbox"/> Yes <input 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>2230</u> 2. <u>56</u> / <u>2242</u> 3. <u>54</u> / <u>2255</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		26/30 One Leg Stand 24/30 														
Modified Romberg Balance Approx. 2" 2" 3" 3" 	Walk and Turn Test  walked slowly throughout the test	Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking <input checked="" type="checkbox"/> Misses heel-toe <input checked="" type="checkbox"/> Steps off line <input checked="" type="checkbox"/> Raises arms <input checked="" type="checkbox"/> Actual steps taken 9		1 st Nine 2 nd 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></table>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<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>1</td><td>1</td></tr></table> Miscounted several times	L	R	1	1	1	1	1	1
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																			
L	R																			
1	1																			
1	1																			
1	1																			
Time Estimation <u>36</u> estimated as 30 seconds	Describe turn walking turn with both feet	Cannot do test (explain) N/A		Type of footwear: Dress shoes																
Finger to Nose (Draw lines to spots touched)  Slow hand movements. Searched for tip of nose		PUPIL SIZE	Room light (2.5-5.0)	Darkness (5.0-8.5)	Direct (2.0-4.5)	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															
		RIGHT ARM 		LEFT ARM 																
		Nothing detected																		
Blood Pressure 104 / 64	Temperature 97.4 °F	Muscle Tone: <input type="checkbox"/> Near <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:																
What drugs or medications have you been using? "Something to help me sleep"		How much? "1 or 2 pills"		Time of use? "About 6pm"	Where were the drugs used? (Location) "At dinner"															
Date / Time of arrest: 10/06/14 / 2118	Time DRE was notified: 2150	Evaluation start time: 2215	Evaluation completion time: 2310	<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														

Suspect: **Adams, Frank**

1. **Location:** The drug influence evaluation was conducted at the Denver County Jail Intake Center, 10500 E. Smith Road, Denver, Colorado. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Officer Mark Ashby (Thornton Police Department). Deputy Mark George (Boulder County Sheriff's Office) was the scribe.
3. **Breath Test:** A breath test was administered to Adams with an approved evidential breath-testing device with the results of 0.000, and 0.000.
4. **Notification/Interview:** Officer Alan Ma stopped the subject after observing him drifting outside the travel lane and then making an improper turn. While speaking with Adams at roadside, Officer Ma noticed he had slurred speech and appeared to have difficulties with divided attention tasks. Officer Ma was unable to detect the odor of an alcoholic beverage on his breath, but did administer SFSTs to the subject. Officer Ma observed all six clues of the Horizontal Gaze Nystagmus Test during field sobriety testing, as well as Vertical Gaze Nystagmus. Adams demonstrated significant impairment during the Walk and Turn and the One Leg Stand tests. Officer Ma arrested Adams and transported him to the Denver County jail for breath testing. When his breath alcohol test was inconsistent with the impairment observed at roadside, Officer Ma contacted a DRE for further investigation. I was on-duty and responded to his location.
5. **Initial Observation of Suspect:** I first observed the suspect in the booking room at the jail. His head was tilted forward, his eyes were closed, and his breathing was deep and slow. He responded slowly to questions. His speech was slow, slurred, and thick. Several times when he stood, he would stagger and use the wall to steady himself. He was cooperative, his face appeared normal, and there was no discernable odor of an alcoholic beverage on his breath. His eyes were normal, his pupils were equal, and his eyes tracked together. His eyelids were droopy.
6. **Medical Problems/Treatment:** Adams stated he had no physical problems and none were observed. He stated he was seeing Dr. Davis for a sleeping problem, to which he had received a prescription for an unknown sleep aid. He was unable to recall the name of the medication. Adams he was not under the care of a dentist and was not seeing any other doctors.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Adams estimated the passage of 30 seconds when 36 seconds actually elapsed. During this test he had a front to back sway of approximately 2 inches in each direction, as well as a side-to-side sway of approximately 3 inches in each direction.

Walk and Turn: During the Walk and Turn test, Adams lost his balance twice during the instructions phase. During the walking stage he stopped while walking two times during the first set of nine steps (#4, #8) and once during the second set of nine steps (#9), he missed heel to toe three times in the first set of nine steps (#6, #7, #9) and three times in the second set (#3, #4, #6), he stepped off the line once in each direction (#2 first set, #7 second set), and raised his arms for balance three times each direction. During the turn he did a walking turn with both feet. He was wearing dress shoes during this test.

One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing once, used his arms to balance once, and put his foot down at count 1,019. He counted slowly and only reached 1,026 at the conclusion of 30 seconds. During the second test, he swayed while balancing one time, used his arms to balance once, and put his foot down at 1,022. He counted to 1,024 at the conclusion of the 30 seconds. He miscounted several times during this test. He was wearing dress shoes during this test.

Finger to Nose: During the Finger to Nose test, Adams displayed slow hand and arm movements and appeared to have to search for the tip of his nose. He touched the tip of his nose correctly three times (#3, #4, #5) and missed it three times. On one attempt (#6) he missed his nose entirely and touched his upper lip instead.

8. **Clinical Signs:** Adams had all six clues of Horizontal Gaze Nystagmus with an angle of onset of approximately 35 degrees. He also had Vertical Gaze Nystagmus. Adams was not able to converge his eyes. Adams' pulse was measured three times during the course of the evaluation: 1) at 2230 hours it was 56 beats per minute; 2) at 2242 hours it was 56 beats per minute; and 3) at 2255 hours it was 54 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 104/64, which was below the DRE average ranges. His body temperature was measured at 97.4°, which is below normal. During the pupil size examinations, his eyes were estimated in room light at 4.5 and 4.5, near total darkness at 6.5 and 6.5, and in direct light at 3.5 and 3.5. These sizes are within the DRE average range. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was flaccid.
9. **Signs of Ingestion:** His nasal area and oral cavity were clear. There were no indicators of injection sites.
10. **Statements:** Officer Ma advised Adams of his constitutional rights and he agreed to waive his rights and answer questions. He stated he taken "1 or 2 pills" around 1800 hours (approximately 3 hours before the arrest) while he was at dinner. He said the pills were "something to help him sleep."
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Adams is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and in accordance with statutory requirements. The collection was witnessed by me and Officer Ma, and immediately delivered into his custody. The sample was sealed with evidence tape and submitted into evidence for laboratory testing.
13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

Evaluator Trooper Joseph Germano		DRE # 10712	Rolling Log # 14-08-021	Evaluator's Agency NY State Police	Case # Session XV-#2																					
Recorder/Witness Trooper David Olney NY State Police		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency New York State Police																						
Arrestee's Name (Last, First, Middle) Baker, Samuel		Date of Birth 10/15/88	Sex M	Race B	Arresting Officer (Name, ID#) Trooper Jim Guerriere #5525																					
Date Examined / Time / Location 08/04/14 2210 Cooperstown PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 44321	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 Guerriere	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? French fries 2 hours ago	When?	What have you been drinking? How much? Water 1 bottle	Time of last drink? N/A																					
Time now/ Actual 9:30PM / 2215	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	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		Coordination: Poor, staggering at times																						
Speech: Rapid, slurred at times		Breath odor: Rancid		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																						
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	Left Eye	Right Eye	Convergence																						
1. <u>90</u> / <u>2224</u>	Lack of Smooth Pursuit	<u>None</u>	<u>None</u>																							
2. <u>92</u> / <u>2235</u>	Maximum Deviation	<u>None</u>	<u>None</u>																							
3. <u>92</u> / <u>2252</u>	Angle of Onset	<u>None</u>	<u>None</u>																							
Modified Romberg Balance Approx. 3" 3" 3" 3"	Walk and Turn Test		<table border="1" style="width: 100%;"> <tr> <td>Cannot keep balance</td> <td colspan="2"></td> </tr> <tr> <td>Starts too soon</td> <td colspan="2"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Stops walking</td> <td>1st Nine</td> <td>2nd Nine</td> </tr> <tr> <td>Misses heel-toe</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Steps off line</td> <td></td> <td></td> </tr> <tr> <td>Raises arms</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Actual steps taken</td> <td><u>9</u></td> <td><u>9</u></td> </tr> </table>			Cannot keep balance			Starts too soon	<input checked="" type="checkbox"/>		Stops walking	1 st Nine	2 nd Nine	Misses heel-toe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Steps off line			Raises arms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Actual steps taken	<u>9</u>	<u>9</u>
Cannot keep balance																										
Starts too soon	<input checked="" type="checkbox"/>																									
Stops walking	1 st Nine	2 nd Nine																								
Misses heel-toe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																								
Steps off line																										
Raises arms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																								
Actual steps taken	<u>9</u>	<u>9</u>																								
	<p><i>quick, jerky steps</i></p>		<p>One Leg Stand 40/30 38/30</p> <table border="1" style="width: 100%;"> <tr> <td>L</td> <td>R</td> <td></td> </tr> <tr> <td>1</td> <td>1</td> <td rowspan="4"> Sways while balancing Uses arms to balance Hopping Puts foot down </td> </tr> <tr> <td>1</td> <td>1</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td>1</td> </tr> </table>			L	R		1	1	Sways while balancing Uses arms to balance Hopping Puts foot down	1	1				1									
L	R																									
1	1	Sways while balancing Uses arms to balance Hopping Puts foot down																								
1	1																									
	1																									
Time Estimation <u>21</u> estimated as 30 seconds	Describe turn <i>As instructed</i>		Cannot do test (explain) <i>N/A</i>		Type of footwear: <i>Lace-up shoes</i>																					
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)																					
<p><i>quick and jerky hand and arm movements</i></p>		Left Eye	6.5	8.0	6.0																					
		Right Eye	6.5	8.0	6.0																					
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <i>Slow</i>																					
		RIGHT ARM		LEFT ARM																						
		Nothing detected																								
Blood Pressure 104 / 64	Temperature 97.4 °F																									
Muscle Tone: <input type="checkbox"/> Near <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid																										
Comments: <i>"Nothing"</i>	How much? <i>N/A</i>	Time of use? <i>N/A</i>	Where were the drugs used? (Location) <i>N/A</i>																							
Date / Time of arrest: 08/04/14 / 2110	Time DRE was notified: 2130	Evaluation start time: 2210	Evaluation completion time: 2315	<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"/> Narcotic Analgesic																						
				<input type="checkbox"/> Inhalant																						
				<input type="checkbox"/> Cannabis																						

Suspect: **Baker, Samuel**

1. **Location:** The drug influence evaluation was conducted at the Cooperstown Police Department, 22 Main Street, Cooperstown, New York. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Trooper David Olney (New York State Police). Trooper Joseph Germano (New York State Police) was the scribe.
3. **Breath Test:** A breath test was administered to Baker with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** Trooper Jim Guerriere stopped the subject after observing him cross over the center line of a two-lane roadway and almost struck an oncoming vehicle. While speaking with Baker at roadside, Trooper Guerriere noticed Baker's speech was quick and difficult to understand at times and he was very fidgety. Trooper Guerriere did not detect an odor of an alcoholic beverage on his breath, but did administer SFSTs to the subject. Baker appeared to have great difficulty with the SFSTs and could not perform them as directed. Trooper Guerriere arrested Baker and transported him to the Cooperstown PD for breath testing. When his breath alcohol test was inconsistent with the impairment observed at roadside, Trooper Guerriere requested a DRE for further investigation. I was off-duty, but lived nearby and responded to his location.
5. **Initial Observation of Suspect:** I first observed the suspect in the breath testing room at Cooperstown PD. Baker repeatedly shifted his weight from foot to foot and appeared restless. He was frequently moving his hands and arms. His pupils were dilated, and I noticed he was grinding his teeth. His speech was both fast and slurred. His coordination was poor, and he staggered several times while standing. Several times when he stood he would stagger. He was cooperative, his face appeared normal, and his breath was rancid. His eyes were normal, his pupils were equal, and his eyes tracked together. His eyelids were normal.
6. **Medical Problems/Treatment:** Baker stated he had no physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Baker estimated the passage of 30 seconds when 21 seconds actually elapsed. During this test he had a front to back sway of approximately 3 inches in each direction, as well as a side-to-side sway of approximately 3 inches in each direction.

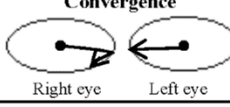
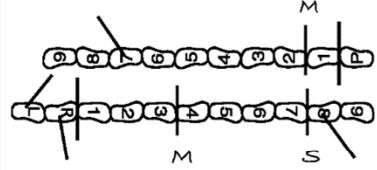
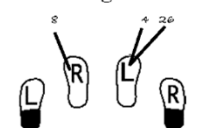
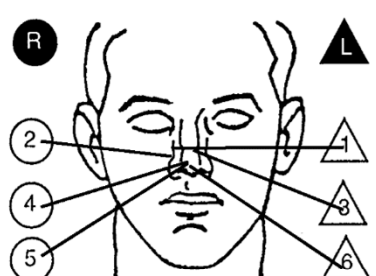
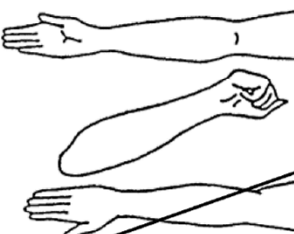
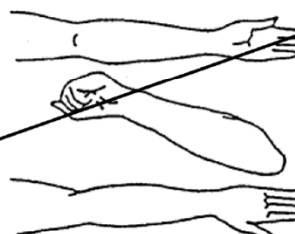
Walk and Turn: During the Walk and Turn test, Baker attempted to start the test before instructed during the instructions phase. During the walking stage he missed heel to toe two times in the first set of nine steps (#6, #9) and once in the second set (#9), and raised his arms for balance three times on the first set of nine steps and two times on the second set. He turned as instructed. He walked with quick, jerky steps. He was wearing lace-up shoes during this test.

One Leg Stand: The One Leg Stand test was conducted twice - once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing once, and used his arms to balance once. He counted quickly and reached 1,040 at the conclusion of 30 seconds. During the second test, he swayed while balancing one time, used his arms to balance once, and put his foot down at 1,021. He counted to 1,038 at the conclusion of the 30 seconds. He was wearing lace-up shoes during this test.

Finger to Nose: During the Finger to Nose test, Baker displayed quick and jerky hand and arm movements. He touched the tip of his nose correctly three times (#3, #4, #5) and missed it three times.

8. **Clinical Signs:** Baker had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Baker was able to converge his eyes. Baker' pulse was measured three times during the course of the evaluation: 1) at 2224 hours it was 90 beats per minute; 2) at 2235 hours it was 92 beats per minute; and 3) at 2252 hours it was 92 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. His blood pressure was measured at 142/98, which was above the DRE average ranges. His body temperature was measured at 99.7°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 6.5 and 6.5, near total darkness at 8.0 and 8.0, and in direct light at 6.0 and 6.0. These sizes are dilated in room light and direct light. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was rigid.
9. **Signs of Ingestion:** His nasal area showed some redness. His oral cavity was clear. There were no indicators of injection sites.
10. **Statements:** Trooper Guerriere advised Baker of his constitutional rights and he agreed to waive his rights and answer questions. He denied consuming any drugs.
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Baker is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A urine sample was collected from the suspect and witnessed by me. I immediately delivered the specimen to Trooper Guerriere. The sample was sealed with evidence tape and submitted into evidence for laboratory testing.
13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

Evaluator Deputy Rob Corn		DRE # 12373	Rolling Log # 14-03-058	Evaluator's Agency Kitsap County SO	Case # Session XV-#3
Recorder/Witness Sgt Courtney Stewart WA State Patrol		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Seattle Police Dept	
Arrestee's Name (Last, First, Middle) Charles, Mary C.		Date of Birth 6/13/72	Sex F	Race W	Arresting Officer (Name, ID#) Officer Michael Jongma #6156
Date Examined / Time / Location 03/17/14 0045 Seattle PD		Breath Test: Results: 0.05	Test Refused <input type="checkbox"/> Instrument #: 13345	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: Ofc Jongma	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Pizza		When? 6 pm	What have you been drinking? How much? "Couple glasses of wine 2"
Time now/ Actual midnight / 0055	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: Cooperative	Coordination: Fair	
Speech: Slurred		Breath odor: Alcohol (ETOH)		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 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 and Time 1. <u>66</u> / <u>0105</u> 2. <u>64</u> / <u>0114</u> 3. <u>64</u> / <u>0128</u>		HGN Lack of Smooth Pursuit Present Maximum Deviation Present Angle of Onset None	Left Eye Present	Right Eye Present	Convergence  Right eye Left eye
Modified Romberg Balance Approx. 2" 2" 2" 2"		Walk and Turn Test 		28/30 One Leg Stand 30/30 	
Time Estimation <u>32</u> estimated as 30 seconds		Describe turn Lost balance, staggered		Cannot do test (explain) N/A	
Type of footwear: Slip on shoes		Nasal area: Clear		Oral cavity: Clear	
Finger to Nose (Draw lines to spots touched)  Quick and jerky hand and arm movements		PUPIL SIZE		Reaction to Light: Normal	
Blood Pressure 120 / 72		Temperature 98.6 °F		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Muscle Tone: <input type="checkbox"/> Near <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM 		LEFT ARM 	
Comments: What drugs or medications have you been using? "I smoked some MJ 2 or 3 days ago"		How much? "A couple of grams maybe"		Time of use? 5 pm	
Date / Time of arrest: 03/17/14 / 0005		Time DRE was notified: 0020		Where were the drugs used? (Location) Home	
Evaluation start time: 0045		Evaluation completion time: 0140		<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"/> Medical		<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 type="checkbox"/> Cannabis	

Suspect: **Charles, Mary**

1. **Location:** The drug influence evaluation was conducted at the Seattle Police Department Southwest Precinct, 2300 SW Webster Street, Seattle, Washington. The darkroom examinations were conducted inside a storage room at that location. The surface was level and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Deputy Rob Corn (Kitsap County Sheriff's Office). Sergeant Courtney Stewart (Washington State Patrol) was the scribe.
3. **Breath Test:** A breath test was administered to Charles with an approved evidential breath-testing device with the results of .050.
4. **Notification/Interview:** Officer Michael Jongma advised the subject had been reported by another motorist as a possible DUI on I-5. Officer Jongma observed her traveling northbound on I-5 in the vicinity of the call and noticed she was unable to maintain her vehicle in a single travel lane. He stopped her and spoke with her at roadside. During his roadside interview, she had slow, sluggish reactions and her speech was thick and slurred. She admitted to drinking a couple glasses of wine earlier in the evening. She consented to SFSTs and she performed poorly. Officer Jongma arrested Charles and transported her to the Southwest Precinct of the Seattle Police Department for breath testing. When her breath alcohol test was inconsistent with the impairment observed at roadside, Officer Jongma requested a DRE for further investigation. I was on duty and responded to his location.
5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at the Southwest Precinct of Seattle PD. Charles was swaying when she stood, and was unstable on her feet when moving. Her speech was slow, thick, and slurred. She was very emotional at times and began crying several times. She was cooperative, her face appeared flushed, and her breath had the odor of an alcoholic beverage. Her eyes were bloodshot and watery, her pupils were equal, and her eyes tracked together. Her eyelids were normal.
6. **Medical Problems/Treatment:** Charles stated she had no physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Charles estimated the passage of 30 seconds when 32 seconds actually elapsed. During this test she had a front to back sway of approximately 2 inches in each direction, as well as a side-to-side sway of approximately 2 inches in each direction.

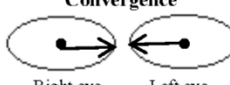

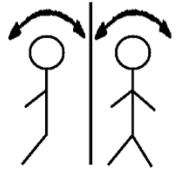
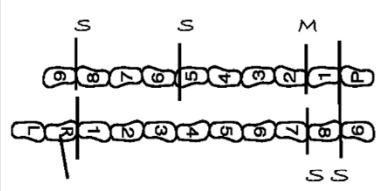
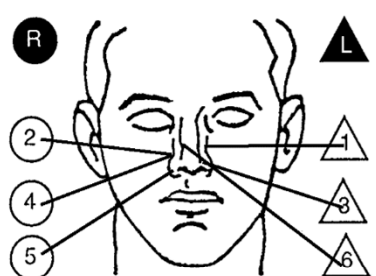
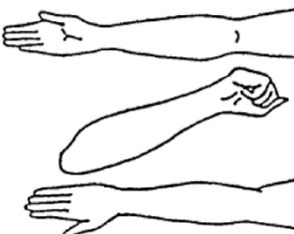
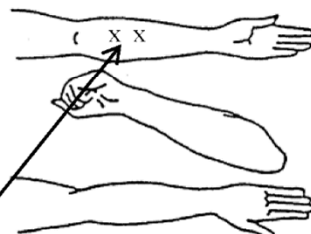
Walk and Turn: During the Walk and Turn test, Charles lost her balance twice during the instructions phase. During the walking stage she stopped while walking one time during the first set of nine steps #7, missed heel to toe once in each direction (#4 on first, #2 on second), stepped off the line once in the first set of nine steps (#8) and once in the second set of nine steps (#7), and raised her arms for balance two times on the first set of nine steps and three times on the second set. She lost her balance during the turn and staggered. She was wearing slip on shoes during this test.

One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, she swayed while balancing once, used her arms to balance once, and placed her foot down one time (#1,008). During the second test, she swayed while balancing one time, used her arms to balance once, and put her foot down at 1,009, and 1,026. She was wearing slip on shoes during this test.

Finger to Nose: During the Finger to Nose test, Charles touched the tip of her nose correctly three times (#4, #5, #6) and missed it three times.

8. **Clinical Signs:** Charles had a lack of smooth pursuit and a distinct and sustained nystagmus at maximum deviation in both eyes, but an onset angle of nystagmus was not observed. Vertical Gaze Nystagmus was not present. Charles was not able to converge her eyes. Charles' pulse was measured three times during the course of the evaluation: 1) at 0105 hours it was 66 beats per minute; 2) at 0114 hours it was 64 beats per minute; and 3) at 0128 hours it was 64 beats per minute. These readings are within the DRE average range of 60-90 beats per minute. Her blood pressure was measured at 120/72, which was within the DRE average ranges. Her body temperature was measured at 98.6°, which was normal. During the pupil size examinations, her eyes were estimated in room light at 4.5 and 4.5, near total darkness at 6.5 and 6.5, and in direct light at 3.5 and 3.5. These sizes are within the DRE normal ranges. Rebound dilation was not present. She had a normal reaction to light. Her muscle tone was flaccid.
9. **Signs of Ingestion:** Her nasal area and oral cavity were clear. There were no indicators of injection sites.
10. **Statements:** Officer Jongma advised Charles of her constitutional rights and she agreed to waive her rights and answer questions. In addition to the two glasses of wine, Charles also stated she had smoked marijuana "2 or 3 days ago" while at home. She stated she had smoked "a couple of grams, maybe."
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Charles is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Officer Jongma and myself. The collected evidence was provided to Officer Jongma. The sample was sealed with evidence tape and submitted into evidence for laboratory testing.
13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

Evaluator <i>Sergeant Joseph Milos</i>		DRE # <i>4477</i>	Rolling Log # <i>14-02-008</i>	Evaluator's Agency <i>Bellevue PD</i>	Case # <i>Session XV-#4</i>																		
Recorder/Witness <i>Sgt Martin Denton Nebraska SP</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <i>Grand Island Police Dept</i>																			
Arrestee's Name (Last, First, Middle) <i>Dodge, Fred A.</i>		Date of Birth <i>10/13/75</i>	Sex <i>M</i>	Race <i>W</i>	Arresting Officer (Name, ID#) <i>Sergeant Dale Hilderbrand #6047</i>																		
Date Examined / Time / Location <i>02/22/14 0210 Grand Island PD</i>		Breath Test: Results: <i>0.05</i>	Test Refused <input type="checkbox"/> Instrument #: <i>37755</i>	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: <i>Hilderbrand</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <i>"Nothing"</i>		When? <i>N/A</i>	What have you been drinking? How much? <i>Coffee 2-3 cups</i>																		
Time now/ Actual <i>1 am / 0215</i>	When did you last sleep? <i>Last night</i>	How long? <i>5-6 hours</i>	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>Long pause before answering</i>			Attitude: <i>Antagonistic</i>	Coordination: <i>Poor, quick</i>																			
Speech: <i>Rapid, slurred</i>		Breath odor: <i>Normal</i>		Face: <i>Flushed, sweaty</i>																			
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. <i>102 / 0218</i> 2. <i>100 / 0228</i> 3. <i>102 / 0240</i>	HGN Lack of Smooth Pursuit <i>None</i> Maximum Deviation <i>None</i> Angle of Onset <i>None</i>	Left Eye <i>None</i>	Right Eye <i>None</i>	Convergence  Right eye Left eye	<i>38/30</i> One Leg Stand <i>36/30</i> 																		
Modified Romberg Balance Approx. 0" 0" Approx. 2" 2" 	Walk and Turn Test  <i>walked quickly. stiff legged</i>	Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops walking <input checked="" type="checkbox"/> Misses heel-toe <input checked="" type="checkbox"/> Steps off line <input type="checkbox"/> Raises arms <input checked="" type="checkbox"/> Actual steps taken <i>9</i>		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><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><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table>		<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"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Time Estimation <i>22</i> estimated as 30 seconds	Describe turn <i>As instructed. stiff movements</i>	Cannot do test (explain) <i>N/A</i>		Type of footwear: <i>Lace-up work boots</i>																			
Finger to Nose (Draw lines to spots touched)  <i>Quick hand and arm movements</i>		PUPIL SIZE	Room light (2.5-5.0)	Darkness (5.0-8.5)	Direct (2.0-4.5)																		
		Left Eye	<i>6.0</i>	<i>8.5</i>	<i>5.0</i>																		
		Right Eye	<i>6.0</i>	<i>8.5</i>	<i>5.0</i>																		
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <i>Slow</i>																		
		RIGHT ARM 		LEFT ARM  <i>Two red puncture marks</i>																			
Blood Pressure <i>162 / 96</i>	Temperature <i>99.8 °F</i>	Muscle Tone: <input type="checkbox"/> Near <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid																					
Comments: What drugs or medications have you been using? <i>"I'm not answering that"</i>		How much? <i>Refused</i>	Time of use? <i>Refused</i>	Where were the drugs used? (Location) <i>Refused</i>																			
Date / Time of arrest: <i>02/22/14 / 0108</i>	Time DRE was notified: <i>0130</i>	Evaluation start time: <i>0210</i>	Evaluation completion time: <i>0250</i>	<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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant																		
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																		

Suspect: **Dodge, Fred**

1. **Location:** The drug influence evaluation was conducted at the Grand Island Police Department, 111 Public Safety Drive, Grand Island, Nebraska. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Sergeant Joseph Milos (Bellevue PD). Sergeant Martin Denton (Nebraska State Patrol) was the scribe.
3. **Breath Test:** A breath test was administered to Dodge with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** Sergeant Dale Hilderbrand indicated Dodge had attempted to elude police, but was apprehended after a short pursuit. Dodge was very restless, animated, and unable to stand still. He was very talkative and his speech was rapid and slurred. He appeared to have great difficulty with divided attention tasks. When he was sufficiently secure, he was administered SFSTs and had difficulty in performing them. He was arrested for DUI and other offenses related to the pursuit and transported to Grand Island Police Department for processing. A breath test confirmed Dodge was not impaired by alcohol, so a DRE was summoned for further investigation. I was on duty and responded to his location.
5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at Grand Island PD. Dodge's speech was rapid, loud and slurred. He had quick movements and was unable to stand still. He was constantly moving around the room. He appeared to be sweating though the inside temperature was cool, and his pupils appeared dilated. His coordination was poor but with quick movements. He was antagonistic, his face was flushed and sweaty, and his breath was normal. His eyes were normal, his pupils were equal, and his eyes tracked together. His eyelids were normal.
6. **Medical Problems/Treatment:** Dodge stated he had no physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Dodge estimated the passage of 30 seconds when 22 seconds actually elapsed. During this test he had a side-to-side sway of approximately 2 inches in each direction.

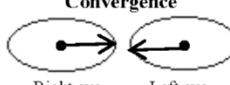
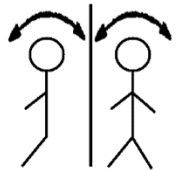
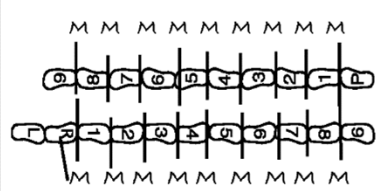
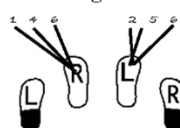
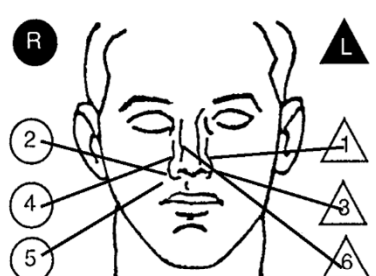
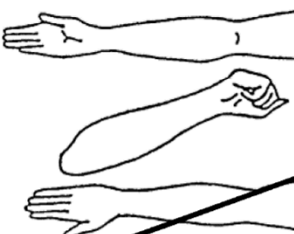
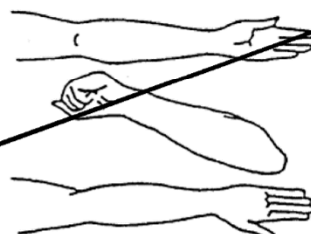
Walk and Turn: During the Walk and Turn test, Dodge lost his balance once while listening to instructions and attempted to start the test before instructed twice. During the walking stage he stopped while walking two times during the first nine steps (#7, #8) and two times during the second set of nine steps (#5, #8), missed heel to toe once in the second set of nine steps (#2), and raised his arms for balance once on the first set of nine steps and two times on the second set. He turned as instructed, but his movements were stiff. He walked quickly and was stiff-legged. He was wearing lace-up work boots during this test.

One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing once. He counted quickly and reached 1,038 at the conclusion of 30 seconds. During the second test, he swayed while balancing one time, and put his foot down at 1,015. He counted to 1,036 at the conclusion of the 30 seconds. He was wearing lace-up work boots during this test.

Finger to Nose: During the Finger to Nose test, Dodge displayed quick hand and arm movements. He missed the tip his nose on all six attempts.

8. **Clinical Signs:** Dodge had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Dodge was able to converge his eyes. Dodge' pulse was measured three times during the course of the evaluation: 1) at 0218 hours it was 102 beats per minute; 2) at 0228 hours it was 100 beats per minute; and 3) at 0240 hours it was 102 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. His blood pressure was measured at 162/96, which was above the DRE average ranges. His body temperature was measured at 99.8°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 6.0 and 6.0, near total darkness at 8.5 and 8.5, and in direct light at 5.0 and 5.0. These sizes are dilated. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was rigid.
9. **Signs of Ingestion:** His nasal area showed some redness. His oral cavity was clear. There were two red puncture marks on his left arm.
10. **Statements:** Sergeant Hilderbrand advised Dodge of his constitutional rights and he refused to waive his rights and answer questions.
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Dodge is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Sergeant Hilderbrand. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Sergeant Hilderbrand.
13. **Miscellaneous:** None

DRUG INFLUENCE EVALUATION

Evaluator <i>Sergeant Jim Roy</i>		DRE # <i>12574</i>	Rolling Log # <i>14-08-035</i>	Evaluator's Agency <i>Colchester PD</i>	Case # <i>Session XV-#5</i>						
Recorder/Witness <i>Lt John Flannigan Vermont State Police</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <i>St. Albans PD</i>							
Arrestee's Name (Last, First, Middle) <i>Edwards, Joan L.</i>		Date of Birth <i>1/16/92</i>	Sex <i>F</i>	Race <i>W</i>	Arresting Officer (Name, ID#) <i>Officer Ron Hoague #13224</i>						
Date Examined / Time / Location <i>08/15/14 2010 St Albans PD</i>		Breath Test: Results: <i>0.00</i>	Test Refused <input type="checkbox"/> Instrument #: <i>45401</i>	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: <i>Ofc Hoague</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <i>Veggie Burger</i>		When? <i>6 pm</i>	What have you been drinking? How much? <i>"Just water" "A lot"</i>						
Time now/ Actual <i>9 pm / 2015</i>	When did you last sleep? <i>"I don't remember"</i>	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 checked="" type="checkbox"/> No							
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>just some herbal vitamins</i>			Attitude: <i>Disoriented, cooperative</i>		Coordination: <i>Poor</i>						
Speech: <i>Incoherent at times, rambling</i>		Breath odor: <i>Normal</i>		Face: <i>Flushed, sweaty</i>							
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. <i>106 / 2025</i> 2. <i>102 / 2038</i> 3. <i>104 / 2055</i>		HGN Lack of Smooth Pursuit <i>None</i>	Left Eye <i>None</i>	Right Eye <i>None</i>	Convergence  Right eye Left eye						
Modified Romberg Balance Approx. 1" 1" 3" 3" 		Walk and Turn Test  <i>Missed heel to toe on all steps</i>		6/30 One Leg Stand 6/30  L R <table border="1" style="display: inline-table;"><tr><td>1</td><td>1</td></tr><tr><td>1</td><td>1</td></tr><tr><td>3</td><td>3</td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down <i>Test stopped two times - almost fell</i>		1	1	1	1	3	3
1	1										
1	1										
3	3										
Time Estimation <i>62 estimated as 30 seconds</i>		Describe turn <i>Made a walking turn</i>		Cannot do test (explain) <i>N/A</i>							
Type of footwear: <i>Flip-flops</i>		PUPIL SIZE		Nasal area: <i>Redness</i>							
Finger to Nose (Draw lines to spots touched)  <i>Kept her eyes open throughout the test</i>		Room light (2.5-5.0) <i>7.0</i>		Darkness (5.0-8.5) <i>9.5</i>							
		Direct (2.0-4.5) <i>6.0</i>		Oral cavity: <i>Clear</i>							
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: <i>Normal</i>							
		RIGHT ARM 		LEFT ARM 							
Blood Pressure <i>166/98</i>		Temperature <i>101 °F</i>		Nothing observed							
Muscle Tone: <input type="checkbox"/> Near <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:									
What drugs or medications have you been using? <i>stated "nothing" then laughed</i>		How much? <i>N/A</i>		Time of use? <i>N/A</i>							
Where were the drugs used? (Location) <i>N/A</i>		Date / Time of arrest: <i>08/15/14 / 1900</i>		Time DRE was notified: <i>1940</i>							
Evaluation start time: <i>2010</i>		Evaluation completion time: <i>2115</i>		<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							

Suspect: **Edwards, Joan**

1. **Location:** The drug influence evaluation was conducted at the St. Albans Police Department 30 Lower Welden Street, St. Albans, Vermont. The darkroom examinations were conducted inside a bathroom at that location. The surface was level and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Officer Ron Hoague (St. Albans PD). Lieutenant John Flannigan (Vermont State Police) was the scribe.
3. **Breath Test:** A breath test was administered to Edwards with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** Officer Ron Hoague observed Edwards stop her car near I-89. She exited her vehicle and climbed onto the hood and began waving her arms and screaming at vehicles as they passed. Officer Hoague made contact with her because of her bizarre behavior. Her answers to his questions rambled frequently, but he was able to learn she had driven to this location after attending a concert in Canada. She appeared very uncoordinated and Officer Hoague suspected she was impaired. He administered SFSTs to the subject and determined she was DUI. He placed her into custody and transported her to the St Albans Police Department for processing. Her breath test results showed no alcohol, so a DRE was summoned for further investigation. I was on duty and responded to his location.
5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at St Albans PD. Edwards's speech incoherent at times and rambling. She appeared dazed, disoriented, and had difficulty standing. She was flushed and sweating though she had been in a cool environment for nearly an hour. Her breath was normal, her eyes were normal, pupils were equal, and her eyes tracked together.
6. **Medical Problems/Treatment:** Edwards stated she felt nauseous, but did not require medical attention. She stated she had no physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Edwards estimated the passage of 30 seconds when 62 seconds actually elapsed. During this test she had a front-to-back sway of approximately one inch in each direction, and a side-to-side sway of approximately 3 inches in each direction.

Walk and Turn: During the Walk and Turn test, Edwards lost her balance once while listening to instructions and attempted to start the test before instructed twice. During the walking stage she missed heel to toe on every step, and raised her arms for balance four times during the first set of nine steps and two times on the second set. She made a walking turn. She was wearing flip-flops during this test.

One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, she swayed while balancing once, used her arms for balance, and put her foot down at 1,001, 1,004, and 1,006. It appeared she was in danger of falling so the test was stopped at that point. During the second test, she again swayed while balancing, used her arms for balance, and put her foot down at 1,002, 1,005, and 1,006. For her safety, this test was also terminated early. She was wearing flip-flops during this test.

Finger to Nose: During the Finger to Nose test, Edwards kept her eyes open during the entire test. Despite having her eyes open, she still she missed the tip her nose on all six attempts.

8. **Clinical Signs:** Edwards had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Edwards was able to converge her eyes. Edwards' pulse was measured three times during the course of the evaluation: 1) at 2025 hours it was 106 beats per minute; 2) at 2038 hours it was 102 beats per minute; and 3) at 2055 hours it was 104 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. 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 normal. During the pupil size examinations, her eyes were estimated in room light at 7.0 and 7.0, near total darkness at 9.5 and 9.5, and in direct light at 6.0 and 6.0. These sizes are dilated. Rebound dilation was not present. She had a normal reaction to light. Her muscle tone was rigid.
9. **Signs of Ingestion:** Her nasal area and her oral cavity were both clear. There were no indicators of injection sites.
10. **Statements:** Officer Hoague advised Edwards of her constitutional rights and she agreed to answer questions. When asked what drug she had taken, she replied "Nothing," and laughed.
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Edwards is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Officer Hoague. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Hoague.
13. **Miscellaneous:** None

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Session 16

Dissociative Anesthetics



Session 16 - Dissociative Anesthetics

Learning Objectives

- **Explain brief history of Dissociative Anesthetics**
- **Identify common drug names and terms**
- **Identify common methods of administration**

Drug Recognition Expert Course 16-2

Upon successfully completing this session, the participant will be able to:

- Explain a brief history 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

Session 16 - Dissociative Anesthetics

Learning Objectives

- Describe symptoms, observable signs, and other effects
- Describe typical time parameters
- List indicators likely to emerge during the drug influence evaluation

Drug Recognition Expert Course 16-3

- 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 clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category

CONTENT SEGMENTS

- A. Overview of Dissociative Anesthetics
- B. Possible Effects of Dissociative Anesthetics
- C. Onset and Duration of Effects
- D. Signs and Symptoms of Dissociative
- E. Anesthetics Overdose
- F. Expected Results of the Evaluation
- G. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Review of DEC Program Exemplars
Reading Assignments
Video Presentations
Slide Presentations

Overview of Dissociative Anesthetics

- Drugs that inhibit pain by cutting off or dissociating brain's perception of pain
- Induce a state of sedation, immobility, amnesia, and analgesia



A. Overview of Dissociative Anesthetics

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.

Session 16 - Dissociative Anesthetics

Phencyclidine (PCP)

Phenyl Cyclohexyl Piperidine

- **Produces some effects similar to effects of CNS Depressants**
- **Produces some effects similar to those of CNS Stimulants**
- **In some respects it acts like a Hallucinogen**

Drug Recognition Expert Course 16-5

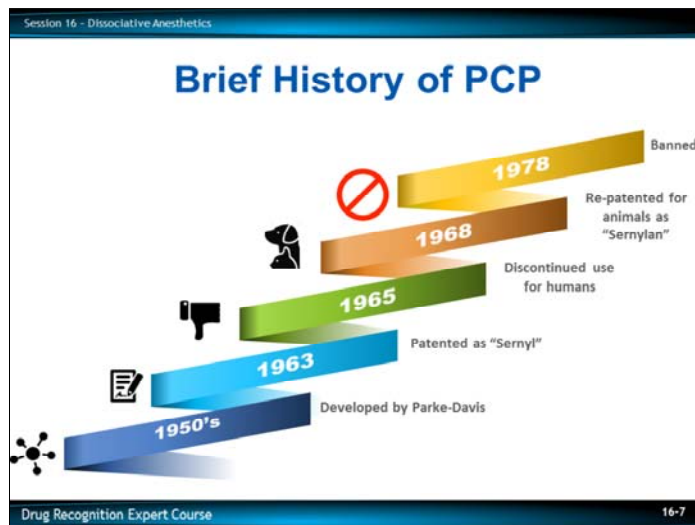
Phencyclidine (PCP)

PCP is a drug that, along with its analogs, are examples of this distinct drug category.

The chemical for PCP is Phenyl Cyclohexyl Piperidine.

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 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
- 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

Manufacture of PCP

- Relatively easy
- Chemicals available commercially
- Formula for producing PCP has been widely publicized
- Basic hardware



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

Common PCP "Street Names"

- Ace
- Angel Dust
- Crystal
- DOA
- Dust
- Embalming Fluid
- Jet
- Juice
- Lovely
- Monkey
- Ozone
- Rocket Fuel
- Wack
- Water
- Wet

Drug Recognition Expert Course 16-8

Street names for PCP:

- Ace
- Angel Dust
- Crystal
- DOA
- Dust
- Embalming Fluid
- Jet
- Juice
- Lovely
- Monkey
- Ozone
- Rocket Fuel
- Wack
- Water
- Wet

Session 16 - Dissociative Anesthetics

More PCP "Street Names"

- Peace
- Peace Pill
- Paz
- Green
- Elephant Tranquilizer
- Horse Tranquilizer
- Animal Tranquilizer
- Green Leaves
- Tic Tac
- Kools
- Super Kools
- Super Grass
- Super Weed
- Zombie Weed
- Peace Weed
- Mint Weed
- Killer Weed
- Sherms

Drug Recognition Expert Course 16-9

More Street names for PCP:

- Peace
- Peace Pill
- Paz
- Green
- Elephant Tranquilizer
- Horse Tranquilizer
- Animal Tranquilizer
- Green Leaves
- Tic Tac
- Kools
- Super Kools
- Super Grass
- Super Weed
- Zombie Weed
- Peace Weed
- Mint Weed
- Killer Weed
- Sherms

Session 16 - Dissociative Anesthetics

Ketamine

- **Analog of PCP**
- **Brand names of Ketamine: Ketalar, Ketaject, Vetalar and Vetamine**
- **Methoxetamine – Analog of Ketamine**

Drug Recognition Expert Course 16-10

Ketamine

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, Vetalar, and Vetamine (veterinary use)
- Ketamine is being studied as a possible treatment of depression
- Methoxetamine 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

Session 16 - Dissociative Anesthetics

“Street Names” for Ketamine

<ul style="list-style-type: none">• K• Special K• Vitamin K• Jet• Super acid	<ul style="list-style-type: none">• Kit Kat• Lady K• Kitty• Cat Valium• Super K
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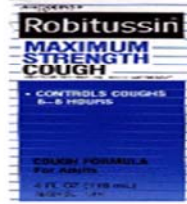
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Ketamine street names include:

- K
- Special K
- Vitamin K
- Jet
- Super acid
- Kit Kat
- Lady K
- Kitty
- Cat Valium
- Super K

Dextromethorphan (DXM)

- Synthetically produced
- Found in numerous OTC cough and cold products



Dextromethorphan (DXM)

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.

DXM is a synthetically-produced substance that is chemically related to Codeine although it is not an Opiate.

When ingested in recommended dosage levels, DXM generally is a safe and highly-effective cough suppressant; however, when ingested in large amounts, it produces negative physiological effects.

DXM abusers normally ingest the drug orally although some snort.

Some abusers ingest 250 to 1,500 milligrams in a single dosage.

Session 16 - Dissociative Anesthetics

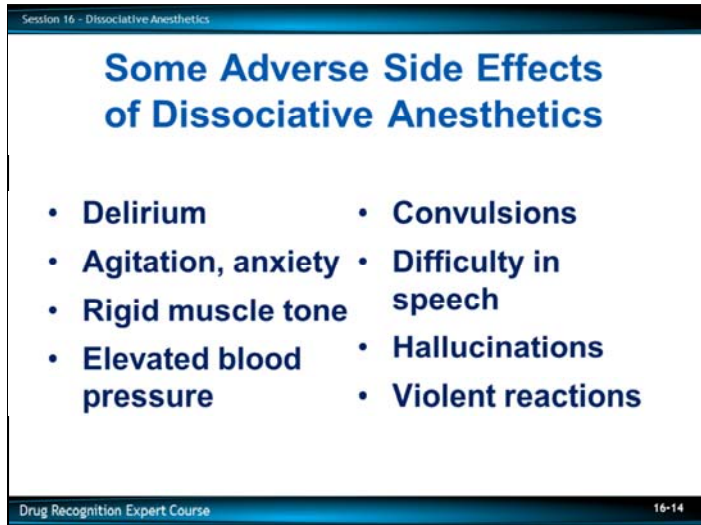
“Street Names” for DXM

• Triple C	• Robo-Fire
• Robo	• Rojo
• Robo-Tripping	• Candy
• Skittles	• Velvet
• Robo-Dosing	• DM

Drug Recognition Expert Course 16-13

Street names for Dextromethorphan include:

- Triple C
- Robo
- Robo-Tripping
- Skittles
- Robo-Dosing
- Robo-Fire
- Rojo
- Candy
- Velvet
- DM



B. Possible Effects of Dissociative Anesthetics

Possible effects of PCP and other Dissociative Anesthetics may include the following adverse side effects

- 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 in speech
- Hallucinations
- Violent reactions

Some lingering and long-term effects were also noted.

- Some patients complained of dizziness for several hours after their attention and consciousness appeared to be cleared of PCP's effects
- Some patients report memory disorders and other psychological disorders resembling schizophrenia for several months and even years afterwards

PCP Psychotomimetic Drug

- Effects mimic psychosis
- PCP cuts off brain's perceptions of senses



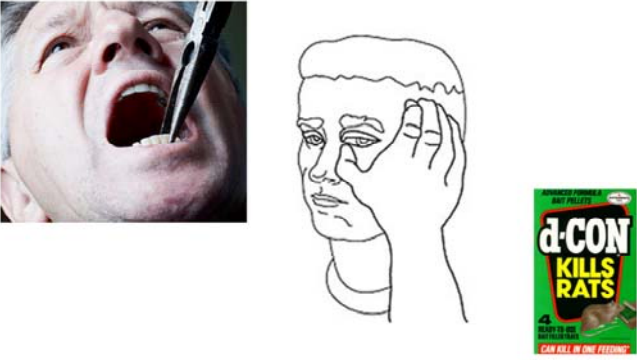
PCP has sometimes been called a psychotomimetic drug; i.e., it produces effects that mimic psychosis, or "craziness." When the psychosis remains long after the drug has dissipated, we say its effects were psychotogenic, i.e., it didn't simply mimic craziness, it caused craziness.

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

Session 16 - Dissociative Anesthetics

PCP Behavior



Drug Recognition Expert Course 16-16

Cases of terribly bizarre, self-destructive behavior have been reported with persons under the influence of PCP.


- One young man methodically pulled his own teeth out using a pair of pliers
- 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

Session 16 - Dissociative Anesthetics

PCP and Analogs

Common Methods of Ingestion

Smoking



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Common Methods of Ingestion: PCP

- Many users ingest 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
White cigarette paper will be stained brown if adulterated with PCP. Brown cigarette paper will show white crystals when adulterated.

Session 16 - Dissociative Anesthetics

PCP and Analogs

Common Methods of Ingestion

- Insufflation
- Orally
- Injection
- Eyedropper
- Transdermal absorption



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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.

Common Methods of Ingestion: 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.

Session 16 - Dissociative Anesthetics

DXM
Common Methods of Ingestion

- Orally
- Injection
- Insufflation (snorting)

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Common Methods of Ingestion: DXM

- Orally
- Injection
- Insufflation (snorting)

Onset and Duration of PCP and its Analogs

Method	Onset
Smoked	1-5 minutes
Injected	1-5 minutes
Snorted	2-3 minutes
Ingested (Oral)	30-60 minutes
Peak Effects	Generally in 15-30 minutes
Duration	4-6 hours

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 2 – 3 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

**Onset and Duration
of Ketamine**

Method	Onset	Duration
Smoked	Within seconds	Varies
Injected	1-5 minutes	30-45 minutes
Snorted	5-10 minutes	45-60 minutes
Ingested (Oral)	15-20 minutes	1-2 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

Onset and Duration of Effects for (DXM)

- **Rapidly absorbed from gastrointestinal tract**
- **Peak plasma concentration is reached in approximately 2.5 hours**
- **Expect antitussive effects in 15 – 30 minutes**
- **Duration of effects approximately 3 – 6 hours**

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

Session 16 – Dissociative Anesthetics

(DXM) Plateau Effects

Normal liquid is 2mg/ml - Pills 30 mg per tablet

4th Plateau – Mind-body dissociation

3rd Plateau – Altered state of consciousness

2nd Plateau – Mild hallucinations

1st Plateau – Mild inebriation

Drug Recognition Expert Course

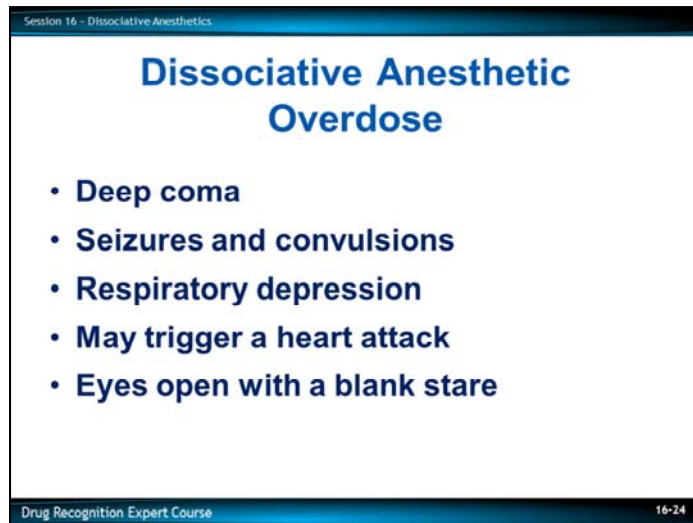
DXM Plateau (or effect)

Abusers will also ingest various amounts of DXM depending on their body weight and the effect or “plateau” they are attempting to achieve. Plateau’s include:

- 1st Plateau: Mild inebriation
- 2nd Plateau: An effect similar to alcohol intoxication with mild hallucinations
- 3rd Plateau: An altered state of consciousness where the abuser’s senses, particularly vision, can become impaired
- 4th Plateau: Mind and body dissociation or an “out of body” experience

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.

Acute dose between 250 – 1500 mg.



D. Signs and Symptoms of Dissociative Anesthetic Overdose

In addition to the bizarre, violent, and self-destructive behavior discussed previously, persons severely intoxicated by Dissociative Anesthetics may exhibit definite and extreme symptoms signifying a medically dangerous condition.

- A deep coma, lasting up to 12 hours
- Seizures and convulsions
- A danger associated with severe Dissociative Anesthetics intoxication is the person may die due to respiratory depression
- There is also some evidence Dissociative Anesthetics may trigger a heart attack if the user had some pre-existing condition disposing him or her to possible cardiac problems
- Eyes generally open with a blank stare

There is also some evidence prolonged use of Dissociative Anesthetics can lead to psychosis, which can be permanent.

Session 16 - Dissociative Anesthetics

Evaluation of Subjects Under the Influence of Dissociative Anesthetics

- HGN – Present with a very early angle of onset (maybe “immediate” or even Resting Nystagmus)
- VGN – Present
- LOC – Present
- Psychophysical Impairment – Present

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E. Expected Results of the Evaluation

- Horizontal Gaze Nystagmus (HGN) generally will be present with a very early angle of onset
- 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 a “high gait ataxia” (unsteady, uncoordinated walk) or “moon walking,” i.e., taking abnormally high and slow steps as though he or she were trying to step over obstacles in his or her path.

Session 16 - Dissociative Anesthetics

Evaluation of Subjects Under the Influence of Dissociative Anesthetics

Vital Signs:

- **Pulse – Up**
- **Blood pressure – Up**
- **Body temperature – Up**

Muscle Tone – Rigid

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Vital Signs

- Pulse rate will generally be up
- Blood pressure will generally be elevated
- Body temperature will generally be up

Muscle tone will be rigid.

Evaluation of Subjects Under the Influence of Dissociative Anesthetics

Dark Room:

- Pupil size – within the DRE average ranges
- Pupillary Reaction To Light – Normal

Dark Room

- Pupil size will be within the DRE average ranges
- Reaction to Light will be normal

Session 16 - Dissociative Anesthetics

General Indicators Subjects Under the Influence of Dissociative Anesthetics

- **Blank stare**
- **Confusion**
- **Chemical odor (PCP)**
- **Cyclic behavior (PCP)**

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General Indicators

- Blank stare
- Confusion
- Chemical odor (PCP)
- Cyclic behavior (PCP)

General Indicators

- Difficulty with speech
- Disoriented
- Early HGN angle of onset
- Hallucinations
- Incomplete verbal responses
- Non-Communicative
- Perspiring (PCP)
- Sensory distortions
- Possibly violent
- Slurred and repetitive speech
- Warm to touch (PCP)
- Loss of Memory

- Difficulty with speech
- Disoriented
- Early HGN angle of onset
- Hallucinations
- Incomplete verbal responses
- Non-communicative
- Perspiring (PCP)
- Sensory distortions
- Possibly violent
- Slurred and repetitive speech
- Warm to touch (PCP)
- Loss of Memory

Session 16 - Dissociative Anesthetics

Dissociative Anesthetic Symptomatology Chart

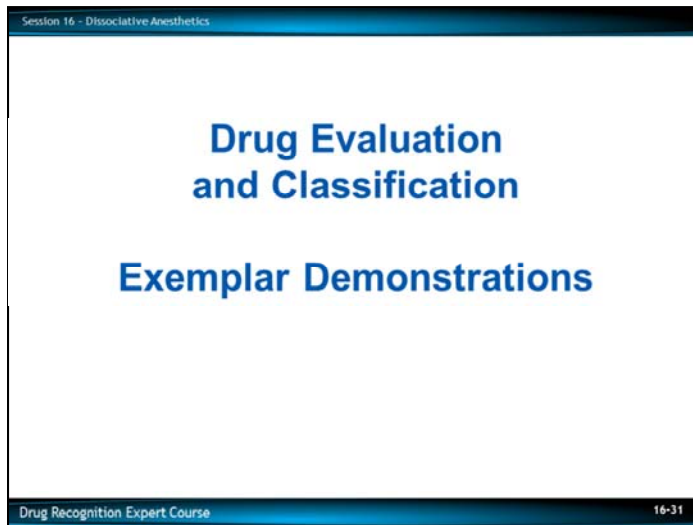
HGN	Present
VGN	Present
LOC	Present
Pupil Size	Normal
Reaction to Light	Normal
Pulse Rate	Up
Blood Pressure	Up
Temperature	Up
Muscle Tone	Rigid

Drug Recognition Expert Course 16-31

Summary

Expected Results of the Evaluation. **“Normal” for pupil sizes refers to within the DRE average ranges.**

When a DRE concludes a subject is impaired by a Dissociative Anesthetic, such as PCP or DXM, the report should state *“the subject is under the influence of a Dissociative Anesthetic.”*



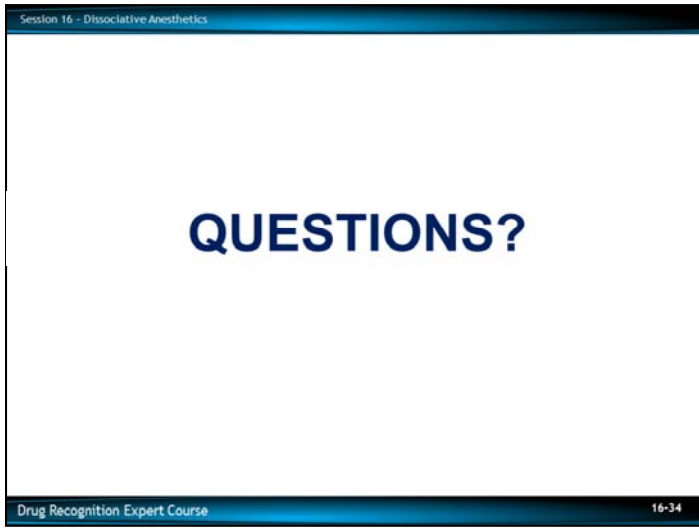
F. Classification Exemplars

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

Dissociative Anesthetic



Steven
Dissociative Anesthetics



Test Your Knowledge

1. What was the original purpose for which PCP was first patented and marketed?
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?
5. “Phencyclidine” is a contraction of what three words?

Test Your Knowledge

1. What was the original purpose for which PCP was first patented and marketed?

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3. What is Ketamine?

4. What does the term “dissociative anesthetic” mean?

5. “Phencyclidine” is a contraction of what three words?

DRUG INFLUENCE EVALUATION

Evaluator Deputy Phillip Lillibridge		DRE # 10331	Rolling Log # 17-04-046	Evaluator's Agency Harris County Sheriff's Office	Case # 17-10177 (Session XVI - #1)																		
Recorder/Witness Lt. Susan Cotter, Harris Co. S.O.		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency Pasadena Police Department																			
Arrestee's Name (Last, First, Middle) Dexing, Delbert R.		Date of Birth 03/09/89	Sex F	Race W	Arresting Officer (Name, ID#) Officer Gary White #10219																		
Date Examined / Time / Location 4/07/17 1620 Harris Co. Jail		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 90914		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: Officer White	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Fried Chicken		When? About noon	What have you been drinking? How much? Water "Lots"																		
Time now/ Actual 2 pm / 1625	When did you last sleep? (Long pause) "Last night"	How long? 2 hours	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No No response		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 No response		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I'm not sick"		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I don't think so"																			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No No response (Laughed)			Attitude: Cooperative		Coordination: Poor, Slow, Rigid																		
Speech: Slow, Confused, Incomplete responses		Breath odor: Normal		Face: Flushed, Sweaty, Blank Stare at times																			
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. 110 / 1635 2. 112 / 1644 3. 110 / 1658		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. 3" 3" 3" 3" 		Walk and Turn Test Rigid. Slow, stiff movements		34/30 One Leg Stand 38/30 Rigid movements Sways while balancing Uses arms to balance Hopping Puts foot down																			
Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		1st Nine 2nd Nine <table border="1"><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><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><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table>		<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"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
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Time Estimation 38 estimated as 30 seconds		Describe turn Rigid steps with both feet		Cannot do test (explain) N/A																			
Type of footwear: Slip-on boots																							
Finger to Nose (Draw lines to spots touched) Slow, rigid movements		PUPIL SIZE	Room light (2.5)	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 Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Normal																		
		RIGHT ARM 		LEFT ARM 																			
Blood Pressure 180 / 98		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? "Just some Coricidin"		How much? (Long pause) "About a dozen" (Laughed)		Time of use? This morning																			
Where were the drugs used? (Location) Home and in my car		Date / Time of arrest: 4/07/17 / 1515		Time DRE was notified: 1545																			
Evaluation start time: 1620		Evaluation completion time: 1725		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation																			
Officer's Signature: <i>Phillip Lillibridge</i>		Reviewed/approved by / date:			DRE# 10331																		
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: Dexing, Delbert R.

1. **Location:** The evaluation was conducted in the booking area of the Harris County Jail. The darkroom examinations were conducted in the staff restroom. Both areas are well illuminated for conducting a drug evaluation and have smooth concrete flooring with no obstructions.
2. **Witnesses:** The evaluation was observed and recorded by Lt. Susan Cotter of the Harris County Sheriff's Office. The arresting officer, Officer Gary White of the Pasadena Police Department witnessed the darkroom examinations.
3. **Breath Alcohol Test:** The suspect's breath test was administered by Officer White prior to my arrival. The result was 0.00% BAC.
4. **Notification and Interview of the Arresting Officer:** On 4/07/17 at approximately 1545 hours, I was dispatched to conduct a drug evaluation at the Harris County Jail. Upon my arrival, I met with the arresting officer, Officer Gary White of the Pasadena PD. He told me that the suspect (Delbert Dexing) was involved in a non-injury crash on the Spencer Highway in Pasadena. According to Officer White, the suspect was traveling westbound on the Spencer Highway and failed to stop at the red light and collided with a vehicle at Preston Avenue. During the personal contact with the suspect, Officer White did not detect an odor of an alcoholic beverage on the suspect's breath. However, he observed him to be very rigid, and in a dazed state. In addition, the suspect had poor balance and his speech was slurred and confused. The suspect consented to SFSTs at roadside and Officer White administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests. He reported observing all six clues of HGN, with an immediate angle of onset. He also observed Vertical Gaze Nystagmus (VGN). The suspect had a difficult time completing the W&T and OLS tests due to his poor balance and coordination. According to Officer White, he located several boxes of Coricidin cold tablets in the suspect's vehicle, one of which was empty. Officer White arrested the suspect for DWI, and transported him to the County Jail for processing. 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 booking area at the County Jail. He was seated in a chair at the table and appeared dazed and disoriented. When he was asked questions by the intake staff, he was slow to respond and at times did not respond at all. He had a flushed face and appeared to be sweating. When he stood, he was very rigid and moved about slowly and several times used the wall and the chair in the room to steady himself. I introduced myself and asked if he would consent to a drug evaluation. The suspect stated, "What? Okay. I guess so." For the most part, the suspect was cooperative, but at times was non-responsive and seemed unconcerned about his arrest and circumstances. I asked the suspect if he was informed of his Miranda rights and he stated, "Rights? Oh ya, I was." I confirmed with Officer White that the suspect had in fact been advised of his Miranda rights. I asked the suspect if he had any injuries from his crash or physical defects, which he indicated that he did not. The suspect denied consuming any drugs, but did admit taking cold medicine. During the preliminary examination, he occasionally would quit talking and had a blank stare. The suspect told me he was not blind in either eye and did not wear corrective lenses. The suspect was wearing dirty black jeans, a dirty blue sweatshirt and black slip-on boots.
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 him attempting them. Several times I had repeat my instructions to ensure he understood them, as he at times had a blank stare and appeared to be having concentration issues. After each demonstration, the suspect confirmed that he understood the instructions. Per DRE protocol, the following psychophysical tests were administered to the suspect:

Modified Romberg Balance: While performing this test, the suspect had an approximate three-inch side to side sway and front to back sway. His time estimation was slow as he estimated 30 seconds in 38 seconds. Throughout this test, the suspect stood very rigid and body tremors were evident in his legs and arms.

Walk and Turn: For this test, a line on the floor was used. The suspect stepped out of the instruction position with his right foot two times. During the walking stage, he had slow, rigid movements. He stopped after his first step and appeared confused. He was told to continue walking which he did. He missed touching heel to toe on step six and step eight on the first nine steps. He made an improper turn by talking several steps with both feet in a rigid-like movement. On the second nine steps, the suspect missed heel to toe on step three and step six. He also stepped off the line on step seven. He raised both arms approximately six-inches from his body one time on the first nine steps and one time on the second nine steps. The suspect was given the option of removing his boots for the test, however, he elected to keep them on.

One Leg Stand: During this test, when the suspect raised his right foot, he swayed while balancing and used his arms to balance once. When the suspect stood on his right foot and raised his left foot, he again was very rigid. He also raised both arms approximately six-inches from his body to maintain his balance. The suspect reached the count of 1,034 in 30 seconds while standing on his left foot, and reached the count of 1,038 in 30 seconds when standing on his right foot.

Finger to Nose: While performing this test, the suspect had very slow, rigid arm and hand movements. He did not touch the tip of his nose with the tip of his index finger on any of the six attempts.

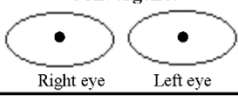
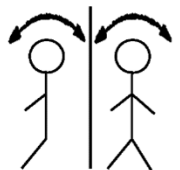
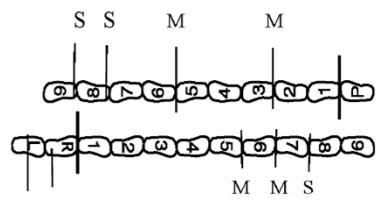
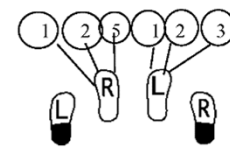
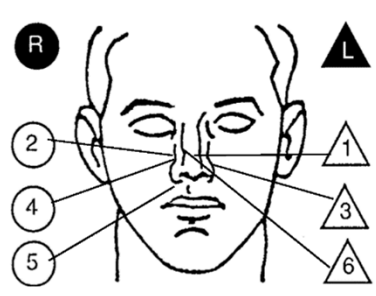
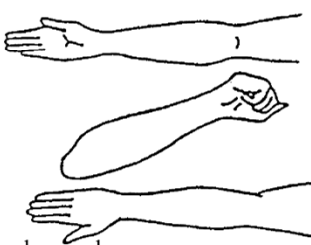
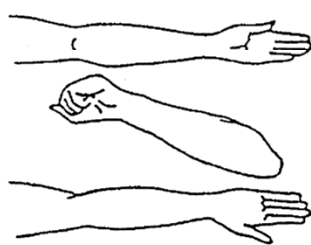
8. Clinical Indicators of Impairment:

Eye Signs: The suspect exhibited equal tracking and had equal pupil size. All six clues of HGN were present with an immediate angle of onset of nystagmus. Vertical Gaze Nystagmus was also present. His eyes were not able to converge as instructed. The suspect's pupils were examined in three different lighting conditions. In Room Light, his pupils were estimated at 5.0 mm in both eyes. In Near Total Darkness, his pupils were estimated at 7.0 mm in both eyes, and in Direct Light, his pupils were estimated at 4.0 mm in both eyes. All three estimates were within the DRE average ranges for the lighting conditions. His pupillary reaction was Normal, and he did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were elevated throughout the evaluation, at 110, 112, and 110 beats per minute (bpm) All three were above the DRE average range of 60-90 bpm for pulse rate. His blood pressure of 160/98 was also elevated and above the DRE average range. His body temperature was above the DRE average range, measured at 98.8 degrees Fahrenheit using an oral thermometer. His muscle tone was rigid.

9. **Signs of Ingestion:** The suspect's nasal and oral cavities were clear. There were no visible signs of injection on his arms or hands.
10. **Suspect's Statements:** The suspect had been advised of his Miranda rights by Officer White and he agreed to answer questions. When asked about his drug use and specifically the Coricidin located in his vehicle, the suspect stated, "I take it for my cold." When asked how much of the Coricidin he had used and the last time he had used it, he stated, "About a dozen" then laughed, and said he had last used it that morning.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Dexing is under the influence of a Dissociative Anesthetic and is unable to operate a vehicle safely.
12. **Toxicological Sample:** The suspect provided a urine sample which was collected by Officer White and submitted as evidence pending delivery to the crime laboratory for analysis.
13. **Miscellaneous:** Refer to Officer's White's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator Officer Kameron Sardar		DRE # 16369	Rolling Log # 17-05-146	Evaluator's Agency Los Angeles Police Department	Case # 17-40175 (Session XVI - #2)
Recorder/Witness Reserve Officer Clark John, LAPD		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input checked="" type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Los Angeles Police Department	
Arrestee's Name (Last, First, Middle) Sherms, Shelly		Date of Birth 08/24/88	Sex F	Race W	Arresting Officer (Name, ID#) Officer Timothy Arroyo #39477
Date Examined / Time / Location 05/02/17 2310 Metro Detention Center		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 77154	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: Officer Arroyo	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Chicken Sandwich	When? About noon	What have you been drinking? How much? Water 4 or 5 bottles	Time of last drink? N/A
Time now/ Actual 10 pm / 2315	When did you last sleep? "Last night"	How long? "About 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 type="checkbox"/> No No response		Do you have any physical defects? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I'm not sick"		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I don't think so"	
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I used to use meth"			Attitude: Indifferent	Coordination: Poor, Slow, Rigid	
Speech: Slow, Thick, Confused,		Breath odor: Chemical-like		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 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	HGN	Left Eye	Right Eye	Convergence	
1. 102 / 2322	Lack of Smooth Pursuit	Present	Present		
2. 100 / 2330	Maximum Deviation	Present	Present	Right eye Left eye	
3. 102 / 2342	Angle of Onset	Immed	Immed		
Modified Romberg Balance Approx. 3" 3" 3" 3"	Walk and Turn Test		5/30 One Leg Stand 3/30		
					
Rigid movements	Rigid, Slow, stiff movements		Falling - test stopped		
Time Estimation 42 estimated as 30 seconds		Describe turn Slow, Rigid steps		Cannot do test (explain) N/A	
Type of footwear: Slip-on Vans		Nasal area: Clear			
Oral cavity: Clear		Reaction to Light: Normal			
Finger to Nose 		PUPIL SIZE	Room light	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
Slow, deliberate movements		Left Eye	4.0	6.0	3.0
		Right Eye	4.0	6.0	3.0
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
		RIGHT ARM		LEFT ARM	
					
		None observed			
Blood Pressure 188 / 98	Temperature 100.0 °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? No response		Time of use? N/A		Where were the drugs used? (Location) N/A	
Date / Time of arrest: 5/02/17 / 2214	Time DRE was notified: 2240	Evaluation start time: 2310	Evaluation completion time: 2358	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: <i>Kameron Sardar</i>		Reviewed/approved by / date:			DRE# 16369
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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE


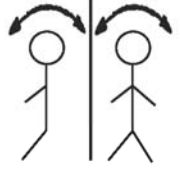
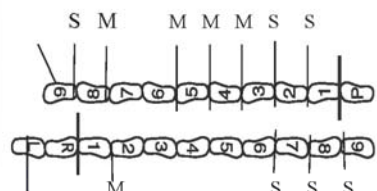
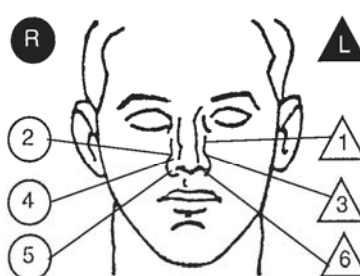
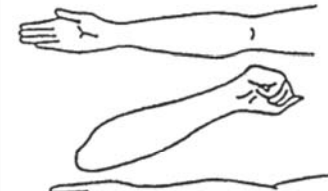
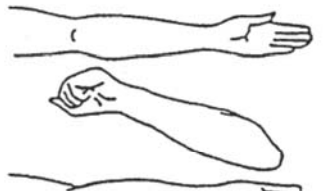
Suspect: Sherms, Shelly

- 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 are well illuminated and conducive for conducting a DRE drug evaluation. Both areas have smooth concrete flooring with no obstructions.
- 2. Witnesses:** The evaluation was observed and recorded by LAPD Reserve Officer Clark John. The arresting officer, Timothy Arroyo of the LAPD witnessed the psychophysical tests.
- 3. Breath Alcohol Test:** The suspect's breath test was administered by Officer Arroyo prior to my arrival. The result was 0.00% BAC.
- 4. Notification and Interview of the Arresting Officer:** On 5/02/17 at approximately 2240 hours, 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 the suspect's vehicle after observing it nearly hit several parked cars along West Olympic Blvd. According to Officer Arroyo, he activated his emergency lights to stop the suspect's vehicle. However, she continued without stopping for almost three blocks, nearly hitting other parked vehicles. When stopping, her vehicle stuck the curb with the right front tire. During the personal contact with the suspect, Officer Arroyo did not detect an odor of an alcoholic beverage on the suspect's breath. However, he observed the suspect to be in a dazed-like state and confused acting. The suspect had difficulty producing her operator's license and other paperwork. Several times, she forgot what she was looking for and appeared confused. Officer Arroyo had the suspect exit her vehicle and had to remind her several times to turn off the vehicle's ignition. Once outside the vehicle, the suspect had poor balance and her speech was slurred and thick. Officer Arroyo also detected a chemical-like odor on the suspect's breath. When asked about the odor, the suspect claimed it was just her bad breath. Officer Arroyo administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests to the suspect. He reported observing all six clues of HGN, with an immediate angle of onset. He also observed Vertical Gaze Nystagmus (VGN). The suspect had difficulty completing the W&T and OLS tests due to her poor balance and coordination, and both tests had to be stopped for safety reasons. Officer Arroyo arrested the suspect for DWI, administered Miranda rights, and transported her to the Detention Center for processing. 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 booking area at the Metro Detention Center. She was seated in a chair at the table and appeared confused and disoriented. I noted that she was slow to respond to questions and was staring at the wall. Her face appeared flushed and she appeared to be sweating. When the suspect stood, her movements were slow and rigid-like. Several times she bumped into the interview desk and twice used the wall to steady herself. I introduced myself and asked if she would consent to a drug evaluation. The suspect appeared confused and after a 20 to 30 second pause, asked, "Is that a drug test?" After explaining the procedure to her, she agreed to do the evaluation. I asked if she remembered being informed of her Miranda rights, she looked at me with a blank stare and did not respond. Therefore, I re-advised the suspect of her Miranda rights, and she gave a verbal response that she understood them and agreed to answer my questions. I asked the suspect if she had any injuries or physical defects, to which she replied she did not. The suspect denied consuming any drugs or medications, only saying she used to use meth (Methamphetamine) and sometimes smokes pot (Marijuana). During the preliminary examination, the suspect would occasionally stop talking, sometimes in the middle of a sentence. The suspect did advise that she was not blind in either eye and did not wear corrective lenses. The suspect was wearing jeans, a blue LA Dodgers tee-shirt and slip-on Vans shoes.

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. I had repeat my instructions to her several times. After each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:
- Modified Romberg Balance:** While performing this test, the suspect had an approximate three-inch side to side sway and front to back sway. The suspect demonstrated a slow time estimation, estimating 30 seconds in 42 seconds. While performing the test, she stood very rigid.
- Walk and Turn:** For this test, a line on the floor was used. The suspect lost her balance to the right two times while in instruction position. During the walking phase, she had slow, rigid, stiff movements. During the first nine steps, the suspect missed touching heel to toe on steps five and six, six and seven, and seven and eight. She also stopped walking at step eight and appeared confused, then continued with the test. She made an improper turn by taking slow rigid-like steps with both feet. On the second nine steps, the suspect missed touching heel to toe on steps two and three and five and six. She also stopped walking at steps seven and eight. She then continued the test taking a total of eleven steps instead of nine as directed. She also raised both arms from her body three times on the first nine steps and four times on the second nine steps.
- One Leg Stand:** During this test, when attempting to raise her right foot, she swayed while balancing, used her arms to balance, and put her foot down three times immediately after attempting to raise her foot. The test was then stopped for safety reasons. When the suspect attempted to stand on her right foot and raise her left foot, she again was very rigid, swayed while balancing, used her arms to balance, and put her foot down after three attempts. This portion of the test was also stopped for safety reasons.
- Finger to Nose:** While performing this test, the suspect had very slow and deliberate arm movements. She did not touch the tip of her nose with the tip of her index finger on any of the six attempts.
8. **Clinical Indicators of Impairment:**
- Eye Signs:** The suspect exhibited equal tracking and had equal pupil size. All six clues of HGN were present with an immediate angle of onset of nystagmus. Vertical Gaze Nystagmus was also present. Her eyes were not able to converge as instructed and her eyes looked straight ahead. The suspect's 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 levels. Her pupillary reaction to light was normal, and she did not exhibit rebound dilation.
- Vital Signs:** The suspect's pulse rates were checked three different times during the evaluation. They were elevated and checked at 102, 100, and 112 beats per minute (bpm). All three were above the DRE average range. Her blood pressure of 158/96 was also above the DRE average range. Her body temperature was above the DRE average range, measured at 100 degrees Fahrenheit. Her muscle tone was rigid.
9. **Signs of Ingestion:** The suspect's nasal and oral cavities were clear and there were no visible signs of injection marks.

10. **Suspect's Statements:** The suspect had been advised of his Miranda rights and she agreed to answer my questions. When asked about drug use, she gave no response, other than saying she "used to use meth."
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 suspect 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 arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator Det. Joseph MacLean		DRE # 11522	Rolling Log # 17-09-66	Evaluator's Agency Franklin Police Department	Case # 17-75301 (Session XVI - #3)
Recorder/Witness Sgt. Don Decker, Nahant PD		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Middleboro Police Department	
Arrestee's Name (Last, First, Middle) Krystal, K. J.		Date of Birth 09/06/89	Sex M	Race B	Arresting Officer (Name, ID#) Sgt. Deb Batista #10423
Date Examined / Time / Location 09/28/17 2145 Middleboro PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 14454	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: Sgt. Batista	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Pizza	When? About 7 pm	What have you been drinking? How much? Juice & Water 4 or 5 bottles	Time of last drink? N/A
Time now/ Actual 8 pm / 2150	When did you last sleep? "Yesterday"	How long? "About 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, Passive		Coordination: Poor, Staggering	
Speech: Slow, Low, Slurred		Breath odor: Normal		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 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	HGN	Left Eye	Right Eye	Convergence	
1. <u>102</u> / <u>2150</u>	Lack of Smooth Pursuit	Present	Present		
2. <u>104</u> / <u>2202</u>	Maximum Deviation	Present	Present	Right eye Left eye	
3. <u>100</u> / <u>2215</u>	Angle of Onset	Immed	Immed		
Modified Romberg Balance Approx. 2" 2" 2" 2" 	Walk and Turn Test		Cannot keep balance <u>1</u>		
			Starts too soon	1 st Nine 2 nd Nine	
Rigid	Slow, rigid, stiff movements		Stops walking	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
			Misses heel-toe	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
			Steps off line	<input checked="" type="checkbox"/>	
			Raises arms	All All	
			Actual steps taken	9 9	
Time Estimation <u>38</u> estimated as 30 seconds	Describe turn Stopped. Needed directions		Cannot do test (explain) N/A		Type of footwear: Athletic type 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)
Slow, rigid movements		Left Eye	4.0	6.0	3.0
		Right Eye	4.0	6.0	3.0
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Normal
		RIGHT ARM		LEFT ARM	
					
		None observed			
Blood Pressure 188 / 98	Temperature 101.0 °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: 9/28/17 / 2100	Time DRE was notified: 2120	Evaluation start time: 2145	Evaluation completion time: 2230	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: <i>Joseph MacLean</i>		Reviewed/approved by / date:			DRE# 11522
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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Krystal, K. J.

1. **Location:** The evaluation was conducted in the Interview Room of the Middleboro Police Department. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting for conducting a drug evaluation and have smooth tile flooring with no obstructions.
2. **Witnesses:** The evaluation was observed and recorded by Sergeant Don Decker of the Nahant PD. The arresting officer, Sergeant Deb Batista witnessed the eye examinations.
3. **Breath Alcohol Test:** The suspect provided a breath test which was conducted by Sergeant Batista prior to my arrival. The result was 0 .00%.
4. **Notification and Interview of the Arresting Officer:** On 09/28/17 at approximately 2120 hours, I was requested conduct a drug evaluation for Sergeant Batista at the Middleboro Police Department. Upon my arrival, Sergeant Batista advised that she had stopped the suspect's vehicle after observing it fail to stop while exiting a business and nearly hitting another vehicle. According to Sergeant Batista, during the personal contact with the suspect, she did not detect an odor of an alcoholic beverage on the suspect's breath. However, she noted that the suspect was confused acting and appeared to be impaired. The suspect had difficulty finding his operator's license and vehicle registration. Several times the suspect had to be reminded to produce the documents. She also noted that his speech was slurred and thick. Once the suspect exited his vehicle, Sergeant Batista noted that he had poor balance and needed to steady himself on his vehicle. Sergeant Batista administered SFST's and she reported observing all six clues of Horizontal Gaze Nystagmus (HGN), with an immediate angle of onset. She also observed Vertical Gaze Nystagmus (VGN). The suspect had difficulty completing the Walk and Turn (W&T) and the One Leg Stand (OLS) tests due to his poor balance. Both tests had to be stopped because the suspect nearly fell several times. After completing the SFSTs, Sergeant Batista arrested the suspect for DUI and transported him to the PD for processing. After obtaining a 0.00 BAC on the breath test, she requested a DRE to assist with the investigation.
5. **Initial Observation of the Suspect:** I first observed the suspect in the interview room at Middleboro PD. He was standing at the table and appeared disoriented. He was slow to respond to Sergeant Batista's questions and was noticeably sweating. When the suspect moved around the room, his movements were slow and he appeared to be very stiff and rigid. Several times he used the wall to steady himself. I introduced myself and requested to conduct a drug evaluation, which the suspect agreed to do. For the most part, the suspect was cooperative. I asked if he remembered being informed of his Miranda rights and he indicated that he did. I asked the suspect if he had any injuries or physical defects and he stated, "None that I can remember." The suspect denied consuming any drugs or medications and claimed he was just tired and couldn't understand why he was being arrested. During the preliminary examination, at times the suspect would stop talking and appeared to be confused, and was trying to process information. The suspect did advise that he was not blind in either eye and did not wear corrective lenses. The suspect was wearing black baggy shorts, a gray hoody sweatshirt, and red unlaced athletic shoes.
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 him attempting them. Several of the instructions had to be repeated. However, the suspect did confirm that he understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: While performing this test, the suspect had an approximate two-inch side to side sway and front to back sway. The suspect had a slow time estimation, estimating 30 seconds in 38 seconds. While performing the test, he stood very rigid. .

Walk and Turn: For this test, a line in the tile floor was used. The suspect lost his balance to the left one time during the instruction phase. During the walking phase, he had slow, rigid, stiff movements. On the first nine steps, the suspect missed touching heel to toe on his second step. He also stopped walking four times on the first nine steps. At the turn, he stopped and asked for directions on how to complete the turn. Once the directions were given to him, he made a slow, rigid turn. On the second nine steps, the suspect 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. The suspect had his arms raised in a stiff-like manner during the entire test.

One Leg Stand: During this test, when attempting to raise his right foot, the suspect swayed while balancing, and immediately put his right foot down three times to keep from falling. The test was stopped for safety reasons. When the suspect attempted to stand on his right foot and raise his left foot, he again nearly fell and put his foot down three times. The test was then stopped for safety reasons. On each attempt, the suspect appeared to be very rigid and stiff.

Finger to Nose: While performing this test, the suspect had slow and rigid arm movements. He was unable to touch the tip of his nose with the tip of his index finger on any of the six attempts.

8. Clinical Indicators of Impairment:

Eye Signs: The suspect exhibited equal tracking and had equal pupil size. All six clues of HGN were present with an immediate angle of onset of nystagmus. Vertical Gaze Nystagmus was also present. The suspect's eyes were not able to converge as instructed. The suspect's pupils were examined in three different lighting levels. In Room Light, his pupils were estimated at 4.0 mm in both eyes. In Near Total Darkness, his pupils were estimated at 6.0 mm in both eyes, and in Direct Light, they were estimated at 3.0 mm in both eyes. All three estimates were within the DRE average ranges for the three lighting levels. His pupillary reaction was normal, and he did not exhibit rebound dilation.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation. Each time they were elevated at 102, 104, and 100 beats per minute (bpm), and were above the DRE average ranges of 60-90 bpm. His blood pressure of 188/98 was also above the DRE average range. His body temperature was checked at 101 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 clear 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 by Sergeant Batista and he agreed to answer questions. When asked about drug use, he refused to answer, providing no response.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Krystal is under the influence of a Dissociative Anesthetic and is unable to operate a vehicle safely.
12. **Toxicological Sample:** The suspect provided a urine sample after the evaluation which was turned over to Sergeant Batista who submitted it as evidence pending analysis by the crime laboratory.
13. **Miscellaneous:** Due to the suspect's high vital signs, EMS was requested to evaluate the suspect's condition. The suspect was subsequently released to EMS who transported him to the hospital for a follow-up medical evaluation. Refer to Sergeant Batista's arrest report for additional details.

Session 17

Narcotic Analgesics



Learning Objectives

- **Explain brief history of Narcotic Analgesic category of drugs**
- **Identify common drug names and terms**
- **Identify common methods of administration**
- **Describe symptoms, observable signs, and other effects**

Upon successfully completing this session, the participant will be able to:

- Explain a brief history 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

Learning Objectives

- Describe typical time parameters
- List indicators likely to emerge during the drug influence evaluation
- Describe procedures for examining and evaluating injection sites

- 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

CONTENT SEGMENTS

- A. Overview of the Category
- B. Possible Effects
- C. Onset and Duration
- D. Overdose Signs and Symptoms
- E. Expected Results of the Evaluation
- F. Injection Site Examination
- G. Expected Locations of Injection Marks
- H. Conclusion
- I. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments
Video Presentations
Slide Presentations
Review of DEC Program Exemplars

Narcotic Analgesic

- **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.

A. Overview of the Category

Narcotic Analgesic Defined

This category sometimes is called “The Opioids”; the drugs it contains either are found in Opium, derived chemically from Opium or produce effects similar to those of the Opium Derivatives.

The term “Opioid,” however, most correctly refers to the synthetic subcategory of Narcotic Analgesics.

A medical term, not a legal or police term.

A Narcotic is a drug derived from Opium, or produced synthetically, 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.

Narcotic Analgesic

Non-Narcotic Analgesics such as aspirin, Tylenol, and Motrin do NOT produce narcosis.



Non-Narcotic Analgesics, such as Aspirin, Tylenol, and Motrin, relieve pain, but do NOT produce narcosis, which means numbness or sedation.

Clarification: non-Narcotic Analgesics relieve pain, but do not alter mood. Therefore, they, in small amounts, are not psychoactive and are not abused for their mind or mood altering actions.

Types of Narcotic Analgesics

- Opiates
 - Natural alkaloids
 - Opium derivatives
- Synthetics



There are two subcategories of Narcotic Analgesics:

- Opiates
- Synthetics

Opiates: drugs that either contain or are derived from Opium.

Natural alkaloids of Opium.

The term “main ingredient” can be used as a synonym for “alkaloid.”

The Natural Alkaloids

Alkaloids and the Opium derivatives all come 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”)

Opium Derivatives

Opium derivatives are obtained by chemically treating the Opium alkaloid. Opium derivatives are therefore derived from Opium.

Synthetics

Synthetics, which do not derive from Opium at all, have similar or identical effects as Opium alkaloids and derivatives.

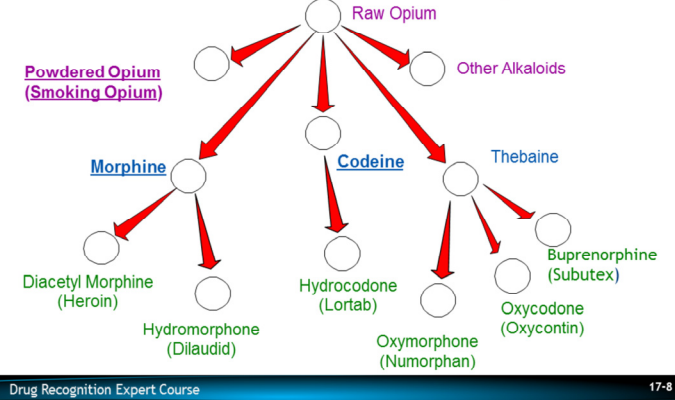
Three Characteristics Common to All Narcotic Analgesics

- **Relieve pain**
- **Produce withdrawal signs and symptoms**
- **Suppress withdrawal signs and symptoms**

Narcotic Analgesics all share three characteristics:

- They all relieve pain
 - Clarification: They produce analgesia
- They will produce withdrawal signs and symptoms when the user is physically dependent and drug use is stopped
 - Clarification: Physical dependence results from “chronic administration”
 - This means the drug has been taken at fairly regular intervals for a period of time
- They will suppress the withdrawal signs and symptoms of chronic Narcotic Analgesic administration
 - Clarification: This means the various Narcotic Analgesics can be substituted for each other to relieve withdrawal symptoms

Commonly-Abused Opiates and Their Derivation From Opium



Some Commonly Abused Opiates

Powdered Opium

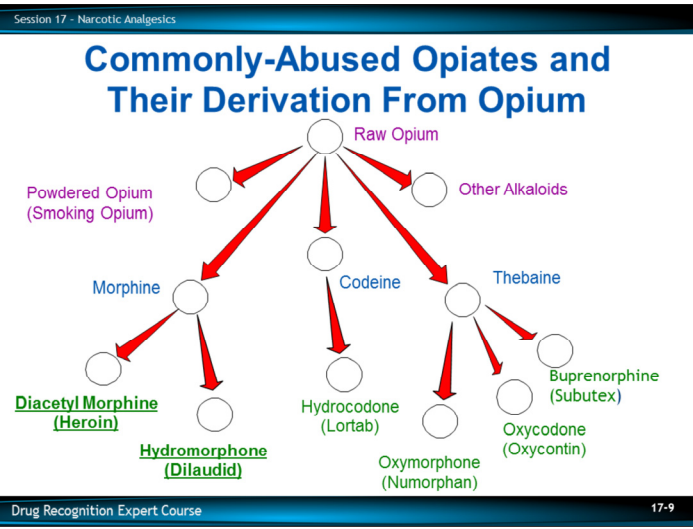
- Also known as smoking Opium
- A simple refinement of raw Opium
- Used medically to treat diarrhea (administered orally)
- The development of more effective opiates and synthetics has virtually eliminated its use medically
 - In recent years, there has been little street use of Opium
 - It is important 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
- First isolated from Opium in 1805
- Used medically to suppress severe pain (e.g., with terminal cancer patients)
- Highly addictive
- 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.

Codeine

- Codeine is another natural alkaloid of Opium
- Its technical name is Methylmorphine
- First isolated in 1832
- Codeine’s pain-killing ability is much weaker than Morphine’s
- 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

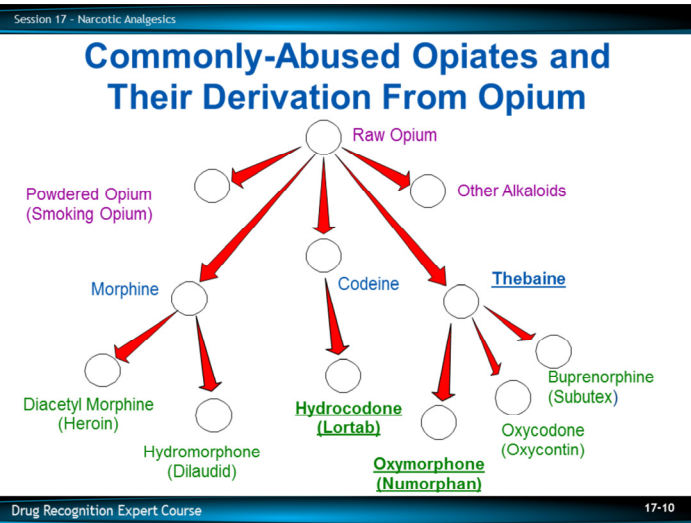


Heroin

- Heroin is the most commonly-abused illicit Narcotic Analgesic
- Derived from Morphine in 1874
- First thought to be a non-addictive substitute for Morphine
- 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
- Schedule I drug, which means it has no legitimate medical uses in the United States.

Dilaudid

- Dilaudid is another derivative from Morphine
- Technical Name: Hydromorphone Hydrochloride
- First produced in 1923
- Sometimes called “Drug Store Heroin” since it is commercially available from medical and pharmaceutical sources
- Has the same addictive liabilities as does Heroin or Morphine
- Used medically for short-term relief of moderate to severe pain and to suppress severe, persistent coughs
- Can be ingested via injection, orally, or in suppositories
- Sometimes abused by addicts who are unable to obtain Morphine or Heroin



Hydrocodone

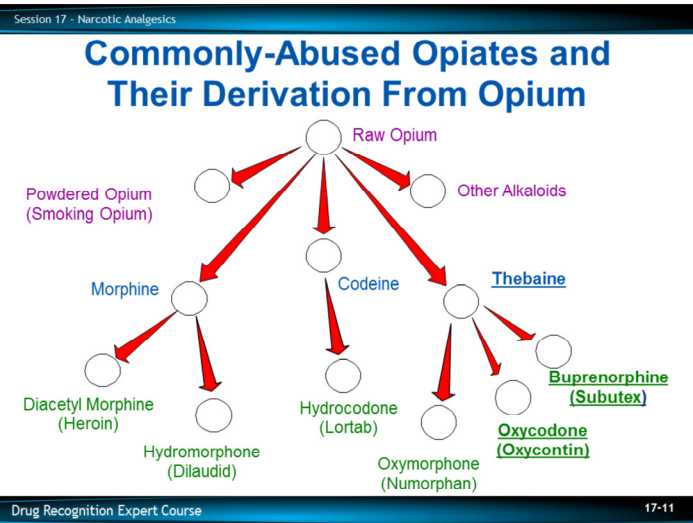
- Derived from Codeine but is more closely related to Morphine in its pharmacological profile
- Hydrocodone (Vicodin, Hycodan, Tussend, Norco, Lortab) is the most widely-prescribed Opioid with many of the same actions as Codeine, but produces less nausea
 - Used orally for relief of moderate to severe pain, but also commonly taken in liquid form as an antitussive/cough suppressant
- Examples include:
 - Hycodan (A commonly prescribed pain reliever containing Hydrocodone and Acetaminophen)
 - Vicodin (Lortab) (Vicodin is a commonly prescribed pain reliever containing Hydrocodone and Acetaminophen)

Thebaine

- An Opiate alkaloid derived from Opium
- Not used therapeutically
- Converted into several drugs including Oxycodone and Oxymorphone

Oxymorphone

- Numorphan or Opana are derivatives of Thebaine and used to treat moderate to severe pain.
- 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



Oxycodone

- Oxycodone is a semi-synthetic narcotic produced by chemically treating Thebaine
- It is somewhat less addictive than Morphine, but more than Codeine
- Two examples are:
 - Brand Name: OxyContin
 - Percodan is one of the most commonly prescribed Narcotic Analgesics
- It is also produced under the brand name of “Percocet”, which is Percodan combined with Acetaminophen, such as Tylenol
- OxyContin is a controlled-release tablet that contains large amounts of Oxycodone (10-160mg)
- Abusers learn to circumvent the slow release mechanism
- Street names: “Oxy”; “OC”; “Killer”

Buprenorphine

- A Thebaine derivative with powerful analgesia
- As an analgesic, it is about 25 to 40 times more potent than Morphine
- It is an ingredient of the drug Suboxone
- Depending on the application form, Buprenorphine is normally prescribed for the treatment of moderate to severe chronic pain (pain that has outlived its use to prevent injury and after three months)
- 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.

Common Synthetic Opiates

• Demerol



Some Common Synthetic Opiates

Demerol

- Meperidine (Demerol, Pethidine, Mepergan) 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
- First produced in 1939
- One of the most widely used Synthetic Opiates for relief of pain and for sedation
- Also one of the Narcotic Analgesics most frequently abused by medical personnel
- Widely used as an analgesic in childbirth
- One medical advantage of Demerol is it produces less respiratory depression than do other Narcotic Analgesics; thus, a fatal overdose is less likely with Demerol
- Medical literature sometimes indicates Demerol does not cause pupillary constriction
 - Enforcement experience indicates to the contrary.

Common Synthetic Opiates

• Methadone



Methadone

- Developed in Germany during World War II and first marketed in America in 1947
- Developed in Germany because of wartime shortages of Morphine
- 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
- Used extensively in "maintenance programs" as a substitute for Heroin for addicts undergoing therapy and treatment
 - 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.
- 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

Common Synthetic Opiates

- Fentanyl



Fentanyl

Fentanyl (Sublimaze, Actiq) is a highly potent, synthetic Opioid pain medication with a rapid onset and short duration of action. It is 50 to 100 times more potent than Morphine on a weight-for-weight basis. It was introduced into medical practice as an intravenous anesthetic under the trade name of Sublimaze in the 1960s.

In 2015, there were 6.5 million Fentanyl prescriptions dispensed in the U.S. Similarly, in the first nine months of 2016, 4.55 million Fentanyl prescriptions were dispensed (IMS Health). 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 tablet (Abstral), 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 is about 100 times more potent than Morphine as an analgesic. It is a μ -Opioid receptor agonist with high lipid solubility and a rapid onset and short duration of effects. Fentanyl rapidly crosses the blood-brain barrier. It is similar to other μ -Opioid receptor agonists (like Morphine or Oxycodone) in its pharmacological effects and produces analgesia, sedation, nausea, vomiting, itching, and respiratory depression. Fentanyl appears to produce muscle rigidity with greater frequency than other Opioids. Unlike some μ -Opioid receptor agonists, Fentanyl does not cause histamine release and has minimal depressant effects on the heart.

Other Narcotic Analgesics

- **Kratom**



Other Narcotic Analgesics

Kratom (*Mitragyna Speciosa*) is produced from the leaves of tropical trees native to Indonesia, Malaysia, Thailand, and other areas of Southeast Asia.

- At high doses, it delivers Opioid-like effects, inhibits smooth muscle control, and reduces pain
- At low doses, it has a stimulant effect, increasing alertness, talkativeness, and outward behaviors
- In the U.S., it is usually obtained over the internet and is most likely to be consumed in tea or chewed
- It is not a controlled substance in the U.S., but is illegal in several countries

Common Methods of Ingestion

- Orally
- Smoked
- Snorted
- Suppositories
- Injected
- Transdermal (Patches)



Common Methods of Ingestion

Methods of administration of Narcotic Analgesics vary from one drug to another.

- Some are commonly taken orally
- Some are smoked
- Some are snorted (insufflated).

Users have stated the fear of contracting diseases, such as AIDS, from shared needles, has prompted them to either snort or smoke Heroin.

Some are often administered in suppositories. Medically, some Narcotic Analgesics may be administered transdermally or through the skin.

Fentanyl patches are often used for chronic pain.

Heroin and some others are usually taken by injection.

Concept of Tolerance for a Drug



B. Possible Effects

As with nearly all drugs of abuse, the effects produced by Heroin or other Narcotic Analgesics depend on the tolerance the user has developed for the drug.

People develop tolerance for Narcotic Analgesics fairly rapidly. “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.

A Narcotic Analgesic 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.

Clarification: the tolerant addict who has injected his or her “normal dose” of Heroin may appear to be much less impaired than an inexperienced user who had taken the same dose.

Observable Effects of Narcotic Analgesics



Observable Effects

Observable effects of Heroin and other Narcotic Analgesics.

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.

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.

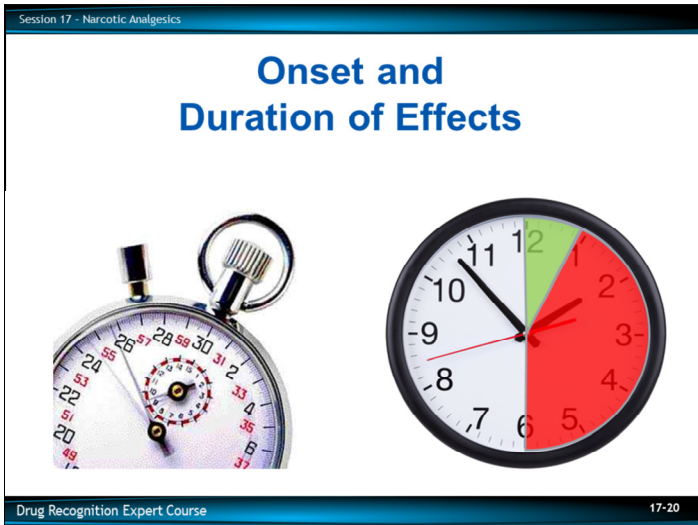
Other Effects

- Slowed reflexes
- Slow and raspy speech
- Slow, deliberate movements
- Inability to concentrate
- Slowed breathing
- Skin cool to the touch
- Possible nausea
- Itching of face, arms, or body

Other Effects

These effects may be dose-related and most often occur with non-tolerant users.

- Slowed reflexes
- Slow and raspy speech
- Slow, deliberate movements
- Inability to concentrate
- Slowed breathing
- Skin cool to the touch
- Possible nausea
- Itching of the face, arms, or body



C. Onset and Duration of Effects

Psychological Effects

The psychological effects of Heroin begin immediately after the injection.

- A feeling of pleasure or euphoria
- Relief from the symptoms of withdrawal
- Relief from pain

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

Session 17 - Narcotic Analgesics

Signs and Symptoms of Withdrawal From Heroin

Symptoms normally begin 4 – 6 hours following injection:

- Aches
- Chills
- Insomnia
- Nausea

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The effects will usually be observable for up to 4 – 6 hours.

As the drug wears off, withdrawal signs and symptoms start to develop until the addict user injects again.

As the effects of Heroin diminish, withdrawal symptoms begin.

- Aches
- Chills
- Insomnia
- Nausea

Session 17 - Narcotic Analgesics

Signs and Symptoms of Withdrawal From Heroin

Signs appear 8 – 12 hours following injection:

- **Goose bumps**
- **Sweating**
- **Runny nose**
- **Tearing**
- **Vomiting**
- **Yawning**

Closely resemble those of
Influenza or the common cold

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As with nearly all drugs, the withdrawal signs and symptoms are essentially the opposite of the “high” or intoxicated state.

Withdrawal signs start to become observable 8 – 12 hours following injection.

- Goose bumps (usually associated to chills)
- Sweating
- Runny nose
- Tearing
- Vomiting
- Yawning

Withdrawal signs and symptoms closely resemble those of Influenza or the common cold.

Session 17 - Narcotic Analgesics

Signs and Symptoms of Withdrawal From Heroin

Signs and symptoms intensify 14 – 24 hours after injection:

- **Dilation of pupils**
- **Goosebumps**
- **Loss of appetite**
- **Slight tremors**

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These symptoms begin to intensify from 14 – 24 hours after injection and may be accompanied by goose bumps (piloerection), slight tremors, loss of appetite, and dilation of the pupils.

Signs and Symptoms of Withdrawal From Heroin

Situation worsens 24 – 36 hours after injection:

- Depression
- Insomnia
- Diarrhea
- Vomiting
- Hot and cold flashes
- Weakness

Approximately 24 – 36 hours after injection, the addicted user experiences insomnia, vomiting, diarrhea, weakness, depression, and hot and cold flashes.

Session 17 - Narcotic Analgesics

Signs and Symptoms of Withdrawal From Heroin

Reaching the peak 2 – 3 days after injection:

- **Muscular and abdominal cramps**
- **Severe tremors and twitching**
- **Elevated temperature**
- **Sharp loss of weight**

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Withdrawal symptoms and signs generally reach their peak 2 – 3 days after injection:

- Muscular and abdominal cramps
- Severe tremors and twitching
- Elevated temperature
- Sharp loss of weight

The addicted user at this point is nauseated, gags, vomits, and may lose 10 – 15 pounds within 24 hours.

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.

Overdose Signs and Symptoms

- **Slow, shallow breathing**
- **Clammy skin**
- **Convulsions**
- **Blue lips and pale or blue body**
- **Extremely constricted pupils**
- **Recent needle marks**
- **Coma**
- **Death**

D. Overdose Signs and Symptoms

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, extremely constricted pupils (unless there is brain damage, in which pupils may be dilated), recent needle marks, or perhaps a needle still in the user's arm.

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 addict uses may be much higher than what the addict expects and is accustomed.

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.

Session 17 - Narcotic Analgesics

Evaluation of Subjects Under the Influence of Narcotic Analgesics

- HGN – None
- VGN – None
- LOC – None
- Psychophysical Impairment – Present

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E. Expected Results of the Evaluation

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

Performance on the Modified Romberg Balance (MRB) test will be impaired. Generally, the subject will appear drowsy and will have slow time estimation.

Performance on the Walk and Turn (WAT) and One Leg Stand (OLS) will generally be impaired and will reflect the slow and deliberate movements caused by this category of drugs.

Performance on Finger to Nose (FTN) will also be impaired. Generally, the subject will appear drowsy, possibly “on the nod,” and exhibit slow and deliberate movements.

Session 17 - Narcotic Analgesics

Evaluation of Subjects Under the Influence of Narcotic Analgesics

Vital Signs:

- **Pulse – Down**
- **Blood pressure – Down**
- **Body temperature – Down**

Muscle tone – Flaccid

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Vital Signs

- Pulse will be down
- Blood pressure will be down
- Body temperature will be down

Muscle tone will be flaccid.

Evaluation of Subjects Under the Influence of Narcotic Analgesics

Dark Room:

- Pupils – Constricted (Miosis)
- Reaction to light – Little or none visible

Dark Room

- Pupil size generally will be constricted (below 3.0 mm in diameter)
- Pupil reaction to light will be little or none visible

Evaluation of Subjects Under the Influence of Narcotic Analgesics

General Indicators

- Constricted pupils
- Depressed reflexes
- Droopy eyelids
- Drowsiness
- Dry mouth
- Euphoria
- Facial itching

General Indicators

- Constricted pupils (Miosis)
- Depressed reflexes
- Droopy eyelids (Ptosis)
- Drowsiness
- Dry mouth
- Euphoria
- Facial itching
 - Itching – caused by the release of Histamines

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

Symptomatology Chart

Injection Sites



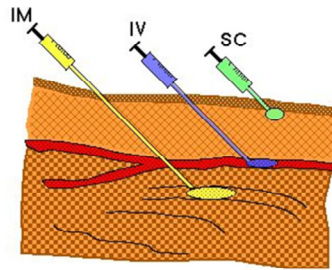
F. Injection Site Examination

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 doesn't ensure the subject is under the influence of drugs
 - 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
- May be evidence of habitual use
- The trauma to the skin, muscles, and the blood is the basic concept of injection sites

Types of Injections

- **Intramuscular**
- **Intravenous**
- **Subcutaneous**



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)
 - Veins are usually used
 - Arteries are deep, thus not lending themselves to injection
- Abbreviated as I/V
- “Intravenous” defined as entering a vein

Subcutaneous

- Subcutaneous (S/C) means just under the skin
- Commonly referred to as “skin popping”

Primary Injection Instrument



Top to bottom
Brown - 26G
Orange - 25G
Black - 22G
Green - 21G
Yellow - 20G
White - 19G

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 Drug Recognition Expert (DRE) to see them

User's Equipment – Hype Kit



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"
- 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

Medical Injection Site

- **Usually IM**
- **Possible multiple injections**
- **Mark is usually larger**
- **Sterile needles**



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 IM
 - 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

Non-Medical Injection Site

- Over a vein
- Usually multiple marks in various stages of healing
- Injection sites may be jagged

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 addict 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.

Locations of Injection Marks

- **Anywhere**
- **Arm**
- **Hand**



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
- 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

Location of Injection Marks

- Ankles
- Feet
- Legs



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 Injection Sites Indicators

- Tattooing
- Track Marks



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”.

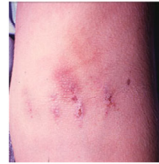
The entire vein area becomes scarred and hardened and, over time, future injections may not be possible. The area becomes silvery-blue in color and raised. This is referred to as “tracks” or “silver streaks”.

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.

Puncture Healing

“Scabbing”
and
“Trap Dooring”



Basic Principles of Puncture Healing

The healing is greatly retarded.

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

- Scabs develop in about 18 – 24 hours
- Scab peels, flakes, off in about 14 days



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
- Scabs develop within about 18 – 24 hours after a puncture
- A general rule: when the scab first forms, it is bright red; with age, the color gets darker and 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.

Classifying Age of Puncture Wounds

- Fresh – Under 12 hours after injection
- Early – 12 – 96 hours after injection



There is no exact science to classifying the age of puncture wounds. Some general guidelines are:

- 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

Classifying Age of Puncture Wounds

- **Late – 5 – 14 days after injection**
- **Healing – Over 14 days after injection**



- 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

Session 17 - Narcotic Analgesics

Conclusion

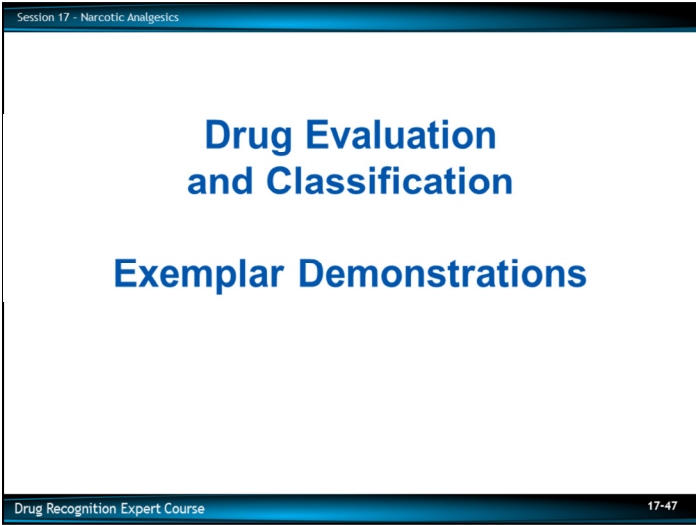
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H. Conclusion

The injection site examination may reveal evidence of recent use.

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.



I. Classification Exemplars

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

A series of 16 horizontal lines provided for writing a narrative report.

Narcotic Analgesics



Test Your Knowledge

1. What are the two subcategories of Narcotic Analgesics?
2. What three distinguishing characteristics do all Narcotic Analgesics share?
3. Consider this situation: A heroin addict injects what is, for him, a "normal" dose of the drug. One hour later a DRE examines the addict and finds he is not impaired. What is the most likely explanation for this?

Test Your Knowledge

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Test Your Knowledge

4. What is another, more common, name for the drug called Diacetyl Morphine?
5. What is Methadone?
6. An analgesic is a drug that _____?
7. What is Oxycodone?

4. What is another, more common, name for the drug called Diacetyl Morphine?

5. What is Methadone?

6. An analgesic is a drug that _____?

7. What is Oxycodone?

DRUG INFLUENCE EVALUATION

Evaluator Officer Joseph Koher		DRE # 21707	Rolling Log # 17-1-068	Evaluator's Agency Huntington Police Department	Case # 17-7850 (Session XVII-1)
Recorder/Witness Sgt. Jay Powers West VA State Police		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Huntington Police Department	
Arrestee's Name (Last, First, Middle) Schmack, Charley J.		Date of Birth 5/14/1970	Sex M	Race W	Arresting Officer (Name, ID#) Officer Travis Hogan #23990
Date Examined / Time / Location 1/23/2017 / 1505 / Huntington PD		Breath Test: Results: 0.000	Test Refused <input type="checkbox"/> Instrument #: 67590	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: Officer Hogan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Nothing	When? N/A	What have you been drinking? How much? "just coffee" 4 or 5 cups	Time of last drink? N/A
Time now/ Actual "About 4 pm"/1510	When did you last sleep? Last night	How long? 5 - 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 type="checkbox"/> No "You tell me"			Attitude: Cooperative, Passive	Coordination: Poor, Relaxed, 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>1518</u> 2. <u>52</u> / <u>1538</u> 3. <u>52</u> / <u>1550</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	20/30 One Leg Stand 22/30 L R All All Sways while balancing All All Uses arms to balance Hopping 2 2 Puts foot down Counted slowly
Modified Romberg Balance Approx. 2" 2" 2" 2" On the nod. Counted slowly	Walk and Turn Test Slow, deliberate steps.	Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon _____ Stops walking <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Misses heel-toe <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Steps off line _____ Raises arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Actual steps taken 9 9			
Time Estimation 54 estimated as 30 seconds	Describe turn Slow, deliberate	Cannot do test (explain) N/A		Type of footwear: Lace-up boots	
Finger to Nose (Draw lines to spots touched) Slow movements. On the nod.		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	2.0	4.0	2.0
		Right Eye	2.0	4.0	2.0
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Little to None
		RIGHT ARM Red puncture mark		LEFT ARM 	
Blood Pressure 110 / 60	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 don't use drugs. I'm just tired."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A	
Date / Time of arrest: 1/23/2017 / 1340	Time DRE was notified: 1430	Evaluation start time: 1505	Evaluation completion time: 1600	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: <i>Joseph Koher</i>		Reviewed/approved by / date:			DRE #21707
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, Charley

1. **Location:** The evaluation was conducted in the booking room at Huntington Police Department. The room is well illuminated and has a tile floor with no obstructions. The dark room examinations were conducted in the staff restroom adjacent to the interview room.
2. **Witnesses:** Sergeant Jay Powers of the West Virginia State Police observed and recorded the entire evaluation. The arresting officer, Officer Travis Hogan, observed the psychophysical examinations.
3. **Breath Alcohol Test:** The suspect's breath test was 0.00%. It 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 contacted by Dispatch and requested to contact Officer Hogan at HPD for a drug evaluation. When contacted, Officer Hogan advised that the suspect was found slumped over the steering wheel in the driver's seat with his foot on the brake, and he appeared to be unconscious. At first, Officer Hogan thought he may have to administer Narcan to the suspect. However, the suspect became responsive, and Narcan was not administered. During the personal contact, Officer Hogan did not detect an odor of an alcoholic beverage coming from suspect's breath. However, he did observe indicators of possible drug impairment, which included slow movements while retrieving his identification, along with slow, thick, and raspy speech. Officer Hogan also noted that the suspect had small, constricted pupils. He was also lethargic and passive acting, and had poor coordination. Officer Hogan also noted that the suspect had a red puncture mark on his right arm, and was frequently licking his lips. According to Officer Hogan, the suspect consented to SFSTs at roadside. Officer Hogan 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, however, five clues were observed on the W&T, and three clues were observed on the OLS. 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.
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. The suspect responded to my questions slowly, and his speech was thick and slurred. He had a dry mouth and was frequently licking his lips. His movements were slow and deliberate. The suspect was wearing blue jeans, a red tee-shirt, and lace-up boots. I introduced myself and asked if he would consent to a drug evaluation. He replied by stating, "Sure, I guess so." His coordination was poor. He appeared to be relaxed, and he was unstable on his feet. I asked the suspect 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." The suspect advised that he was not blind in either eye and did not wear corrective lenses. When I asked him when he last slept, he indicated he had slept about 4 or 6 hours last night.
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:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to him attempting them. After each demonstration, the suspect 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 2” front to back and approximately 2” side to side. His time estimation was slow, estimating 30 seconds in 54 seconds, and he appeared to be “on the nod” during the test.

Walk & Turn: For this test, a painted line of the booking room floor was used. During this test, the suspect lost his balance three times during the instructions phase. Once he started the walking phase, he stopped one time, stepped off the line once, and missed touching heel to toe once on the first nine steps. His turn was slow and deliberate, but done as described. On the second nine steps, he missed touching heel to toe once, and stopped while walking at step eight and appeared to be confused on what to do. Once completing the test, he moved towards the wall and leaned against to steady himself.

One Leg Stand: For this test, when the suspect raised his right leg, he swayed front to back noticeably. He used his arms to balance during the entire test. He also put his foot down on counts 1,012 and 1,016. He counted slowly throughout the test, counting to 1,020 in 30 seconds. When he raised his left leg, the suspect again swayed noticeably. He also used his arms to balance during the entire test. The suspect put his foot down on counts 1,014 and 1,021. He again counted slowly, counting to 1,022 in the 30 second period.

Finger to Nose: During this test, the suspect swayed front to back approximately 2 – 3 inches. He also missed touching the tip of his nose with the tip of his index finger on four 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. The suspect’s pupil sizes were estimated in three lighting levels and were 2.0 mm in both eyes in Room Light, 4.0 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. His pupillary reaction was little to none, and he did not exhibit rebound dilation.

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 110/60 millimeters of Mercury (mmHg) and body temperature of 97.0 degrees Fahrenheit, were low and below the DRE average ranges. The suspect’s eyelids were droopy, and his muscle tone was flaccid. Numerous times during the evaluation, the suspect appeared to be “on the nod.”

9. Signs of Ingestion: A red injection mark was located on the inside of the suspect’s right arm. The suspect claimed it was from a blood donation he did a couple of days ago. 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. The suspect 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 urine sample, which I collected 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 and it will be forwarded to the State Police Forensic Laboratory for analysis. (Refer to Officer Hogan’s arrest report for additional details).

DRUG INFLUENCE EVALUATION

Evaluator Trooper Sam Criswell		DRE # 22372	Rolling Log # 17-07-045	Evaluator's Agency Ohio Highway Patrol	Case # 17-9750 (Session XVII - 2)																															
Recorder/Witness Trooper Joshua Craft, OH State Patrol		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Columbus Police Department																																
Arrestee's Name (Last, First, Middle) Wynn, Hara		Date of Birth 4/10/1987	Sex M	Race W	Arresting Officer (Name, ID#) Officer Nick Konves #21898																															
Date Examined / Time / Location 7/05/17 / 1840 / Franklin County Jail		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. Konves	<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, Dr. Pepper 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 medicine"		Attitude: Cooperative		Coordination: Poor, Sluggish, Unstable																																
Speech: Slow, Thick		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																																
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	Left Eye	Right Eye	Convergence	24/30 One Leg Stand 26/30																															
1. <u>56</u> / <u>1855</u>	Lack of Smooth Pursuit	None	None																																	
2. <u>52</u> / <u>1908</u>	Maximum Deviation	None	None																																	
3. <u>52</u> / <u>1920</u>	Angle of Onset	None	None																																	
Modified Romberg Balance Approx. 3" 3" 3" 3"	Walk and Turn Test	<table border="1" style="width: 100%;"> <tr> <td>Cannot keep balance</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Starts too soon</td> <td></td> <td></td> </tr> <tr> <td>Stops walking</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Misses heel-toe</td> <td></td> <td></td> </tr> <tr> <td>Steps off line</td> <td></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Raises arms</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Actual steps taken</td> <td>9</td> <td>9</td> </tr> </table>		Cannot keep balance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Starts too soon			Stops walking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Misses heel-toe			Steps off line		<input checked="" type="checkbox"/>	Raises arms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Actual steps taken	9	9	<table border="1" style="width: 100%;"> <tr> <td>I.</td> <td>R</td> <td rowspan="3">Sways while balancing Uses arms to balance Hopping Puts foot down</td> </tr> <tr> <td>All</td> <td>All</td> </tr> <tr> <td>All</td> <td>All</td> </tr> <tr> <td>2</td> <td>1</td> <td>Counted slowly. Scratching arms and face.</td> </tr> </table>		I.	R	Sways while balancing Uses arms to balance Hopping Puts foot down	All	All	All	All	2	1	Counted slowly. Scratching arms and face.
Cannot keep balance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																		
Starts too soon																																				
Stops walking	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																		
Misses heel-toe																																				
Steps off line		<input checked="" type="checkbox"/>																																		
Raises arms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																																		
Actual steps taken	9	9																																		
I.	R	Sways while balancing Uses arms to balance Hopping Puts foot down																																		
All	All																																			
All	All																																			
2	1	Counted slowly. Scratching arms and face.																																		
Time Estimation 44 estimated as 30 seconds	Describe turn Slow, deliberate steps	Cannot do test (explain) N/A		Type of footwear: Athletic 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)																															
		Left Eye	2.0	3.5	1.5																															
		Right Eye	2.0	3.5	1.5																															
Slow arm movements. Leaned forward.		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Little to None																																
Blood Pressure 108 / 66		Temperature 97.0 °F		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>RIGHT ARM</p> <p>Scar tissue</p> </div> <div style="text-align: center;"> <p>LEFT ARM</p> <p>Fresh puncture marks</p> </div> </div>																																
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: 7/05/17 / 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>Samuel Criswell</i>		Reviewed/approved by / date:			DRE #22372																															
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 checked="" type="checkbox"/> Narcotic Analgesic																																
				<input type="checkbox"/> Inhalant																																
				<input type="checkbox"/> Cannabis																																

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Wynn, Hara

1. **Location:** The evaluation was conducted in the booking area of the Franklin County Jail. The area is well illuminated and has a concrete floor with no obstructions. The dark room examinations were conducted in the booking area restroom.
2. **Witnesses:** Trooper Joshua Craft of the Ohio Highway Patrol witnessed and recorded the entire evaluation.
3. **Breath Alcohol Test:** The suspect's breath test was 0.00%. It was administered by the arresting officer, Sergeant Nick Konves of the Columbus PD prior to my arrival.
4. **Notification and Interview of the Arresting Officer:** I was on duty and at approximately 1815 hours, I was requested to contact Sergeant Konves from the Columbus Police Department for a drug evaluation. I contacted Sergeant Konves at the Franklin County Jail and it was determined that the suspect had been arrested for OVI after the vehicle he was operating failed to stop at a red traffic light at E. Broad and High Streets and had nearly crashed into his patrol vehicle. Sergeant Konves further advised that after stopping the suspect's vehicle, the suspect did not have an odor of an alcoholic beverage on his breath, but showed other indicators of impairment. He reported that the suspect passed over driver's license three times while looking for it. He also had slow and deliberate hand movements. Sergeant Konves also noticed that the suspect's speech was slow, thick and slurred. He also noted that the suspect's pupils were very constricted. Sergeant Konves administered SFSTs at roadside to the suspect which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing no HGN clues, but did observe four clues on the W&T and four clues on the OLS. Throughout the tests, the suspect was unstable on his feet and his movements were slow and sluggish. Sergeant Konves arrested the suspect for OVI and transported him to the Franklin County Jail for processing. According to Sergeant Konves, while the suspect was in back his patrol vehicle, he was slumped over and appeared to be on-the-nod.
5. **Initial Observation of the Suspect:** I first observed the suspect in the booking room at the Franklin County Jail. Sergeant Konves had just completed the breath test and was completing his paperwork when I arrived. I noted that the suspect was repeatedly scratching his face and neck. His head kept nodding forward and he appeared to be "on the nod." His voice was low and raspy. His pupils appeared to be constricted and his coordination and movements were slow and deliberate. The suspect was wearing soiled blue jeans, a brown button-up shirt, and lace-up athletic shoes. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to do. I asked the suspect if he had been informed of his Miranda rights and he stated, "yup." I asked if he had any injuries or physical defects that would prevent him from doing the tests, and he said he did not. He also stated that he was not currently under the care of a doctor or dentist. He advised he had eaten a couple of candy bars around 3 pm and had drank some water and a Dr. Pepper earlier. When asked if he was taking any medication or drugs, he responded "No, no medicine." The suspect told me he was not blind in either eye and did not wear corrective lenses. When asked when he had last slept, he stated, "last night." When asked for how many hours, and he stated, "a few hours." His responses to my questions were slow and at times thick and slurred. His eyelids were very droopy and 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 the suspect appeared to be having attention problems. After each demonstration, the suspected indicated that he understood the instructions. The following tests were administered to the suspect:

Modified Romberg Balance: During this test, the suspect swayed approximately 3” front to back and 3” side to side, and had a slow time estimation, estimating 30 seconds in 44 seconds. The suspect was on-the-nod during portions of the test.

Walk and Turn: For this test, a painted white line on the booking room floor was used. During the test, the suspect lost his balance twice during the instructions phase. During the walking phase, he stopped while walking one time on the first nine steps and twice on the second nine steps. He stepped off the line 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.

One Leg Stand: When the suspect stood on his left foot and raised his right foot, he counted slowly and swayed front to back approximately three inches. He also used his arms to balance repeatedly during the test, and put foot down on counts 1,010 and 1,019. When the suspect stood on his right foot and raised his left foot, he swayed front to back approximately three inches. He also used his arms to balance during the entire test, and put foot down on count 1,017. His counting was slow, counting to 1,024 in 30 seconds while standing on his left foot and counting to 1,026 in 30 seconds while standing on his right foot. During the test, the suspect continued to scratch his arms and face.

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 all six attempts, and had slow hand and arm movements.

8. Clinical Indicators of Impairment:

Eye Signs: The suspect’s pupils were checked in three lighting levels and were estimated at 2.0 mm in both eyes in Room Light, 3.5 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 reaction to light was little to none visible. The suspect’s eyes were able to converge as directed and rebound dilation was not present.

Vital Signs: The suspect’s pulse, blood pressure, and body temperature were below the DRE average ranges. His pulse rates were 56, 52 and 52 beats per minute (bpm). The suspect’s blood pressure was measured at 108/66. His temperature was checked using a standard oral thermometer and was 97.0 degrees Fahrenheit, which was also below the DRE average range for body temperature. His muscle tone was flaccid.

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.” The scars and marks were photographed.

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 is unable to operate a vehicle safely.

12. Toxicological Sample: Wynn provided a urine sample, which I collected and forwarded to the State Police Crime Laboratory for analysis.

13. Miscellaneous: Sergeant Konves reported that the suspect’s vehicle was towed per department policy and a pre-tow inventory revealed several used syringes under the driver’s seat of the vehicle. Refer to Sergeant Konves’ arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator Sergeant Jeff Bullard		DRE # 20418	Rolling Log # 17-01-87	Evaluator's Agency Casper Police Department	Case # 17-8875 (Session XVII - 3)
Recorder/Witness Sergeant Scott Jones		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Casper Police Department	
Arrestee's Name (Last, First, Middle) Cottin, Ozzie		Date of Birth 5/16/1976	Sex M	Race H	Arresting Officer (Name, ID#) Officer Ben Flake #P65
Date Examined / Time / Location 1/07/2017 / 2000 / Natrona County Jail		Breath Test: Results: 0.000	Test Refused <input type="checkbox"/> Instrument #: 32215		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: Officer Flake	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Cheeseburger		When? 1 pm	What have you been drinking? How much? Energy drink 1 can
Time now/ Actual 9 pm / 2005	When did you last sleep? Last night	How long? About 9 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No Sore elbow		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 "But I used to take pain pills"			Attitude: Cooperative		Coordination: Poor, Slow, Unstable
Speech: Slow, Thick		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	
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>58</u> / <u>2015</u> 2. <u>56</u> / <u>2027</u> 3. <u>56</u> / <u>2045</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" Approx. 2" Approx. 2" Approx. 2" Scratching arms		Walk and Turn Test Stopped counting out loud on 5 th step. Had to be reminded to count out loud.		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"/> Steps off line <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Raises arms <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Actual steps taken 9 9	
Time Estimation <u>55</u> estimated as 30 seconds		Describe turn As instructed. Slow		Cannot do test (explain) N/A	
Type of footwear: N/A					
Finger to Nose (Draw lines to spots touched) Slow hand and arm movements. Scratching his arms.		PUPIL SIZE	Room light (2.5)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	2.0	3.0	1.5
		Right Eye	2.0	3.0	1.5
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Little to None
		RIGHT ARM 		LEFT ARM 	
		Nothing observed			
Blood Pressure 112/64	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 used to use pain pills"		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A	
Date / Time of arrest: 1/07/17 1905	Time DRE was notified: 1940	Evaluation start time: 2000	Evaluation completion time: 2305	<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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input checked="" type="checkbox"/> Narcotic Analgesic
					<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Cotton, Ozzie

1. **Location:** The evaluation was conducted at the Natrona County Jail in the booking room. The room is well illuminated and has a 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 Scott Jones of the Casper Police Department witnessed and recorded the entire evaluation.
3. **Breath Alcohol Test:** The suspect's breath test was 0.00%. It was administered by Officer Ben Flake on prior to my arrival.
4. **Notification and Interview of the Arresting Officer:** I was requested to contact Casper Police Officer Flake for a drug evaluation. Upon contacting Officer Flake at the Natrona County Jail, he advised me that the suspect's vehicle was observed drifting in and out of his traffic lane and driving 20 mph under the posted speed on Highway 220. According to Officer Flake, during personal contact, the suspect did not have an odor of an alcoholic beverage on his breath. However, Officer Flake observed that the suspect had poor coordination, slow and deliberate movements, and constricted pupils. He also noticed that the suspect's speech was slow, thick, and slurred, and that his face appeared pale. The suspect consented to SFSTs at roadside. Officer Flake told me that the suspect reported having no medical conditions, injuries, or physical defects, but observed that he had been driving barefoot. Officer Flake administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing no clues of HGN, three clues on the W&T, and four clues on the OLS. At the conclusion of the SFSTs, Officer Flake arrested the suspect for DWI, and transported him to the Natrona County Jail for processing. After obtaining a .00 BAC, he requested the assistance of a DRE.
5. **Initial Observation of the Suspect:** I first observed the suspect in the booking area at the Natrona County Jail. He was sitting on a bench and was continually scratching his face and arms. He had a dry mouth and smacked his lips when he spoke. When he stood, he was unstable and several times used the wall next to the bench to steady himself. Several times he stated he was cold. The suspect was wearing blue jeans, a brown tee-shirt, and no footwear. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to. His coordination was poor and he had slow, deliberate movements. I asked the suspect if he had been informed of his Miranda rights and he indicated that he had. I asked the suspect if he had any injuries or physical defects, and he said he had a sore elbow. He also stated that he was otherwise healthy and was not under the care of a doctor or dentist. He told that he had eaten a cheeseburger around 1 pm and had drank an energy drink at that time. When asked if he was taking any medication or drugs, he responded "no" and added "but I used to take pain pills." The suspect told me that he was not blind in either eye and did not wear corrective lenses. He indicated that he had slept the night before for about nine hours. Several times during the initial contact with the suspect, he appeared to be on the nod and at times, I had to repeat my questions.
6. **Medical Problems and Treatment:** The suspect stated he had a sore elbow but had not seen a physician for the pain. During the evaluation, the suspect did not report any other injuries 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, the suspect 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 two inches front to back and side to side. His time estimation was slow, estimating 30 seconds in 55 seconds. He scratched his arms and face 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 instructions phase. During the walking phase of the test, 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, the suspect missed touching heel to toe once, stepped off the line twice, and raised his arms to balance twice. Several times during the test, he 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 counted slowly, and swayed side to side. He also used his arms to balance during the entire test, and put foot down on counts 1,016 and 1,019. The suspect's counting was slow, counting to 1,023 in the 30 second period. When standing on his right foot and raising his left foot, the suspect swayed front to back. He used his arms to balance during the entire test, and put foot down on count 1,008. The suspect again counted slowly, counting to 1,025 in the 30 second period.

Finger to Nose: During this test, the suspect scratched his arms numerous times. He also did not touch the tip of his nose with the tip of his index finger as instructed on three of the six attempts. His hand and arm movements were slow and deliberate.

8. Clinical Indicators of Impairment:

Eye Signs: The suspect's pupil sizes were estimated in three different lighting levels. In Room Light, his pupils were estimated at 2.0 mm in both eyes. In Near Total Darkness, the suspect's pupils were estimated at 3.0 mm both eyes, and in Direct Light they were estimated at 1.5 mm both eyes. All were below the DRE average ranges. There was little to none visible pupil reaction to light. Rebound dilation was not observed and he was able to converge his eyes as directed.

Vital Signs: The suspect's pulse rates were checked three times during the evaluation and were 58 beats per minute (bpm), 56 bpm, and 56 bpm. All three were below the DRE average range of 60 – 90 bpm. His blood pressure was measured at 112/64, which was also below the DRE average ranges. The suspect's body temperature was measured with an oral thermometer at 97.2 degrees Fahrenheit which was below the DRE average range. His muscle tone was flaccid.

9. Signs of Ingestion: The suspect's nasal was clear. The suspect's mouth was dry and he had a white coating on his tongue. There were no injection signs observed.

10. Suspect's Statements: After explaining my observations to the suspect, I again asked him about drug use. He denied any current drug use, but admitted that he used to take pain pills. When asked how long ago, he indicated it had been about a year. He claimed he used them for lower back pain. When asked what pain medication he used, he indicated that he used several different kinds.

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. The sample was submitted as evidence and will be forwarded to the state crime laboratory for analysis.

13. Miscellaneous: Refer to Officer Flake's arrest report for additional details.

Mid-Course Review

2 Hours, 30 Minutes

Mid-Course Review

Review of Drugs,
Drug Categories,
and the Drug Influence
Evaluation



Drug Recognition Expert Course Mid -2

MID-COURSE REVIEW

CONTENT SEGMENTS

- A. Drugs, Drug Categories, and the Drug Influence Evaluation
- B. Eyes and Vital Signs
- C. Physiology
- D. Questions and Answers

LEARNING ACTIVITIES

Instructor/Participant Dialogues
Participant-Led Demonstrations

Mid-Course Review

Drugs, Drug Categories, and the Drug Influence Evaluation

- Define the word “drug”
- Name the seven drug categories
- Name the six subcategories of CNS Depressants
- Name the three subcategories of CNS Stimulants
- Name the two sub-categories of Narcotic Analgesics

Drug Recognition Expert Course Mid - 2

A. Drugs, Drug Categories, and the Drug Influence Evaluation

Define the word “drug.”

Name the seven drug categories.

Name the six subcategories of Central Nervous System (CNS) Depressants.

Name the three subcategories of CNS Stimulants.

Name the two sub-categories of Narcotic Analgesics.

Mid-Course Review

Identify the Drug Category for:

- Desoxyn
- Secobarbital
- Dilaudid
- Alprazolam
- Phenyl Cyclohexyl Piperidine
- “Ecstasy”
- ETOH
- Numorphan
- Psilocybin

Drug Recognition Expert Course Mid - 3

Identify the category for each of the listed drugs:

Desoxyn

Secobarbital (Seconal)

Dilaudid

Alprazolam (Xanax)

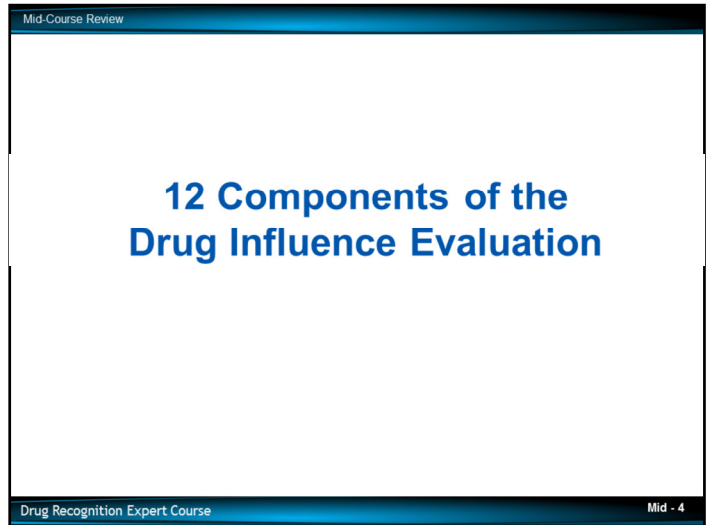
Phenyl Cyclohexyl Peperidine

“Ecstasy” (MDMA)

ETOH

Numorphan

Psilocybin



List the twelve components of the Drug Influence Evaluation in the proper sequence.

Mid-Course Review

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**

Drug Recognition Expert Course Mid - 5

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

Mid-Course Review

Identify the Drug Category for:

- Demerol
- Adderall
- Chlordiazepoxide
- Ketamine
- Percodan
- Ritalin
- Bufotenine
- Methaqualone

Drug Recognition Expert Course Mid - 6

Identify the category for each of the listed drugs:
Demerol

Adderall

Chlordiazepoxide

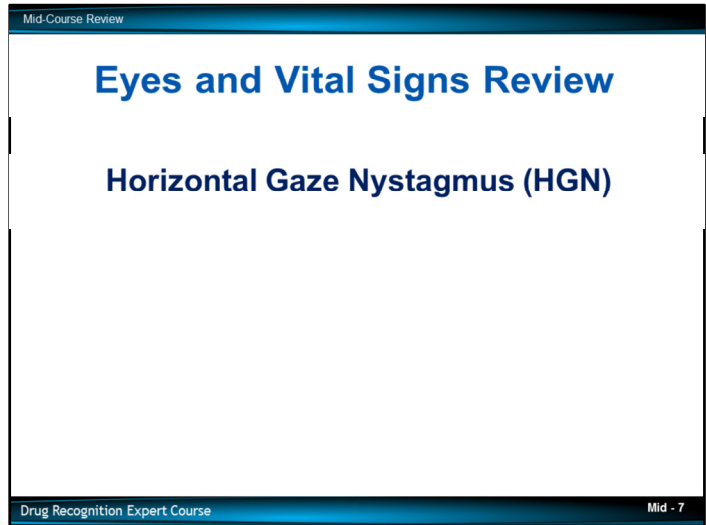
Ketamine

Percodan

Ritalin

Bufotenine

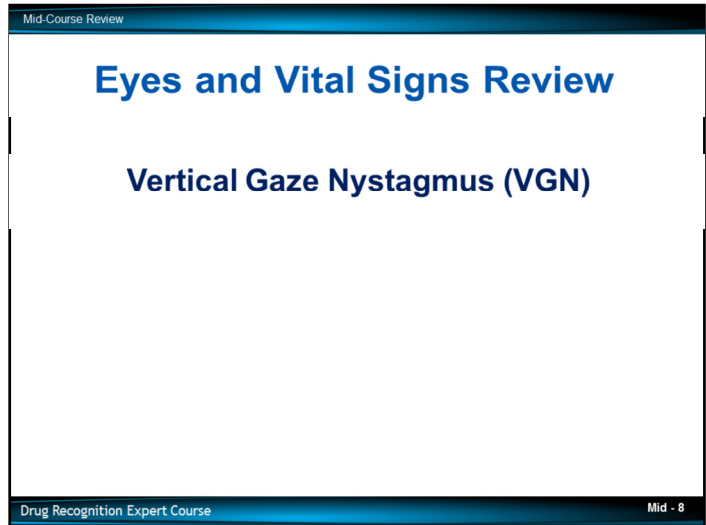
Methaqualone



B. Eyes and Vital Signs

Name the three clues of Horizontal Gaze Nystagmus (HGN).

Name the categories of drugs that cause HGN.



Name the categories that will cause Vertical Gaze Nystagmus (VGN).

Name the test always administered immediately after VGN.

Name the categories of drugs that usually will cause Lack of Convergence (LOC).

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

Name the lighting conditions under which we make estimations of pupil size.

Name the other things a Drug Recognition Expert (DRE) looks for while shining the light directly into the subject's eye.

Mid-Course Review

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

Drug Recognition Expert Course Mid - 10

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.

Mid-Course Review

What Do These Terms Mean?

- Miosis
- Mydriasis
- Ptosis

Drug Recognition Expert Course Mid - 11

Define each of the listed terms:

Miosis

Mydriasis

Ptosis

Pupil Dilation and Constriction

- What categories of drugs cause dilation of the pupils?
- What categories of drugs cause constriction?

What categories of drugs cause dilation of the pupils?

What categories of drugs cause constriction?

Mid-Course Review

More Drugs to Categorize

• Oxycodone	• Diazepam
• Halcion	• Dexedrine
• Librium	• Hycodan
• Peyote	• Klonopin
• Ritalin	

Drug Recognition Expert Course Mid - 13

Identify the category for each of the listed drugs:

Oxycodone

Halcion

Librium

Peyote

Ritalin

Diazepam

Dexedrine

Hycodan

Klonopin

Mid-Course Review

Circulatory System Review

- Define “Pulse”
- Define “Pulse Rate”
- Define “Artery”
- Define “Vein”

Drug Recognition Expert Course Mid - 14

Define “Pulse.”

Define “Pulse Rate.”

Define “Artery.”

Define “Vein.”


Where Are These Pulse Points Located?

- Radial
- Brachial
- Carotid

Mid-Course Review

Pulse Point Location

- **Radial**
- **Brachial**
- **Carotid**



Drug Recognition Expert Course Mid - 16

Identify the location of each listed pulse point:

Radial

Brachial

Carotid

State the normal range of adult human pulse rate.

Name the drug categories that usually cause elevated pulse rate.

Name the drug categories that usually cause lowered pulse rate.

Blood Pressure Review

- Define “Blood Pressure”
- How often does a person’s blood pressure change?
- When does the blood pressure reach it’s highest value?
- When does the blood pressure reach it’s lowest value?

Define “Blood Pressure.”

How often does a person’s blood pressure change?

When does the blood pressure reach it’s highest value?

When does the blood pressure reach it’s lowest value?

Mid-Course Review

Blood Pressure Review

130--
120--
110--
100--
90--
80--
70--
60--

Drug Recognition Expert Course Mid - 18

Name the two medical instruments used to measure blood pressure.

Name the sounds we hear through the stethoscope when we take a blood pressure measurement.



What does this “Hg” mean?

In what units is blood pressure measured?

Suppose, at some particular instant, a person has a blood pressure of 120 mmHg. What does “120 mmHg” mean?

Drugs and Blood Pressure

- Name the drug categories that usually cause a lowered blood pressure
- Name the drug categories that elevate blood pressure

Name the drug categories that usually cause a lowered blood pressure.

Name the drug categories that elevate blood pressure.

Some Technical Terms to Define

- **Systolic**
- **Diastolic**
- **Bradycardia**
- **Tachycardia**
- **Hypertension**
- **Hypotension**

State the meaning of each of the listed terms:

Systolic

Diastolic

Bradycardia

Tachycardia

Hypertension

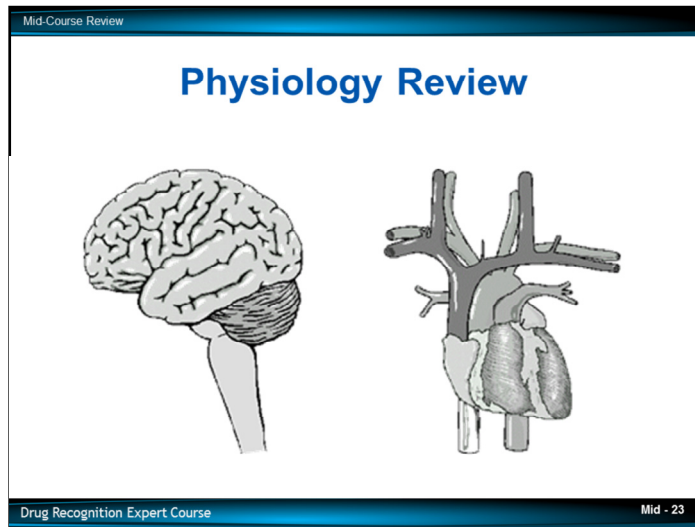
Hypotension

Blood Pressure Measurement

- State the normal range of systolic blood pressure.
- State the normal range of diastolic blood pressure.

State the normal range of systolic blood pressure.

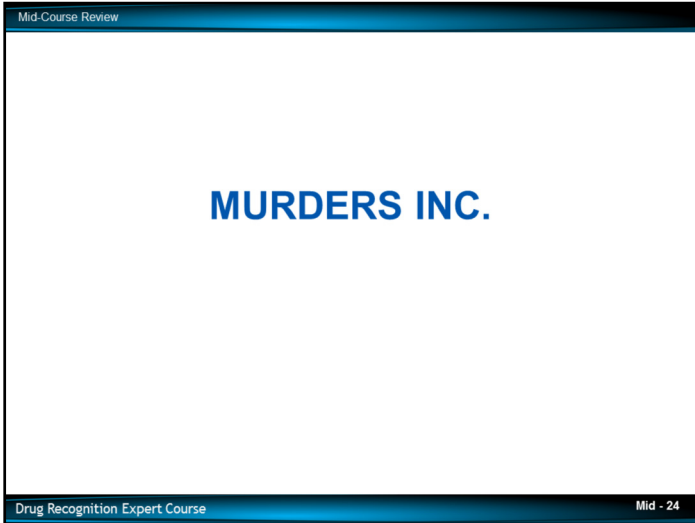
State the normal range of diastolic blood pressure.

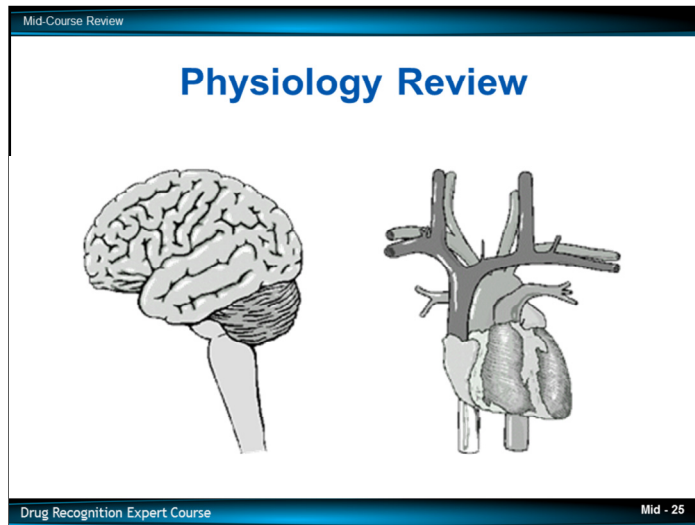


C. Physiology

Define "Physiology."

What is the expression we use to remember the names of the ten major body systems?





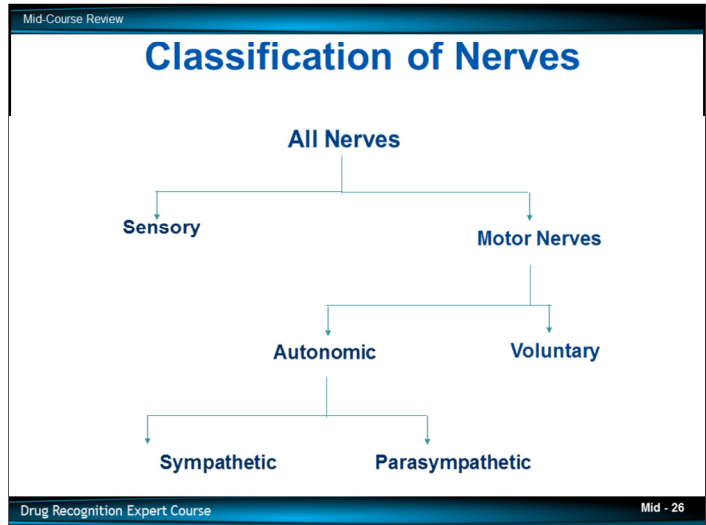
State the word that means “dynamic balance involving levels of salts, water, sugars and other materials in the body’s fluids.”

Which artery carries blood from the heart to the lungs?

What is unique about the Pulmonary artery, compared to all other arteries?

What are the Pulmonary veins?

What is unique about the Pulmonary veins?



What do these terms mean?

Sensory

Motor Nerves

Voluntary

Autonomic

Sympathetic

Parasympathetic

Mid-Course Review

More Technical Terms to Define

- Neuron
- Synapse
- Neurotransmitter
- Axon
- Dendrite

Drug Recognition Expert Course Mid - 27

Define each of the listed terms:

Neuron

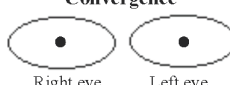

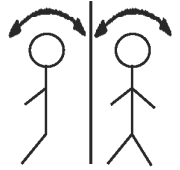
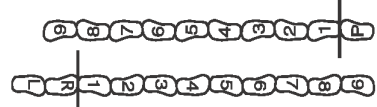
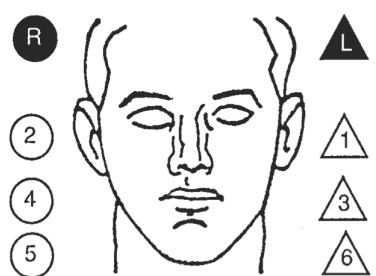
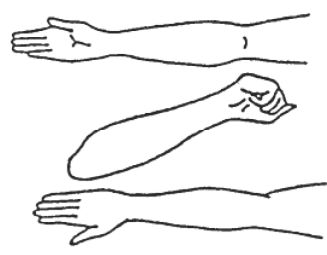
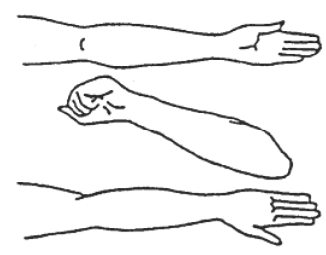
Synapse

Neurotransmitter

Axon

Dendrite

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 1. ___ / ___ 2. ___ / ___ 3. ___ / ___	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye	Right Eye	Convergence  Right eye Left eye		/30 One Leg Stand /30 																																
Modified Romberg Balance Approx. Approx. 	Walk and Turn Test 		Cannot keep balance _____ 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> </td><td> </td><td> </td><td> </td></tr> </table>		1 st Nine		2 nd Nine																		<table border="1" style="width: 100%; text-align: center;"> <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> <tr> <td> </td><td> </td></tr> </table> Sways while balancing Uses arms to balance Hopping Puts foot down		L	R								
1 st Nine		2 nd Nine																																				
L	R																																					
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)	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																																

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Session 18

Practice: Test Interpretation



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**

Upon successfully completing this session, the participant will be able to:

- Analyze the results of a complete drug influence evaluation and identify the category or categories of drugs affecting the individual examined
- Articulate the bases for the drug category identification

CONTENT SEGMENTS

- A. Interpretation Demonstrations
- B. Interpretation Practice

LEARNING ACTIVITIES

Instructor-Led Demonstrations
Small-Group Practice
Participant-Led Presentations

Session 18 - Practice: Test Interpretation

Practice: Test Interpretation

Case No. 1: "Subject Martinez"

- Preliminary Examination
- Eye Examinations

Drug Recognition Expert Course 18-3

A. Interpretation Demonstrations

Case No.1: "Subject Martinez"

Preliminary Examination

- Review the results of the preliminary examination of Subject Martinez

Eye Examinations

- Review the results of the eye examination of Subject Martinez

Session 18 - Practice: Test Interpretation

Practice: Test Interpretation

Case No. 1: "Subject Martinez"

- **Psychophysical Tests**
- **Vital Signs Examinations**
- **Dark Room Examinations**

Drug Recognition Expert Course 18-4

Psychophysical Tests

- Review the results of the psychophysical tests of Subject Martinez

Vital Signs Examinations

- Review the results of the vital signs examinations of Subject Martinez

Dark Room Examinations

- Review the results of the dark room examinations of Subject Martinez

Session 18 - Practice: Test Interpretation

Practice: Test Interpretation

Case No. 1: "Subject Martinez"

- Other Evidence
- Opinion of the Evaluator

Drug Recognition Expert Course 18-5

Other Evidence

- Review the results of the examinations for injection sites and muscle rigidity and of the final interview of Subject Martinez

Opinion of the Evaluator

Session 18 - Practice: Test Interpretation

Practice: Test Interpretation

Case No. 2: "Subject Groves"

- Preliminary Examination
- Eye Examinations

Drug Recognition Expert Course 18-6

Case No.2: "Subject Groves"

Preliminary Examination

- Review the results of the preliminary examination of Subject Groves

Eye Examination

- Review the results of the eye examinations of Subject Groves

Session 18 - Practice: Test Interpretation

Practice: Test Interpretation

Case No. 2: "Subject Groves"

- **Psychophysical Tests**
- **Vital Signs Examinations**
- **Dark Room Examinations**

Drug Recognition Expert Course 18-7

Psychophysical Tests

- Review the results of the psychophysical tests of Subject Groves

Vital Signs Examinations

- Review the results of the vital signs examinations of Subject Groves

Dark Room Examinations

- Review the results of the dark room examinations of Subject Groves

Session 18 - Practice: Test Interpretation

Practice: Test Interpretation

Case No. 2: "Subject Groves"

- Other Evidence
- Opinion of the Evaluator

Drug Recognition Expert Course 18-8

Other Evidence

- Review the results of the examinations for injection sites and muscle rigidity and of the final interview of Subject Groves

Opinion of the Evaluator

Session 18 - Practice: Test Interpretation

Interpretation Practice

Team Practice

- **Review and Discussion of Exemplars by Teams**

Drug Recognition Expert Course 18-9

B. Interpretation Practice

Team Practice

Review and Discussion of Exemplars by Teams

Feedback of Results

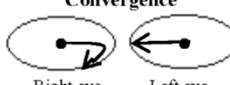
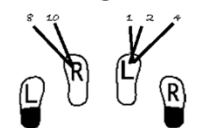
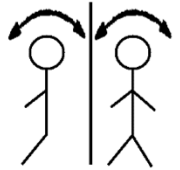
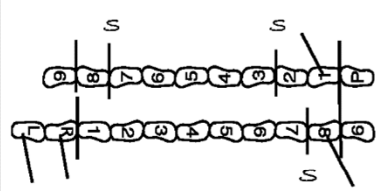
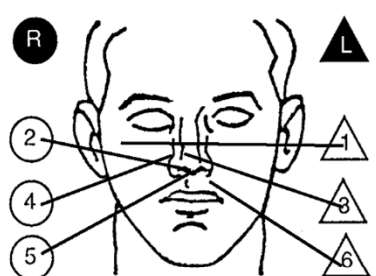
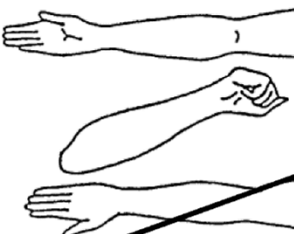
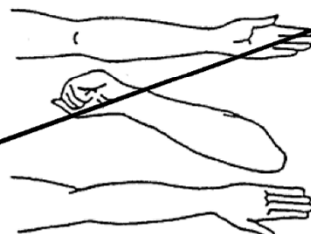
- Subject Martinez
- Subject Groves
- Subject Hatos
- Subject Jackson
- Subject Stevens

Session 18 - Practice: Test Interpretation

QUESTIONS?

Drug Recognition Expert Course 18-10

DRUG INFLUENCE EVALUATION

Evaluator Sgt Scott Peters		DRE # 16855	Rolling Log # 14-08-024	Evaluator's Agency Riverton PD	Case # Session XVIII-#1												
Recorder/Witness Lt Ben Schlosser Wyoming HP		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Laramie PD													
Arrestee's Name (Last, First, Middle) Martinez, Juan		Date of Birth 5/20/80	Sex M	Race W	Arresting Officer (Name, ID#) Officer Troy Bartel #16843												
Date Examined / Time / Location 08/22/14 2330 County Jail Intake		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 32355	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: Ofc Bartel	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Some food"	When? No response	What have you been drinking? How much? No response	Time of last drink? N/A												
Time now/ Actual No response	When did you last sleep? No response	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No No response	Are you diabetic or epileptic? <input type="checkbox"/> Yes <input type="checkbox"/> No Not sick													
Do you take insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No No response	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No No response	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 No response		Attitude: Passive	Coordination: Unsteady														
Speech: Slow, non-responsive at times		Breath odor: Chemical-like		Face: Blank stare, 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 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. 104 / 2340 2. 108 / 2356 3. 106 / 0015	HGN Lack of Smooth Pursuit Present Maximum Deviation Present Angle of Onset 30	Left Eye Present	Right Eye Present	Convergence  Right eye Left eye	18/30 One Leg Stand 21/30  L R <table border="1" style="display: inline-table; margin-right: 10px;"><tr><td>1</td><td>1</td></tr><tr><td>1</td><td>1</td></tr><tr><td>2</td><td>3</td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down Tests stopped for safety reasons	1	1	1	1	2	3						
1	1																
1	1																
2	3																
Modified Romberg Balance Approx. 3" Approx. 3" 	Walk and Turn Test  Rigid, stiff movements	Cannot keep balance ✓✓ Starts too soon Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		<table border="1" style="display: inline-table;"><tr><th>1st Nine</th><th>2nd Nine</th></tr><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 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>9</td><td>9</td></tr></table>		1 st Nine	2 nd Nine	<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"/>	9	9
1 st Nine	2 nd Nine																
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<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																
9	9																
Time Estimation 38 estimated as 30 seconds	Describe turn Slow	Cannot do test (explain) N/A		Type of footwear: Boots													
Finger to Nose (Draw lines to spots touched)  Slow, rigid arm movements		PUPIL SIZE	Room light (2.5-5.0)	Darkness (5.0-8.5)	Direct (2.0-4.5)												
		Left Eye	5.0	6.5	4.0												
		Right Eye	5.0	6.5	4.0												
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Normal												
		RIGHT ARM 		LEFT ARM 													
		Nothing observed															
Blood Pressure 156/98	Temperature 102 °F	Muscle Tone: <input type="checkbox"/> Near <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: 08/22/14 / 2210	Time DRE was notified: 2235	Evaluation start time: 2330	Evaluation completion time: 0030	<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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant												
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis												

Suspect: **Martinez, Juan**

1. **Location:** The drug influence evaluation was conducted at the Albany County Jail, 420 E Ivinson Street, Laramie, Wyoming. The darkroom examinations were conducted inside a storage room at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Officer Troy Bartel (Laramie PD). Lieutenant Ben Schlosser (Wyoming Highway Patrol) was the scribe.
3. **Breath Test:** A breath test was administered to Martinez with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** I was requested to contact Officer Bartel at the Albany County Jail for a drug influence evaluation. When I arrived, I spoke with Officer Bartel who advised he had observed the subject's vehicle drifting over the center lane divider on Highway 287 and nearly hit a vehicle head-on. After stopping the vehicle, Officer Bartel noticed the suspect appeared dazed and confused. He had a blank stare, was non-responsive at times, and was sweating profusely. The ambient temperature was in the upper 50's. Officer Bartel administered SFSTs to Martinez and noticed he had all six clues of HGN, VGN, and did very poorly on the Walk and Turn and One Leg Stand tests. He missed the tip of his nose on six attempts during the Finger to Nose test. Officer Bartel arrested Martinez and transported him to the Albany County jail for processing and breath testing. When contacted, I was off duty and responded in street clothes.
5. **Initial Observation of Suspect:** I first observed the suspect in the booking area at Albany County Jail. Martinez appeared disoriented and had a fixed, blank stare. He responded very slowly to questions. His speech was slow and slurred. He was flushed and sweaty, and was unsteady on his feet. His breath had a chemical odor, his eyes were normal, pupils were equal, and his eyes tracked together.
6. **Medical Problems/Treatment:** Martinez stated he was not sick, but otherwise did not respond to questions about his health. No physical problems were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Martinez estimated the passage of 30 seconds when 38 seconds actually elapsed. During this test he had a side-to-side sway of approximately 3 inches in each direction.

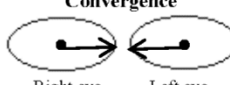
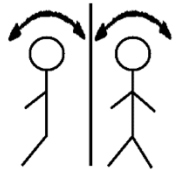
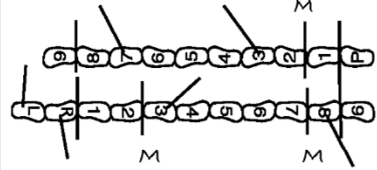
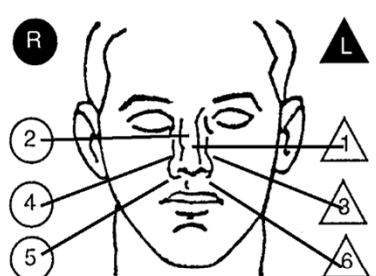
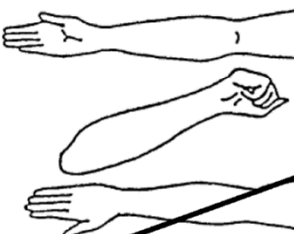
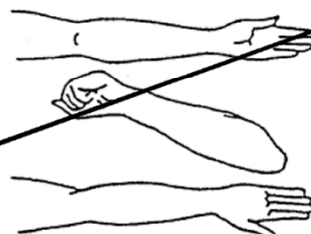
Walk and Turn: During the Walk and Turn test, Martinez lost his balance twice while listening to instructions. During the walking stage he stopped while walking one time during the first nine steps (#7) and two times during the second nine steps (#2, #7), stepped off the line one time in each direction (#8 during first nine steps, #1 on second set of nine steps), and raised his arms for balance two times during the first set of nine steps and three times on the second set. His turn was slow, but correct. He was wearing boots during this test.

One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,008, and 1,010. It appeared he was in danger of falling so the test was stopped at that point. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,001, 1002, and 1,004. For his safety, this test was also terminated early. He was wearing boots during this test.

Finger to Nose: During the Finger to Nose test, Martinez missed the tip of his nose four times (#1, #3, #4, #6). On attempt #1, he touched his right cheekbone approximately one inch from his temple.

8. **Clinical Signs:** Martinez had all six clues of Horizontal Gaze Nystagmus with an angle of onset of approximately 30 degrees. Vertical Gaze Nystagmus was also present. Martinez was not able to converge his eyes. Martinez's pulse was measured three times during the course of the evaluation: 1) at 2340 hours it was 104 beats per minute; 2) at 2356 hours it was 108 beats per minute; and 3) at 0015 hours it was 106 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. His blood pressure was measured at 156/98, which was above the DRE average ranges. His body temperature was measured at 102°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 5.0 and 5.0, near total darkness at 6.5 and 6.5, and in direct light at 4.0 and 4.0. These sizes are within the DRE normal ranges. Rebound dilation was not present. He had a normal reaction to light. His muscle tone was rigid.
9. **Signs of Ingestion:** His nasal area and his oral cavity were both clear. There were no indicators of injection sites.
10. **Statements:** Officer Bartel advised Martinez of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he did not respond.
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Martinez is under the influence of _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a licensed phlebotomist and witnessed by Officer Bartel. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Bartel.
13. **Miscellaneous:** A glass vial with an unknown liquid was located in the subject's vehicle. He claimed he got it from a friend and was unable to identify the contents.

DRUG INFLUENCE EVALUATION

Evaluator Sgt Sam Ketchum		DRE # 16855	Rolling Log # 14-09-112	Evaluator's Agency Idaho State Police	Case # Session XVIII-#2
Recorder/Witness Trooper Chris Glenn Idaho State Police		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Nampa Police Department	
Arrestee's Name (Last, First, Middle) Groves, Robert R.		Date of Birth 8/10/87	Sex M	Race W	Arresting Officer (Name, ID#) Officer Tim Rina #6164
Date Examined / Time / Location 09/15/14 1730 Nampa PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 76550	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: Ofe Rina	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Bacon & eggs When? Noon		What have you been drinking? How much? just lots of coffee 3-4 cups	Time of last drink? N/A
Time now/ Actual 6 pm / 1735	When did you last sleep? Last night	How long? 4-5 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No just a sore back		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 Took a couple pills from a friend			Attitude: Cooperative	Coordination: Poor, wobbly at times	
Speech: Mumbling, 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 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		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pulse and Time	HGN	Left Eye	Right Eye	Convergence	
1. <u>58</u> / <u>1742</u>	Lack of Smooth Pursuit	None	None		
2. <u>56</u> / <u>1758</u>	Maximum Deviation	None	None	Right eye Left eye	
3. <u>56</u> / <u>1815</u>	Angle of Onset	None	None	22/30 One Leg Stand 24/30	
Modified Romberg Balance Approx. 3" 3" Approx. 3" 3"	Walk and Turn Test		Cannot keep balance <input checked="" type="checkbox"/> ✓✓		
			Starts too soon _____		
	Rigid, stiff movements		Stops walking _____		
			Misses heel-toe <input checked="" type="checkbox"/> ✓✓ <input checked="" type="checkbox"/> ✓		
			Steps off line <input checked="" type="checkbox"/> ✓✓ <input checked="" type="checkbox"/> ✓✓		
			Raises arms <input checked="" type="checkbox"/> ✓✓✓ <input checked="" type="checkbox"/> ✓✓		
			Actual steps taken 1st Nine 2nd Nine		
			<input checked="" type="checkbox"/> 9 <input checked="" type="checkbox"/> 9		
Time Estimation 42 estimated as 30 seconds	Describe turn As instructed		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)
		Left Eye	2.0	2.0	2.0
Slow hand and arm movements. Searched for nose		Right Eye	2.0	2.0	2.0
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Little to none
		RIGHT ARM		LEFT ARM	
					
		Nothing detected			
Blood Pressure 118/62	Temperature 97.4 °F	Muscle Tone: <input type="checkbox"/> Near <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Comments:	
What drugs or medications have you been using? "A couple pills from a friend"		How much? "Just a couple"	Time of use? "About 2 pm"	Where were the drugs used? (Location) N/A	
Date / Time of arrest: 09/15/14 / 1640	Time DRE was notified: 1700	Evaluation start time: 1730	Evaluation completion time: 1825	<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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

Suspect: **Groves, Robert**

1. **Location:** The drug influence evaluation was conducted at the Nampa Police Department, 820 2nd Street S, Nampa, Idaho. The darkroom examinations were conducted inside a bathroom at that location. The surface was a level and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Officer Tim Riha (Nampa PD). Trooper Chris Glenn (Idaho State Police) was the scribe.
3. **Breath Test:** A breath test was administered to Groves with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** I was notified to contact Officer Riha of the Nampa Police Department reference to a drug influence evaluation. I was on-duty and responded to his department's detention area. Upon my arrival, Officer Riha advised he had observed the suspect's vehicle drifting over the center line and traveling 15 mph under the posted speed limit on North Midland Boulevard. When stopped, the suspect had slow, slurred speech and had difficulty with divided attention tasks. During the SFSTs, Officer Riha noted the suspect's balance and coordination were poor, and he was unable to complete the SFSTs as directed. He was arrested for DUI and transported to Nampa PD for processing. Following the breath test, Officer requested the assistance of a DRE.
5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at Nampa PD. Groves appeared sleepy, and his head was nodding forward. His speech was slow and slurred. When he stood up, he lost his balance and used the desk to steady himself. His eyes were normal, pupils were equal, he had droopy eyelids, and his eyes tracked together.
6. **Medical Problems/Treatment:** Groves stated he twisted his back about two weeks ago but had not sought medical treatment. He stated he had taken some pills from a friend and they had helped with relieving his back pain. Groves stated he had no other physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Groves estimated the passage of 30 seconds when 42 seconds actually elapsed. During this test he had a forward and backward sway and a side-to-side sway of approximately 3 inches in each direction.

Walk and Turn: During the Walk and Turn test, Groves lost his balance twice while listening to instructions. During the walking stage he missed heel to toe two times during the first set of nine steps (#3, #8) and one time during the second set of nine steps (#2), stepped off the line two times in each direction (##3, #8 during first nine steps, #3, #7 on second set of nine steps), and raised his arms for balance three times during the first set of nine steps and two times on the second set. His turn was as instructed. He was wearing lace-up shoes during this test.

One Leg Stand: The One Leg Stand test was conducted twice - once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,009 and 1,012. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,010 and 1,018. He counted slowly both times, only counting to 1,022 and 1,024 respectively. He was wearing lace-up shoes during this test.

Finger to Nose: During the Finger to Nose test, Groves missed the tip of his nose all six times. His hand movements were slow and it appeared as if he was searching for his nose

8. **Clinical Signs:** Groves had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Groves was able to converge his eyes. Groves' pulse was measured three times during the course of the evaluation: 1) at 1742 hours it was 58 beats per minute; 2) at 1758 hours it was 56 beats per minute; and 3) at 1815 hours it was 56 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 118/62, which was below the DRE average ranges. His body temperature was measured at 97.4°, which is below normal. During the pupil size examinations, his eyes were estimated in room light at 2.0 and 2.0, near total darkness at 2.0 and 2.0 and in direct light at 2.0 and 2.0. These sizes are below the DRE normal ranges. Rebound dilation was not present. He had little to no reaction to light. His muscle tone was flaccid.
9. **Signs of Ingestion:** His nasal area and his oral cavity were both clear. There were no indicators of injection sites.
10. **Statements:** Officer Riha advised Groves of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated he had taken a couple pills from a friend about 2 PM while he was at home. He could not identify the pills he took.
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Groves is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A urine sample was collected from the suspect and I witnessed the collection. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Riha.
13. **Miscellaneous:** None.

DRUG INFLUENCE EVALUATION

Evaluator Deputy Dallas Cotts		DRE # 15690	Rolling Log # 14-07-320	Evaluator's Agency Maricopa County SO	Case # Session XVIII-#3
Recorder/Witness Det Kemp Layton Phoenix PD		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Glendale PD	
Arrestee's Name (Last, First, Middle) Haas, Carlos		Date of Birth 7/13/79	Sex M	Race W	Arresting Officer (Name, ID#) Officer Chip Haas #13073
Date Examined / Time / Location 07/22/14 2110 4th Ave Jail		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #: 13430	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: Ofc Haas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Tacos		When? About 5 pm	What have you been drinking? How much? Time of last drink? Water 2 bottles N/A
Time now/ Actual "10 pm" / 2115	When did you last sleep? Today	How long? "Little bit"	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: Poor, jerky	
Speech: Rapid		Breath odor: Rancid		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 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 None	Right Eye None	Convergence Right eye Left eye	
Modified Romberg Balance Approx. 2" 2" 3" 3" 	Walk and Turn Test M M S 		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken		One Leg Stand 38/30 41/30 L R 1 1 1 1 1 1 Sways while balancing Uses arms to balance Hopping Puts foot down Counted quickly. Body tremors
Time Estimation <u>23</u> estimated as 30 seconds	Describe turn Quick steps		Cannot do test (explain) N/A		Type of footwear: Lace-up boots without laces
Finger to Nose (Draw lines to spots touched) Jerky, fast movements. Used pads of fingers		PUPIL SIZE	Room light (2.5-5.0)	Darkness (5.0-8.5)	Direct (2.0-4.5)
		Left Eye	6.5	9.0	5.5
		Right Eye	6.5	9.0	5.5
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Slow
		RIGHT ARM 		LEFT ARM 	
		Nothing detected			
Blood Pressure 156/98	Temperature 99.8 °F				
Muscle Tone: <input type="checkbox"/> Near <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid					
Comments: What drugs or medications have you been using? "No 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: 07/22/14 / 2025	Time DRE was notified: 2050	Evaluation start time: 2110	Evaluation completion time: 2200	<input type="checkbox"/> Subject refused entire evaluation <input checked="" 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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic
					<input type="checkbox"/> Inhalant <input type="checkbox"/> Cannabis

Suspect: **Hatos, Carlos**

1. **Location:** The drug influence evaluation was conducted at the 4th Avenue Jail, 201 S 4th Ave, Phoenix, Arizona. The darkroom examinations were conducted inside a storage room at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Officer Chip Haas (Glendale PD). Detective Kemp Layton (Phoenix PD) was the scribe.
3. **Breath Test:** A breath test was administered to Hatos with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** I was notified to meet Officer Haas of the Glendale Police Department reference to a drug influence evaluation. I was on-duty and responded to his location at the 4th Avenue Jail. Upon my arrival, Officer Haas advised he had observed the suspect's vehicle driving at a high rate of speed on Indian School Road. When he stopped the suspect, the suspect appeared nervous, was very talkative, and could not stand still. Officer Haas also noticed Hatos' pupils were dilated. Suspecting impairment, Officer Haas administered SFSTs to Hatos. The suspect performed poorly on SFSTs and was subsequently arrested for DUI.
5. **Initial Observation of Suspect:** I first observed the suspect in the booking area at the 4th Avenue Jail. Hatos appeared flushed and sweaty, and he was very talkative. When he was standing, he repeatedly shifted his weight from foot to foot. He was making abrupt, quick hand movements, and he appeared very animated and restless. When he was not speaking, I noticed he was grinding his teeth. His pupils appeared dilated in the lighted jail room. His eyes were normal, pupils were equal, and his eyes tracked together.
6. **Medical Problems/Treatment:** Hatos stated he had no physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Hatos estimated the passage of 30 seconds when 23 seconds actually elapsed. During this test he had a forward and backward sway of approximately 2 inches in each direction, and a side-to-side sway of approximately 3 inches in each direction.

Walk and Turn: During the Walk and Turn test, Hatos lost his balance once while listening to instructions. During the walking stage he stopped while walking one time in each direction (#8 on first set of nine steps, #4 for second set of nine steps), missed heel to toe two times during the first set of nine steps (#3, #8) and two times during the second set of nine steps (#6, #7), and raised his arms for balance two times in each direction. His turn used quick steps. He was wearing lace-up boots without laces during this test.

One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,014. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,017. He counted quickly both times, counting to 1,038 and 1,041 respectively. During both attempts he had obvious body tremors. He was wearing lace-up boots without laces during this test.

Finger to Nose: During the Finger to Nose test, Hatos missed the tip of his nose five times (#1, #2, #3, #4, #6). His hand movements were jerky fast movements. He used the pad of his fingers on the five misses as well.

8. **Clinical Signs:** Hatos had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Hatos was able to converge his eyes. Hatos' pulse was measured three times during the course of the evaluation: 1) at 2122 hours it was 108 beats per minute; 2) at 2135 hours it was 106 beats per minute; and 3) at 2150 hours it was 106 beats per minute. These readings are above the DRE average range of 60-90 beats per minute. His blood pressure was measured at 156/98, which was above the DRE average ranges. His body temperature was measured at 99.8°, which is above normal. During the pupil size examinations, his eyes were estimated in room light at 6.5 and 6.5, near total darkness at 9.0 and 9.0 and in direct light at 5.5 and 5.5. Because of his dark eyes, an ultraviolet light was also used for the near total darkness estimate. These sizes are above the DRE normal ranges. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was rigid.
9. **Signs of Ingestion:** His nasal area showed redness in both nostrils. His oral cavity was clear. There were no indicators of injection sites.
10. **Statements:** Officer Haas advised Hatos of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated "I'm clean" and he had stopped using drugs.
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Hatos is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a trained phlebotomist at 2300 hours and witnessed by Officer Haas. The sample was sealed with evidence tape and submitted into evidence for laboratory testing by Officer Haas.
13. **Miscellaneous:** None.

DRUG INFLUENCE EVALUATION

Evaluator <i>Officer Virgil Miller</i>		DRE # <i>10828</i>	Rolling Log # <i>14-07-035</i>	Evaluator's Agency <i>Wichita PD</i>	Case # <i>Session XVIII-#4</i>
Recorder/Witness <i>Det Karina Brassler Sedgwick CO SO</i>		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency <i>Kansas Highway Patrol</i>	
Arrestee's Name (Last, First, Middle) <i>Jackson, Scott M.</i>		Date of Birth <i>6/15/78</i>	Sex <i>M</i>	Race <i>W</i>	Arresting Officer (Name, ID#) <i>Trooper Mark Crump #7949</i>
Date Examined / Time / Location <i>07/18/14 2020 Sedgwick CO jail</i>		Breath Test: Results: <i>0.00</i>	Test Refused <input type="checkbox"/> Instrument #: <i>13240</i>	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: <i>Tpr Crump</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? <i>Ham Sandwich</i>	When? <i>Noon</i>	What have you been drinking? How much? <i>Coffee 2 cups</i>	Time of last drink? <i>N/A</i>
Time now/ Actual <i>"10 pm" / 2025</i>	When did you last sleep? <i>Last night</i>	How long? <i>7 hours</i>	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: <i>Cooperative, passive</i>		Coordination: <i>Poor, unsteady</i>	
Speech: <i>Slow, thick</i>		Breath odor: <i>Normal</i>		Face: <i>Pale, droopy</i>	
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 and Time	HGN	Left Eye	Right Eye	Convergence	38/30 One Leg Stand 41/30
1. <i>54 / 2032</i>	Lack of Smooth Pursuit	<i>None</i>	<i>None</i>	 Right eye Left eye	 L R
2. <i>54 / 2040</i>	Maximum Deviation	<i>None</i>	<i>None</i>		
3. <i>52 / 2055</i>	Angle of Onset	<i>None</i>	<i>None</i>		
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 9 9		
Time Estimation <i>42 estimated as 30 seconds</i>	Describe turn <i>Walking turn. used both feet</i>		Cannot do test (explain) <i>N/A</i>		Type of footwear: <i>Lace-up shoes</i>
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)
 <i>Slow movements. searched for tip of nose</i>		Left Eye	3.0	4.0	2.5
		Right Eye	3.0	4.0	2.5
		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: <i>Little to none</i>
		RIGHT ARM		LEFT ARM	
				<i>Two fresh injection marks</i>	
Blood Pressure <i>122/68</i>	Temperature <i>98.0 °F</i>	Muscle Tone: <input type="checkbox"/> Near <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid			
Comments: What drugs or medications have you been using? <i>"I didn't use anything."</i>		How much? <i>N/A</i>	Time of use? <i>N/A</i>	Where were the drugs used? (Location) <i>N/A</i>	
Date / Time of arrest: <i>07/18/14 / 1915</i>	Time DRE was notified: <i>1948</i>	Evaluation start time: <i>2020</i>	Evaluation completion time: <i>2105</i>	<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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

Suspect: **Jackson, Scott**

1. **Location:** The drug influence evaluation was conducted at the Sedgwick County Jail, 141 West Elm Street, Wichita, Kansas. The darkroom examinations were conducted inside a storage room at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Trooper Mark Crump (Kansas Highway Patrol). Detective Karrina Brassler (Sedgwick County Sheriff's Office) was the scribe.
3. **Breath Test:** A breath test was administered to Jackson with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** I was notified to contact Trooper Crump of the Kansas Highway Patrol at the Sedgwick County Jail reference to a drug influence evaluation. I was on-duty and responded to his location. Upon my arrival, Trooper Crump advised he had observed the suspect's vehicle driving under the posted speed and drifting in and out of his lane. When he attempted to stop the suspect, the driver continued for over a mile before stopping. When he finally made contact with the driver, his speech was thick and slow. The driver had poor coordination, was unable to complete the SFSTs as directed, and was subsequently arrested and transported to the Sedgwick County Jail. When the breath test revealed no alcohol causing the impairment, Trooper Crump summoned a DRE for further investigation.
5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at the jail. Jackson appeared pale and his face was droopy, he was cooperative, and had slow, thick speech. When walking to the evaluation room, I noticed his coordination was poor and he was unsteady on his feet. He almost fell several times while walking. His eyes were normal, pupils were equal and slightly constricted, and his eyes tracked together.
6. **Medical Problems/Treatment:** Jackson stated he had no physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Jackson estimated the passage of 30 seconds when 42 seconds actually elapsed. During this test he exhibited a 3 inch in every direction.

Walk and Turn: During the Walk and Turn test, Jackson lost his balance once while listening to instructions. During the walking stage he stopped while walking one time in each direction (#7 on first set of nine steps, #1 for second set of nine steps), missed heel to toe four times during the first set of nine steps (#2, #3, #4, #5) and two times during the second set of nine steps (#4, #6), stepped off the line two times during the first set of nine steps (#1, #8), and one time during the second set of nine steps (#5), and raised his arms for balance two times in the first set of nine steps and three times during the second set of nine steps. He turned by using both feet in a walking turn. He was wearing lace-up shoes during this test.

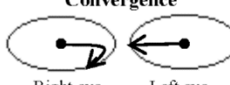
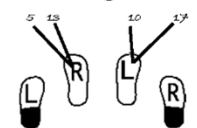
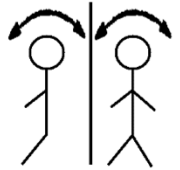
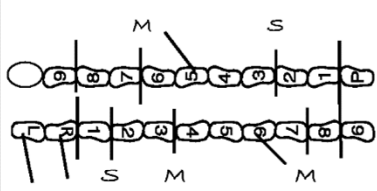
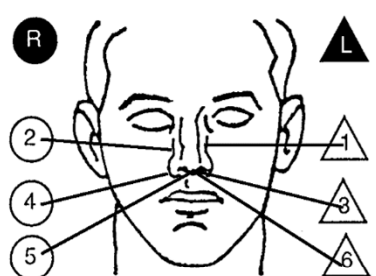
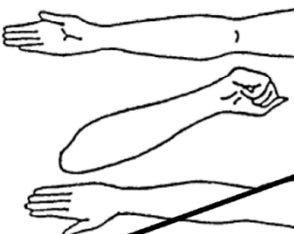
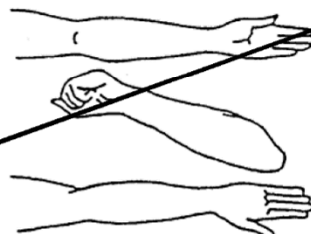
One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,004, 1,006, and 1,007. Jackson appeared to be in danger of

One Leg Stand: The One Leg Stand test was conducted twice - once standing on the left foot and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, and put his foot down at 1,004, 1,006, and 1,007. Jackson appeared to be in danger of falling and this test was terminated early for his safety. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,002, 1,003, and 1,005. Again, this test was terminated early for Jackson's safety. He was wearing lace-up shoes during this test.

Finger to Nose: During the Finger to Nose test, Jackson missed the tip of his nose five times (#1, #2, #4, #5, #6). His movements were slow and he appeared to search for the tip of his nose.

8. **Clinical Signs:** Jackson had neither Horizontal Gaze Nystagmus nor Vertical Gaze Nystagmus. Jackson was able to converge his eyes. Jackson's pulse was measured three times during the course of the evaluation: 1) at 2032 hours it was 54 beats per minute; 2) at 2040 hours it was 54 beats per minute; and 3) at 2055 hours it was 52 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 122/68, which was below the DRE average ranges. His body temperature was measured at 98.0°, which is below normal. During the pupil size examinations, his eyes were estimated in room light at 3.0 and 3.0, near total darkness at 4.0 and 4.0 and in direct light at 2.5 and 2.5. The near total darkness sizes are below the DRE normal ranges, and the other two lighting conditions were at the lower end of the DRE normal ranges. Rebound dilation was not present. He had little to no reaction to light. His muscle tone was flaccid.
9. **Signs of Ingestion:** His nasal area and oral cavity were clear. There were two fresh injection marks on the left medial forearm.
10. **Statements:** Trooper Crump advised Jackson of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated "I didn't use anything."
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Jackson is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a trained phlebotomist and witnessed by Trooper Crump. The sample was sealed with evidence tape and submitted into evidence by Trooper Crump for laboratory testing.
13. **Miscellaneous:** None.

DRUG INFLUENCE EVALUATION

Evaluator Sgt Paul Kotter		DRE # 10262	Rolling Log # 14-11-120	Evaluator's Agency Utah Highway Patrol	Case # Session XVIII-#5																
Recorder/Witness Trooper Jason Marshall Utah HP		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Utah Highway Patrol																	
Arrestee's Name (Last, First, Middle) Stevens, William A.		Date of Birth 4/14/85	Sex M	Race W	Arresting Officer (Name, ID#) Trooper Janet Miller #15746																
Date Examined / Time / Location 11/17/14 19100 County Intake		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 55665	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: Tpr Miller	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Ham sandwich	When? Noon	What have you been drinking? How much? "just some water" N/A	Time of last drink? N/A																
Time now/ Actual 6:30 pm/ 1915	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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No Dr. Frank for anxiety issues																		
Are you taking any medication or drugs? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No "Some kind of anxiety pills"		Attitude: Cooperative		Coordination: Poor, unsteady																	
Speech: Slurred, thick		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																	
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>58</u> / <u>1923</u> 2. <u>58</u> / <u>1935</u> 3. <u>56</u> / <u>1945</u>	HGN Lack of Smooth Pursuit Present Maximum Deviation Present Angle of Onset 30	Left Eye Present	Right Eye Present	Convergence  Right eye Left eye	24/30 One Leg Stand 26/30 																
Modified Romberg Balance Approx. 2" 2" 3" 3" 	Walk and Turn Test  Slow movements	Cannot keep balance <input checked="" type="checkbox"/> Starts too soon _____ Stops walking <input checked="" type="checkbox"/> Misses heel-toe <input checked="" type="checkbox"/> Steps off line <input checked="" type="checkbox"/> Raises arms <input checked="" type="checkbox"/> Actual steps taken 9		1 st Nine 2 nd 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>	<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"/>	<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>2</td><td>2</td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down Counted slowly	L	R	1	1	1	1	2	2
<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"/>																				
L	R																				
1	1																				
1	1																				
2	2																				
Time Estimation 38 estimated as 30 seconds	Describe turn Lost balance to the right	Cannot do test (explain) N/A		Type of footwear: Dress shoes																	
Finger to Nose (Draw lines to spots touched)  Slow hand and arm movements		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 Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Slow																
		RIGHT ARM 		LEFT ARM 																	
		Nothing observed																			
Blood Pressure 120/66	Temperature 99.3 °F	Muscle Tone: <input type="checkbox"/> Near <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid																			
Comments: What drugs or medications have you been using? "Some medicine for anxiety. I have a prescription."		How much? "Just a couple"	Time of use? About 5 pm	Where were the drugs used? (Location) Home																	
Date / Time of arrest: 11/17/14 / 1845	Time DRE was notified: 1910	Evaluation start time: 2005	Evaluation completion time: 0030	<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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant																
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																

Suspect: **Stevens, Scott**

1. **Location:** The drug influence evaluation was conducted at the Salt Lake County Metro Jail, 3415 S 900 W, Salt Lake City, Utah. The darkroom examinations were conducted inside a bathroom at that location. The surface was a level tile floor and free of obstructions. There was adequate lighting at this location.
2. **Witnesses:** The evaluator was Trooper Janet Miller (Utah Highway Patrol). Trooper Jason Marshall (Utah Highway Patrol) was the scribe.
3. **Breath Test:** A breath test was administered to Stevens with an approved evidential breath-testing device with the results of .000.
4. **Notification/Interview:** I was notified to contact Trooper Miller of the Kansas Highway Patrol at the Sedgwick County Metro Jail reference to a drug influence evaluation. I was on-duty and responded to his location. Upon my arrival, Trooper Miller advised she had observed the suspect's vehicle stopped partially in a travel lane on Highway 48. The suspect was sitting in the driver's seat and had a drunk-like appearance. His speech was thick, slurred, and slow. She requested he perform SFSTs and he complied. He had six clues of HGN and VGN, but she was unable to detect the odor of an alcoholic beverage. Stevens had great difficulty performing the SFSTs and was arrested for DUI.
5. **Initial Observation of Suspect:** I first observed the suspect in the interview room at the jail. Stevens had a normal appearance, he was cooperative, and had slurred, thick speech. His coordination was poor and unsteady. His eyes were normal, pupils were equal, and his eyes tracked together.
6. **Medical Problems/Treatment:** Stevens stated he was seeing Doctor Frank for anxiety-related issues. Stevens stated had no other physical problems and none were observed.
7. **Psychophysical Tests:**

Modified Romberg Balance: During the Modified Romberg balance test, Stevens estimated the passage of 30 seconds when 38 seconds actually elapsed. During this test he exhibited a 2 inch in a circular motion.

Walk and Turn: During the Walk and Turn test, Stevens lost his balance twice while listening to instructions. During the walking stage he stopped while walking one time in each direction (#1 on first set of nine steps, #1 for second set of nine steps), missed heel to toe two times during the first set of nine steps (#4, #8) and one time during the second set of nine steps (#7), stepped off the line one time in each direction (#6 on the first set of nine steps, #5 on the second set of nine steps), raised his arms for balance three times in the first set of nine steps and two times during the second set of nine steps, and took an extra step on the second set of steps. While turning, he lost his balance to the right. He was wearing dress shoes during this test.

One Leg Stand: The One Leg Stand test was conducted twice – once standing on the left foot, and once standing on the right. During the first test, he swayed while balancing, used his arms for balance, hopped once, and put his foot down at 1,005 , and 1,013. During the second test, he again swayed while balancing, used his arms for balance, and put his foot down at 1,010, and 1,017. He counted slowly both times, only reach 1,024 during the first test and 1,026 during the second test. He was wearing dress shoes during this test.

Finger to Nose: During the Finger to Nose test, Stevens missed the tip of his nose three times (#1, #2, #4). He had slow hand and arm movements during this test.

8. **Clinical Signs:** Stevens had all clues of Horizontal Gaze Nystagmus with an angle of onset of approximately 30 degrees. Stevens also had Vertical Gaze Nystagmus. Stevens was not able to converge his eyes. Stevens' pulse was measured three times during the course of the evaluation: 1) at 1923 hours it was 58 beats per minute; 2) at 1935 hours it was 58 beats per minute; and 3) at 1945 hours it was 56 beats per minute. These readings are below the DRE average range of 60-90 beats per minute. His blood pressure was measured at 120/66, which was below the DRE average range for the diastolic reading, and at the lower end of normal for the systolic reading. His body temperature was measured at 99.3°, which was normal. During the pupil size examinations, his eyes were estimated in room light at 4.5 and 4.5, near total darkness at 6.5 and 6.5 and in direct light at 4.0 and 4.0. These sizes are within the DRE normal ranges. Rebound dilation was not present. He had a slow reaction to light. His muscle tone was flaccid.
9. **Signs of Ingestion:** His nasal area and oral cavity were clear. There were no indicators of injection sites.
10. **Statements:** Trooper Miller advised Stevens of his constitutional rights and he agreed to answer questions. When asked what drug he had taken, he stated he had taken "some medicine for anxiety," but insisted he was legal to drive because he had a prescription from his doctor to use the drug. He stated he had taken "just a couple" pills at home around 5 pm. He could not recall the name of the drug he took.
11. **Opinion of Evaluator:** I am a certified DRE. It is my opinion Subject Stevens is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A blood sample was collected from the suspect by a trained phlebotomist and witnessed by Trooper Miller. The sample was sealed with evidence tape and submitted into evidence by Trooper Miller for laboratory testing.
13. **Miscellaneous:** None.

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Session 19 Inhalants



Learning Objectives

- **Explain brief history of Inhalants**
- **Identify common drug names and terms**
- **Identify common methods of administration**

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of the Inhalant category of drugs
- Identify common drug names and terms associated with this category
- Identify common methods of administration for this category

Learning Objectives

- Describe symptoms, observable signs, and other effects
- Describe typical time parameters
- List indicators likely to emerge during a drug influence evaluation

- 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 clues likely to emerge when the drug influence evaluation is conducted for a person under the influence of this drug category

CONTENT SEGMENTS

- A. Overview of the Category
- B. Possible Effects
- C. Onset and Duration of Effects
- D. Overdose Signs and Symptoms
- E. Expected Results of the Evaluation
- F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations

Reading Assignments

Video Presentations

Slide Presentations

Review of the Drug Evaluation and Classification (DEC) Program Exemplars

Session 19 - Inhalants

Inhalants - Overview

Drug Recognition Expert Course 19-4

A. Overview of the Category

Inhalants are breathable chemicals that produce mind-altering results.

Inhalants are sometimes called “Deliriant,” in that they may produce delirium. Delirium is usually a brief state characterized by incoherent excitement, confused speech, restlessness, and possible hallucinations.

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.

Subcategories of Inhalants

- Volatile solvents
- Aerosols
- Anesthetic gases



There are three major subcategories of Inhalants:

- Volatile Solvents
- Aerosols
- Anesthetic Gases

“Volatile” Solvents

The Volatile Solvents include a large number of readily available substances, none of which are intended by their manufacturers to be used as drugs.

“Volatile” means they evaporate easily to produce fumes.

One widely abused Volatile Solvent is plastic cement, or “model airplane glue.”

Plastic cement includes the following volatile chemicals:

- Toluene
- Acetone
- Naphtha
- Aliphatic Acetates (straight-chained hydrocarbons)
- Hexane
- Cyclohexane
- Benzene

Volatile Solvents

- **Fingernail polish remover**
- **Household cements and glue**
- **Lighter fluid**
- **Petroleum products**



Other frequently-abused Volatile Solvents include:

- Fingernail polish remover (contains Acetone)
- Household cements and glues (rubber cements contain Benzene)
- Lighter fluid (contains Naphtha)

Petroleum products:

- Various glues (model airplane glue)
- Gasoline
- Kerosene

Volatile Solvents

- Dry cleaning fluids
- Paints (particularly oil or solvent based)
- Paint thinners
- Spray paints
- Liquid correction fluid
- Engine degreasers



- Dry cleaning fluids
- Paints (particularly oil or solvent based)
- Paint thinners
- Spray paints
- Liquid correction fluid
- Engine degreasers

Abused Aerosols

- Hair sprays
- Deodorants
- Insecticides
- Glass chillers (freeze spray)
- Vegetable frying pan lubricants



Aerosols

Aerosols are chemicals discharged from a pressurized container by the propellant force of a compressed gas.

Commonly-abused Aerosols include hair sprays, deodorants, insecticides, glass chillers (freeze spray), and vegetable frying pan lubricants.

All of these abused Aerosols contain various hydrocarbon gases that produce drug effects.

Typical Abusers of Inhalants



The overwhelming majority of abusers of Volatile Solvents and Aerosols are pre-teens and teenagers.

Some reasons:

- These substances appear in nearly every household
- They are inexpensive and readily accessible

Session 19 - Inhalants

Anesthetic Gases

- Ether
- Nitrous Oxide

Drug Recognition Expert Course 19-10

Anesthetic Gases

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:

- Ether
- 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.

Session 19 - Inhalants

Anesthetic Gases

- Amyl Nitrite
- Butyl Nitrite (Isobutyl Nitrite)

Drug Recognition Expert Course 19-11

Other common Inhalants in this subcategory are:

- Amyl Nitrite
- Butyl Nitrite (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.

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

Ingesting Inhalants



Inhalants obviously are ingested by breathing, or inhaling the fumes.

- Some are ingested 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.

Session 19 - Inhalants

Possible Effects of Inhalants

- Altered shapes and colors
- Antagonistic behavior
- Bizarre thoughts
- Distorted perceptions of time and distance
- Dizziness and numbness
- Drowsiness and weakness

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B. Possible Effects

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:

- Altered shapes and colors
- Antagonistic behavior
- Bizarre thoughts
- Distorted perceptions of time and distance
- Dizziness and numbness
- Drowsiness and weakness

Session 19 - Inhalants

Possible Effects of Inhalants

- Floating sensations
- Inebriation similar to alcohol intoxication
- Intense headaches
- Light headedness
- Possible nausea and excessive salivation
- Possible hallucinations

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- Floating sensations
- Inebriation similar to alcohol intoxication
- Intense headaches
- Light headedness
- Possible nausea and excessive salivation
- Possible hallucinations

Persons under the influence of Inhalants generally will appear confused and disoriented and their speech will be slurred.

Session 19 - Inhalants

Inhalants

Onset and Duration of Effects

- **Effects felt immediately**
- **Nitrous Oxide ≤ 5 minutes**
- **Amyl Nitrite and Isobutyl Nitrite – few seconds to 20 minutes**
- **Glue, paint, gasoline – several or more hours**

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C. Onset and Duration of Effects

Inhalants’ effects are felt virtually immediately.

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

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.

Glue, paint, gasoline, and other commonly-abused Inhalants produce effects that last several or more hours. (Generally 6 – 8 hours for most Volatile Solvents depending on exposure).

Inhalants

Overdose Signs and Symptoms

- Risk of death
- SSD
- Respiration ceases
- Severe nausea and vomiting
- Long term abuse:
 - Permanent damage to central nervous system
 - Reduced mental and physical abilities

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” (SSD) has been used to describe death resulting from physical exertion and the breathing of Inhalants in an enclosed, poorly-ventilated space.

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 severe nausea and vomiting. 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 permanent damage to the central nervous system 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.

Expected Results of Evaluation

Significant variation in effects from one substance to another



E. Expected Results of the Evaluation

With Inhalants, there is significant variation in effects from one substance to another.

Session 19 - Inhalants

Evaluation of Subjects Under the Influence of Inhalants

- HGN – Present
- VGN – Present (High dose)
- LOC – Present
- Psychophysical Impairment – Present

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Observable Evidence of Impairment

Eye Exam

- Horizontal Gaze Nystagmus (HGN) will generally be present
- Vertical Gaze Nystagmus (VGN) may be present
- 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.

Evaluation of Subjects Under the Influence of Inhalants

Vital Signs:

- **Pulse – Up**
- **Blood Pressure – Up or Down⁽⁵⁾**
- **Body temperature – Up, Down or Normal**

Muscle tone – Flaccid or Normal

⁽⁵⁾ Down with anesthetic gases, Up with volatile solvents and aerosols

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.

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 average range.

Evaluation of Subjects Under the Influence of Inhalants

Dark Room:

- Pupil size - Normal⁽⁴⁾ (DRE average ranges)
- Pupil reaction to light – Slow

(4) Normal, but may be dilated

Dark Room

Pupil size will be normal (DRE Average Ranges) 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.

Session 19 - Inhalants

Evaluation of Subjects Under the Influence of Inhalants

General Indicators:

- **Bloodshot, watery eyes**
- **Confusion**
- **Disoriented**
- **Flushed face, possibly sweating**
- **Intense headaches**

A photograph of a man with a distressed expression, covering his face with his hand, illustrating the effects of inhalant use.

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General Indicators

- Bloodshot, watery eyes
- Confusion
- Disoriented
- Flushed face, possibly sweating
- Intense headaches

Evaluation of Subjects Under the Influence of Inhalants

General Indicators

- Lack of muscle control
- Non-communicative
- Odor of the inhaled substance
- Possible nausea
- Possible traces of the substance
- Slow, thick, slurred speech



General Indicators

- Lack of muscle control
- Non-communicative
- Normal or Flaccid muscle tone
- 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

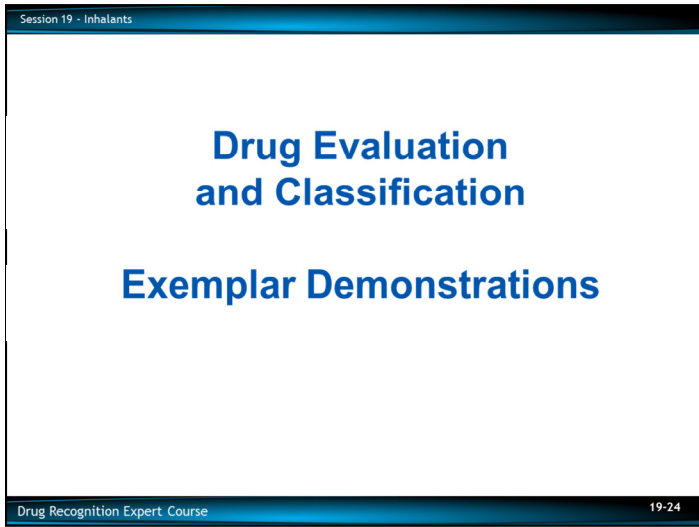
Speech usually clears up quickly when substance is no longer being inhaled.

Inhalants Symptomatology Chart

HGN	Present
VGN	Present (High dose for that individual)
LOC	Present
Pupil Size	Normal ⁽⁴⁾
Reaction to Light	Slow
Pulse Rate	Up
Blood Pressure	Up or Down ⁽⁵⁾
Temperature	Up, Down or Normal
Muscle Tone	Normal or Flaccid

⁽⁴⁾ Normal but may be dilated

⁽⁵⁾ Down with anesthetic gases –
Up with volatile solvents and aerosols



F. Classification Exemplars

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

Inhalants



Frank
Inhalant

Session 19 - Inhalants

QUESTIONS?

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Test Your Knowledge

1. What are the three major subcategories of Inhalants?
2. What are some of the principal active ingredients in many Volatile Substances?
3. In what important respect do the effects of Anesthetic Gases differ from the effects of Volatile Solvents and Aerosols?

Test Your Knowledge

1. What are the three major subcategories of Inhalants?

2. What are some of the principal active ingredients in many Volatile Substances?

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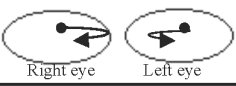
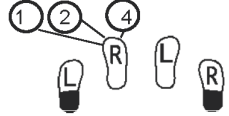
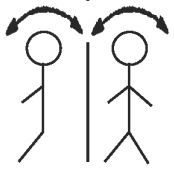
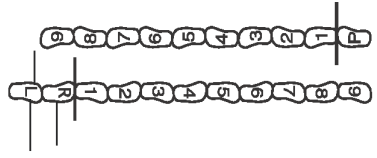
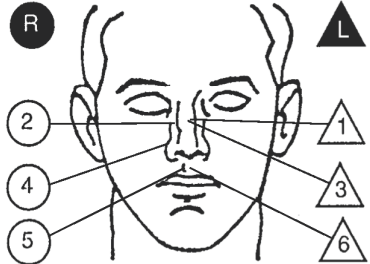
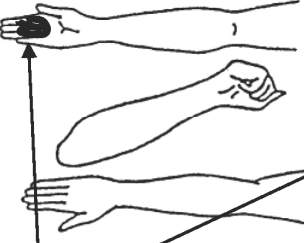
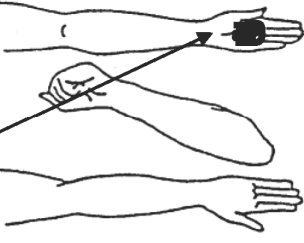
Test Your Knowledge

- 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.

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.

DRUG INFLUENCE EVALUATION

Evaluator Sergeant Charlie Files		DRE # 17809	Rolling Log # 17-09-79	Evaluator's Agency Las Lunas Police Department	Case # 17-3147 (Session XIX - 1)
Recorder/Witness Officer Robert Liccione, Albuquerque PD		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Los Lunas Police Department	
Arrestee's Name (Last, First, Middle) Whippets, Walter L.		Date of Birth 6/08/1996	Sex M	Race W	Arresting Officer (Name, ID#) Officer Ryan Gray #23480
Date Examined / Time / Location 9/04/2017 / 2205 / Las Lunas PD		Breath Test: Results: 0.000		Test Refused <input type="checkbox"/> Instrument #: 32344	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: Officer Gray	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Couple hot dogs"		When? 4 pm	What have you been drinking? How much? Dr. Pepper 2-3
Time now/ Actual About 11pm / 2210	When did you last sleep? This morning	How long? 4-5 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 "What's that?"		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		Coordination: Poor, Unsteady
Speech: Slurred		Breath odor: Rancid		Face: Flushed, Gold paint on chin	
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 checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy
Pulse and Time 1. <u>104</u> / <u>2215</u> 2. <u>100</u> / <u>2226</u> 3. <u>96</u> / <u>2240</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye Present Present 30	Right Eye Present Present 30	Convergence  Right eye Left eye	4/30 One Leg Stand /30  L R All <input type="checkbox"/> All <input type="checkbox"/> 1 <input type="checkbox"/> 3 <input type="checkbox"/> Sways while balancing Uses arms to balance Hopping Puts foot down Nearly fell numerous times. Tests stopped.
Modified Romberg Balance Approx. Approx.  Tests stopped for safety.	Walk and Turn Test  Fell off line three times. Test was stopped for safety reasons.		Cannot keep balance ✓✓✓ Starts too soon Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		
Time Estimation N/A estimated as 30 seconds	Describe turn N/A		Cannot do test (explain) Unable to stand heel-to-toe.		Type of footwear: Skate shoes
Finger to Nose (Draw lines to spots touched)  Seated during test for safety reasons.		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)
		Left Eye	4.0	7.0	3.5
		Right Eye	4.0	7.0	3.5
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Slow
		RIGHT ARM 		LEFT ARM 	
Blood Pressure 158 / 92		Temperature 98.6 °F			
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Gold paint on hands.			
Comments: What drugs or medications have you been using? "I did a little Gold, but nothing else."		How much? "About two cans"		Time of use? Prior to stop	Where were the drugs used? (Location) "In the park in my car."
Date / Time of arrest: 9/04/2017 / 2135	Time DRE was notified: 2145	Evaluation start time: 2205	Evaluation completion time: 2255	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: <i>Charles Files</i>		Reviewed/approved by / date:			DRE # 17809
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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic
				<input checked="" type="checkbox"/> Inhalant	<input type="checkbox"/> Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Whippets, Walter

1. **Location:** The evaluation was conducted in the Booking Room at the Las Lunas Police Department. The Booking Room is well illuminated and has a concrete floor with no obstructions. The darkroom examinations were conducted in an adjacent interview room.
2. **Witnesses:** Officer Robert Liccione of the Las Lunas Police Department observed and recorded the evaluation.
3. **Breath Alcohol Test:** The arresting officer, Officer Ryan Gray administered a breath test to the suspect prior to my arrival obtaining a result of 0.00%.
4. **Notification and Interview of the Arresting Officer:** I was on duty and requested to contact Officer Gray at the Las Lunas PD for a drug evaluation. Upon my arrival, Officer Gray advised he had observed the suspect's vehicle driving without headlights and traveling 15 mph under the posted speed on Main Street near I-25. Officer Gray advised that during personal contact, the suspect did not have an odor of an alcoholic beverage on his breath, but he observed that the suspect had gold paint on his chin and hands. He also observed that the suspect's speech was slurred and he appeared to be very confused. When asked where he was, the suspect thought he was in Albuquerque. Officer Gray had the suspect exit his vehicle and noticed that he had poor balance and coordination. After confirming that he had no medical conditions, injuries, or physical defects, he requested that the suspect perform SFSTs. Officer Gray conducted 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 on HGN, and Vertical Gaze Nystagmus (VGN) was also present. Officer Gray requested the suspect to count backwards from 79 to 59 and the suspect was not able to count correctly. Officer Gray arrested the suspect for DWI, administered Miranda warnings, and transported him to the Los Lunas PD for processing. After obtaining a .00 BAC, he requested the assistance of a DRE.
5. **Initial Observation of the Suspect:** I first observed the suspect in the Booking Room at the Las Lunas PD. His speech was slurred and he was mumbling his words. He was exhibiting poor balance while standing and several times used the wall to steady himself. I noted that he was wearing black cargo shorts, a gray sweatshirt, and soiled athletic shoes. I also noted that he had gold paint smears on his hands and had gold paint marks on his shirt sleeve. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to do. I confirmed that he had been informed of his Miranda warnings and asked if he had any physical injuries or defects, and he indicated that he did not. He advised that he was not under the care of a doctor or dentist. He told me that he had eaten a couple of hot dogs around 4 pm and had drunk 2-3 Dr. Peppers earlier. When asked if he was taking any medication or drugs, he indicated he was not, but when asked if he took insulin, he responded "What's that?" The suspect advised that he was not blind in either eye and did not wear corrective lenses. When I asked him when he last slept, he stated, "This morning." When asked for how many hours he indicated "about 4-5 hours." During my initial contact with the suspect, his coordination remained poor, slow, and he was unstable on his feet. He also complained several times of having a headache.
6. **Medical Problems and Treatment:** The suspect was asked about any injuries or physical conditions and he indicated that he had none. Other than his comments about a headache, none were reported 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. Prior to attempting each test, the suspect advised that he understood them. The following tests were administered to the suspect:

Modified Romberg Balance: The suspect attempted the test but nearly fell several times, and the test was stopped for safety reasons.

Walk & Turn: During this test, the suspect started out in the instructional position. However, while in the instructions stage, he lost his balance three times and the test was stopped for safety reasons.

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 1,001, 1,002, and 1,004 to maintain his balance. He also swayed and used his arms to balance. When he started hopping at count 1,004 and lost his balance, 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 reasons.


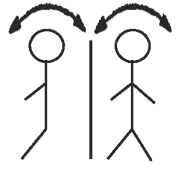
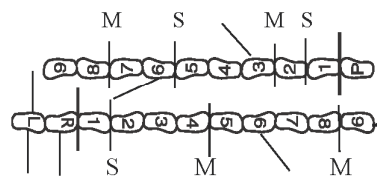
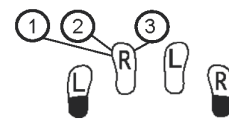
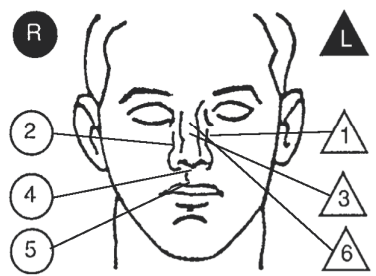
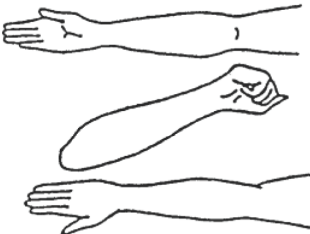
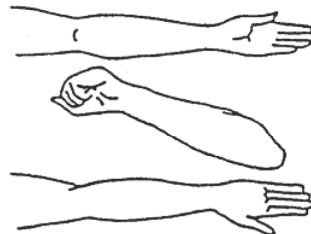
Finger to Nose: For safety reasons, the suspect was allowed to do this test while seated. During this test, the suspect was not able to touch the tip of his nose with tip of his index finger as instructed on all six attempts.

8. Clinical Indicators of Impairment:

Eye Signs: All six clues of HGN were observed with an estimated angle of onset of 30 degrees. VGN and a Lack of Convergence were also present. 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 both eyes in Near Total Darkness, and 3.5 mm in both eyes in Direct Light. The suspect's pupil reaction to light was slow. His eyes were red and bloodshot. Rebound dilation was not observed.

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. The suspect's blood pressure of 158/92 was also above the DRE average ranges. The suspect's body temperature of 98.6 degrees Fahrenheit was within the DRE average. The suspect's muscle tone was flaccid.

- 9. Signs of Ingestion:** The suspect had a paint-like odor on his breath. Gold paint residue was located on the palms of both his hands 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 huffed some Gold in the park." The suspect freely provided detailed information about his use of various inhalants and indicated that he has been using them for years.
- 11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Whippets is under the influence of an Inhalant and is unable to operate a vehicle safely.
- 12. Toxicological Sample:** The suspect provided a urine sample which was submitted into evidence pending analysis by the State Crime Laboratory.
- 13. Miscellaneous:** Due to the suspect's poor balance and nearly falling numerous times, he was released to a family member and not lodged.

Evaluator Sgt. Robert Arman		DRE # 11603	Rolling Log # 17-06-023	Evaluator's Agency North Dakota HP	Case # 17-8895 (Session XIX - 2)
Recorder/Witness Sgt. Travis Skar North Dakota HP		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Fargo Police Department	
Arrestee's Name (Last, First, Middle) Poppers, Jack B.		Date of Birth 9/01/1999	Sex M	Race NA	Arresting Officer (Name, ID#) Officer Troy Neilson #11594
Date Examined / Time / Location 6/24/2017 / 0130 / Fargo Police Dept.		Breath Test: Results: 0.000	Test Refused <input type="checkbox"/> Instrument #: 78785	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: Officer Neilson	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Fried Chicken Dinner	When? 6 pm	What have you been drinking? How much? Water 2 bottles	Time of last drink? N/A
Time now/ Actual Midnight / 0135	When did you last sleep? Yesterday afternoon	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: Cooperative		Coordination: Poor, Staggering	
Speech: Slow, Slurred		Breath odor: Chemical-like		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 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 and Time 1. 98 / 0143 2. 96 / 0155 3. 92 / 0210	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	
Modified Romberg Balance Approx. 4" 4" 4" 4" 		Walk and Turn Test 		One Leg Stand N/A  L R 3 3 3 Sways while balancing Uses arms to balance Hopping Puts foot down Nearly fell. Tests stopped.	
Cannot keep balance ✓✓✓ Starts too soon _____ Stops walking ✓ Misses heel-toe ✓✓ Steps off line ✓ Raises arms _____ Actual steps taken 9 9		Time Estimation 38 estimated as 30 seconds		Describe turn Lost balance, Staggered	
Cannot do test (explain) N/A		Type of footwear: Lace-up boots			
Finger to Nose (Draw lines to spots touched)  Wrong hands on attempts 5 and 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 Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Slow
Blood Pressure 144 / 94		Temperature 99.0 °F		RIGHT ARM 	
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Nothing observed.		LEFT ARM 	
Comments: 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: 6/24/17 / 0100	Time DRE was notified: 0110	Evaluation start time: 0130	Evaluation completion time: 0220	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: <i>Robert Arman</i>		Reviewed/approved by / date:			DRE #11603
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 B.

- 1. Location:** The evaluation was conducted in the Interview Room at the Fargo Police Department. The Interview Room is well illuminated and has a smooth tile floor with no obstructions. The darkroom examinations were conducted in the staff restroom.
- 2. Witnesses:** Sergeant Travis Skar of the North Dakota HP observed and recorded the entire evaluation. The arresting officer, Officer Troy Neilson observed the psychophysical tests.
- 3. Breath Alcohol Test:** The arresting officer, Officer Neilson administered a breath test to the suspect prior to my arrival and obtained a 0.00% BAC result.
- 4. Notification and Interview of the Arresting Officer:** While on duty on 6/24/17, at approximately 0110 hours, I was requested to contact Officer Neilson at the Fargo Police Department for an agency assist in conducting a DRE drug evaluation. After contacting Officer Neilson, it was determined that he had observed the suspect's vehicle drifting over the center divider line numerous times on 45th Street. When Officer Neilson activated his emergency lights to stop the suspect's vehicle, the vehicle continued for approximately three blocks without stopping, and continued drifting in and out of the traffic lane. Officer Neilson further advised that during the personal contact, he did not detect an odor of an alcoholic beverage coming from the suspect's breath. However, he did detect a distinct chemical-like odor coming from the vehicle. Officer Neilson also observed that the suspect was slow to respond to questions, and appeared to be confused and disoriented. Officer Neilson SFSTs to the suspect which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), One Leg Stand (OLS), and the Finger to Nose tests. According to Officer Neilson, he observed six clues on the HGN test and five clues on the W&T. The suspect was not able to do the OLS due to his poor balance and the test was stopped for safety reasons. According to Officer Neilson, the suspect also had great difficulty trying to touch the end of his nose during the Finger to Nose test. The suspect indicated he had not drank any alcohol or drugs, but occasionally liked to inhale Dust Off to help him relax. Officer Neilson arrested the suspect for DWI and transported him to the Fargo 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 Fargo Police Department. His speech was slow and slurred. When up and moving around the room, he had difficulties with his coordination and staggered several times and twice used the wall to steady himself. His eyes were watery and appeared to be bloodshot. The suspect was wearing blue jeans, a black tee-shirt, and lace-up boots. I introduced myself and asked if he would consent to a drug evaluation, which he agreed to. I asked him if he had been informed of his Miranda rights and he stated "Uh-huh. I already know them." I asked him if he had any injuries or physical defects and he said he did not. He also stated that he was not under the care of a doctor or dentist. He told me he had eaten a fried chicken dinner around 6 pm and had drank two bottles of water at that time. When asked if he was taking any medication or drugs, he responded "Nope." He also told me that he was not blind in either eye and did not wear corrective lenses. When I asked him when he last slept he stated, "Yesterday afternoon." I asked him for how many hours and he stated "4 hours." During my initial conversation with the suspect, his coordination was poor and he was very unstable on his feet.
- 6. Medical Problems and Treatment:** The suspect stated he felt light-headed, but declined medical assistance when asked if he needed medical care. The suspect 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: During this test, the suspect swayed approximately 4" front to back and 4" side to side. He estimated the passage of 30 seconds in 38 seconds. When asked how he estimated the time, he said, "One Mississippi, two Mississippi, but I got messed up."

Walk & Turn: During this test, the suspect lost his balance three times during the instructions stage. Once he began the walking stage, he missed touching heel to toe four times. He also stopped while walking three times, stepped off the line three times, and lost his balance and staggered during the turn. The suspect was asked prior to the test about removing his boots, and he said they were okay, and wanted to leave them on for the test.

One Leg Stand: When the suspect stood on his left foot raised his right foot, he swayed while attempting to balance and used his arms to balance during the entire time his foot was up. However, he put his foot down on counts 1,001, 1,002, and 1,003 and nearly fell. Therefore, the test was stopped for safety reasons. When attempting to stand on his right foot and raise his left foot, he again lost his balance nearly falling, and the test was stopped for safety reasons.

Finger to Nose: During this test, the suspect missed 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 left hand on attempt #6.

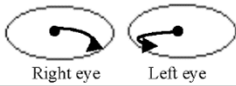
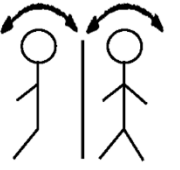
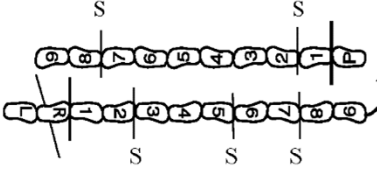
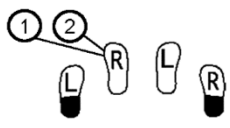
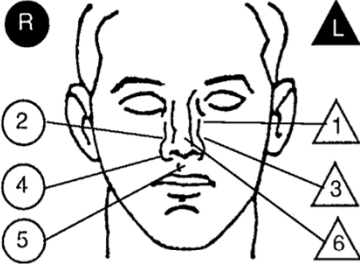
8. Clinical Indicators of Impairment:

Eye Signs: The suspect had six clues of HGN with an approximate 35-degree angle of onset. Vertical Gaze Nystagmus was not present. A Lack of Convergence was present. His pupils were estimated in three lighting levels and were estimated at 5.0 mm in both eyes in Room Light, 6.0 mm in both eyes in Near Total Darkness and 4.0 mm in both eyes in Direct Light. All three were within the DRE average ranges. The suspect's pupils showed a slow reaction to light. Rebound dilation was not observed.

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. The suspect's 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 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:** After explaining my observations to the suspect, I again asked him about drug use. He admitted being with some friends using "Dust Off and some other stuff." He first claimed he didn't use any of it because it made him light-headed, but then later admitted using some.
- 11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Poppers is under the influence of an Inhalant and is unable to operate a vehicle safely.
- 12. Toxicological Sample:** The suspect provided a urine sample, which was submitted as evidence and will be submitted to the state crime laboratory for analysis.
- 13. Miscellaneous:** Refer to Officer Neilson's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator Officer Frank Enko		DRE # 3638	Rolling Log # 17-06-560	Evaluator's Agency Baltimore County Police	Case # 17-8097 (Session XIX - 3)
Recorder/Witness Sgt. Corey Steffy, Maryland State Police		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Howard County Police Department	
Arrestee's Name (Last, First, Middle) Huffer, Misty K.		Date of Birth 9/10/1998	Sex F	Race W	Arresting Officer (Name, ID#) Sgt. Christopher Valentine #16602
Date Examined / Time / Location 6/14/2017 / 2135 / Baltimore Co. Detention		Breath Test: Results: 0.000	Test Refused <input type="checkbox"/> Instrument #: 34873	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 Enko	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Pizza	When? 7 pm	What have you been drinking? How much? Water and some juice N/A	Time of last drink? N/A
Time now/ Actual Midnight / 2140	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 don't do drugs"			Attitude: Cooperative, Indifferent	Coordination: Poor	
Speech: Slurred, Rambling		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	
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	Left Eye	Right Eye	Convergence	
1. 96 / 2145	Lack of Smooth Pursuit	Present	Present		
2. 94 / 2155	Maximum Deviation	Present	Present	Right eye Left eye	
3. 92 / 2208	Angle of Onset	35	35		
Modified Romberg Balance Approx. 3" 3" 3" 3"	Walk and Turn Test		One Leg Stand		
					
	Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops walking <input checked="" type="checkbox"/> Misses heel-toe <input checked="" type="checkbox"/> Steps off line <input checked="" type="checkbox"/> Raises arms <input checked="" type="checkbox"/> Actual steps taken 9		1 st Nine <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 2 nd Nine <input checked="" type="checkbox"/> L R 2 Sways while balancing 2 Uses arms to balance 1 Hopping 2 Puts foot down Test stopped after she nearly fell.		
Time Estimation 22 estimated as 30 seconds	Describe turn Slow and deliberate		Cannot do test (explain) N/A		Type of footwear: Athletic running 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)
		Left Eye	5.0	7.5	3.5
Pronounced sway.		Right Eye	5.0	7.5	3.5
Blood Pressure 110 / 62		Temperature 98.0 °F		Reaction to Light: Slow	
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM			
Comments:		LEFT ARM			
What drugs or medications have you been using? "I did a little nitrous with friends"		How much? "I don't remember."		Time of use? "About 8 pm?"	
Date / Time of arrest: 6/14/2017 / 2055		Time DRE was notified: 2115		Where were the drugs used? (Location) At friend's house.	
Evaluation start time: 2135		Evaluation completion time: 2215		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
Officer's Signature: Frank Enko		Reviewed/approved by / date:			DRE # 3638
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: Huffer, Misty

- 1. Location:** The evaluation was conducted in the Booking Area at the Baltimore County Detention Center. The room adequate lighting and has a smooth concrete floor with no obstructions. The darkroom room examinations were conducted in the staff restroom.
- 2. Witnesses:** Sergeant Corey Steffy of the Baltimore State Police observed and recorded the evaluation.
- 3. Breath Alcohol Test:** The suspect's breath test was 0.00%. It was administered prior to my arrival by the arresting officer, Sergeant Christopher Valentine of the Howard County Police Department.
- 4. Notification and Interview of the Arresting Officer:** On 6/14/17 at 2155 hours, I was requested to contact Sergeant Valentine for a drug evaluation at the Baltimore County Detention Center. After arriving at the Detection Center, Sergeant Valentine advised he had observed the suspect's vehicle fail to stop at red light. The suspect was slow to respond to his emergency lights, and was unable to maintain a single lane of travel. Sergeant Valentine told me that during personal contact, the suspect did not have an odor of an alcoholic beverage coming from her breath, but she did have a chemical-like odor on her clothing and breath. Officer Valentine observed that the suspect had difficulty locating her driver's license and other documents. She was slow to respond to his questions and requests. She also had poor coordination, and her speech was slurred. He also noted that she had a flushed face. Sergeant Valentine indicated that the suspect consented to SFSTs at roadside which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T), and One Leg Stand (OLS) tests. He reported observing six clues on the HGN test, three clues on the W&T, and four clues on the OLS (Refer to Sergeant Valentine's DWI report). After completing the SFSTs, he arrested the suspect for DWI and transported her to the Baltimore County Detention Center for processing. After obtaining a 0.00 BAC, he requested a DRE to assist with the investigation.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the Booking Area, and she appeared to be disoriented and she responded very slowly to questions. Her speech was slurred and rambling. Her face was flushed, and she had red bloodshot eyes. The suspect was wearing a brown skirt, light blue blouse, and athletic running shoes. I introduced myself and asked if she would consent to a drug evaluation. She agreed to the evaluation by stating, "Okay" after a long pause before answering. I asked the suspect if she had been informed of her Miranda rights and she stated "no." I then informed her of her Miranda rights at 2130 hours. I asked the suspect if she had any physical injuries or defects and she said she did not. She also 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 some water and juice at that time. When asked if she was taking any medication or drugs, she responded "I don't do drugs." The suspect told me that she was not blind in either eye and did not wear corrective lenses. When I asked her when she last slept, she stated, "last night." I asked her for how many hours and she stated "8 hours."
- 6. Medical Problems and Treatment:** The suspect indicated that she did not have any injuries or physical problems, and none were observed or mentioned 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. Each time she indicated that she understood the test and agreed to attempt the test. The following tests were administered to the suspect:
Modified Romberg Balance: For this test suspect swayed approximately three inches front to back and three inches side to side. Her time estimation was fast, estimating 30 seconds in 22 seconds.

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, the suspect 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 and twice on the second nine steps. On the turn, she was slow and deliberate with her movements, but made the turn as instructed.

One Leg Stand: On this test, when the suspect stood on her left foot and raised her right foot, she swayed side to side and front to back approximately four inches. She used her arms for balance during the entire time her foot was up. She put her foot down quickly at counts 1,001 and 1,002 and nearly fell, and the test was stopped for safety reasons. When attempting to stand on her right foot and raise her left foot, she nearly fell again and the test was stopped for safety reasons.

Finger to Nose: During this test, the suspect missed the tip of her nose with the tip of her index finger on all six attempts. She also had a pronounced sway throughout the test.

8. Clinical Indicators of Impairment:

Eye Signs: During this test, the suspect exhibited all six clues of HGN with an approximate 35-degree angle of onset. VGN was not observed. She was not able to converge her eyes as instructed. Her pupil sizes were estimated in the three lighting levels and 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. The suspect exhibited a slow reaction to light. Rebound dilation was not present.

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). The suspect's blood pressure was measured at 110/62, which was below the DRE average ranges. The suspect's body temperature was measured at 98.0 degrees using a standard oral thermometer. The suspect's 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. When asked about the odor on her breath and clothing, she indicated that she was hanging out with some friends who "might have been doing some nitrous."
- 10. Suspect's Statements:** After explaining my observations to the suspect, I again asked her about drug use. She stated she "did a little nitrous with friends" just before she got stopped. She said she likes to use nitrous because it relaxes her.
- 11. DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of an Inhalant and is unable to operate a vehicle safely.
- 12. Toxicological Sample:** A urine sample was collected from the suspect, which was submitted as evidence pending delivery to the Crime Lab for analysis.
- 13. Miscellaneous:** Refer to Sergeant Valentine's arrest report for additional details.

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Session 20

Practice: Vital Signs Examinations



Learning Objectives

- **Conduct examinations of pulse, blood pressure, and temperature**
- **Describe vital signs examination procedures**
- **Document results of vital signs examinations**

Upon successfully completing this session, the participant will be able to:

- Conduct examinations of pulse, blood pressure, and temperature
- Describe the vital signs examination procedures
- Document the results of the vital signs examinations

CONTENT SEGMENTS

- A. Procedures for this Session
- B. Pulse Measurements
- C. Blood Pressure Measurements
- D. Temperature
- E. Session Wrap-Up

LEARNING ACTIVITIES

Instructor-Led Presentations
Participant Hands-On Practice
Instructor-Led Coaching
Participant-Led Coaching

Session 20 - Practice: Vital Signs Examinations

Session Procedures

- **Team Assignments**
- **Examinations Conducted**

Drug Recognition Expert Course 20-3

A. Procedures for this Session

Team Assignments

Participants will work in three or four member teams.

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.

Participants will take turns serving as test administrator, test subject, and coach.

Participants will record their measurements using the *Vital Signs Examination Data Sheet*.

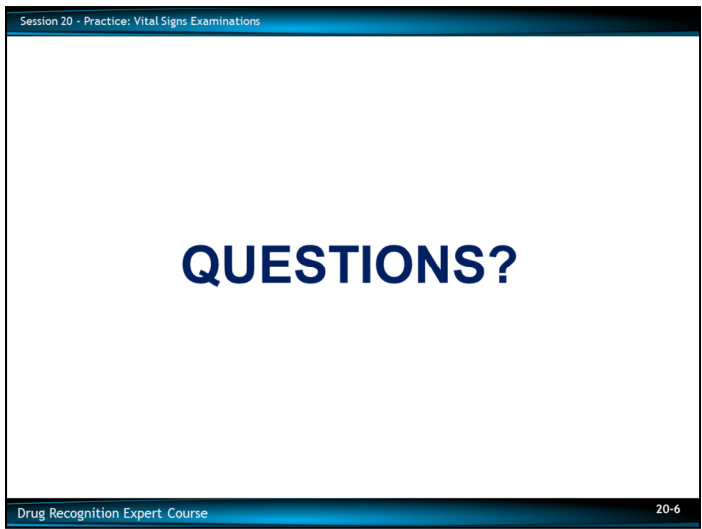
Vital Signs Blood Pressure and Temperature Measurement Practice



C. Blood Pressure Measurements

D. Temperature

Allow participants to practice taking temperatures



E. Session Wrap-Up

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 _____

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Session 21

Cannabis



Learning Objectives

- **Explain brief history of Cannabis**
- **Identify common names and terms**
- **Identify common methods of administration**

Upon successfully completing this session, the participant will be able to:

- Explain a brief history of Cannabis
- Identify common names and terms associated with Cannabis
- Identify common methods of administration for Cannabis

Learning Objectives

- Describe symptoms, observable signs, and other effects
- Describe typical time parameters
- List indicators likely to emerge during drug influence evaluation

- 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

CONTENT SEGMENTS

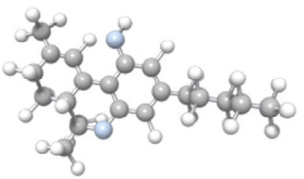

- A. Overview of the Category
- B. Possible Effects of Cannabis
- C. Onset and Duration of Effects
- D. Overdose Signs and Symptoms
- E. Expected Results of the Evaluation
- F. Classification Exemplars

LEARNING ACTIVITIES

Instructor-Led Presentations
Reading Assignments
Video Presentation
Slide Presentations
Review of the DEC Program Exemplars

Session 21 - Cannabis

Cannabis Overview



Δ -9-TETRAHYDROCANNABINOL

Drug Recognition Expert Course 21-4

A. Overview of the Category

“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.” 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.

Although the current national THC average level of marijuana is approximately 11%, Colorado and Washington State’s recreational marijuana is approximately 17%, with some samples testing at 30%. This does not include high-potency extract concentrates, which can have 80-90% THC.

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.

Cannabis Overview

Different varieties of Cannabis have different concentrations of THC



Different varieties of the Cannabis have different concentrations of THC.

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
 - Often referred to as a “cerebral high.”
- Indica Cannabis is better known for having a “body high”
 - Reported to cause deep relaxation often leading to a term called “couch-lock”
- Hybrids are a combination of the two types

Forms of Cannabis



Marijuana



Hashish



Hash Oil



Marinol

Forms of Cannabis

There are four principal forms of Cannabis.

- Marijuana – the dried leaves of the plant
- Hashish – a form of Cannabis made from the dried and pressed resin of a Marijuana plant
- 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%
- Marinol (or trade name of Dronabinol) – a synthetic form of THC
 - This is a prescription drug used to treat nausea and vomiting
 - It is prescribed for certain cancer patients undergoing chemotherapy
- “Dronabinol” is the generic or chemical name for the synthetic THC
- “Nabilone – an analog of Dronabinol used as an anti-vomiting agent; Trade name: Cesamet

Other Forms of Cannabis



Sources indicate “waxy Marijuana” or “dabbing” is the purest form of Cannabis. It involves the use of butane or other various chemicals to heat and refine the THC into “BHO” or butane hash oil. It contains anywhere from 82-99% THC making it several times more potent than a Marijuana bud on a Cannabis plant which usually contains 5-28% THC. The “waxy Marijuana” 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. Typical wax Marijuana is golden in color and crumbly; though texture may vary based on type. Unfortunately for parents, teachers, and law enforcement, the new vaping pens make it extremely difficult to see, smell, or detect.

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



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.

Handwriting practice lines consisting of 15 horizontal lines.

Synthetic Cannabinoid Products

Synthetic cannabinoid products typically include:

- Olive colored herbs
- Combination of herbs
- Plant materials



Synthetic Cannabinoid Products

Synthetic Marijuana or synthetic Cannabinoids have quickly become a worldwide concern. They quickly 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.

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.

Synthetic Cannabinoid Products Effects

- **Panic attacks**
- **Agitation**
- **Tachycardia (range of 110 to 150 BPM)**
- **Elevated blood pressure**
- **Anxiety**
- **Pallor**
- **Numbness and tingling**



Synthetic Cannabinoid Products Effects

They have many adverse effects that include:


- Panic attacks
- Agitation
- Tachycardia (range of 110 to 150 BPM)
- Elevated blood pressure
- Anxiety
- Pallor (pale appearance)
- Numbness and tingling

Users report effects lasting between 30 minutes and 2 hours.

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Possible Medical Cannabis Applications

- **Lowers intraocular pressure**
- **Suppresses nausea**
- **Inhibits seizures**
- **Appetite enhancer**
- **Muscle relaxant**
- **Tumor growth retardant**



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Possible Cannabis Applications

Cannabis may have some limited medical applications, however, many experts vary in their opinions on them. Some possible applications may include:

- Lowering of intraocular pressure, which can be helpful for glaucoma patients
 - “Intraocular” – within the eyeball
 - Cannabis lowers the intraocular pressure by dilating in size the blood vessels of the eyes (more size – less pressure)
 - This causes red, bloodshot eyes
- Suppressing nausea and sometimes is recommended for cancer patients to relieve the nausea accompanying chemotherapy
- Cannabidiol, a non-psychoactive ingredient found in Cannabis, is used in treating Epilepsy; it helps to inhibit seizures
- An appetite enhancer
- A muscle relaxant
- A tumor growth retardant

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THC Levels

- **Marijuana – 13% (2013)**
- **Hash – 30 - 50% (2013)**
- **Hash Oil – 68.4% (2013)**
- **Concentrates – Vary**

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Potency, Purity and Dose

Average THC concentration in Marijuana:

- Marijuana – 13.0% (2013)
- Hash – 30 – 50% (2013)
- Hash Oil – 68.4% (2013)
- Concentrates - Vary

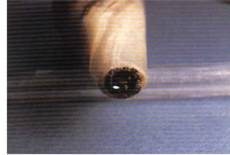
THC levels can vary greatly depending upon areas of the country.

Recreational doses are highly variable.

The lower the THC, the more hits required to achieve desired effects.

Ingestion

- Smoked
- Orally
- Transdermal Absorption



Marijuana usually is smoked.

Marijuana, Hash, and Hash Oil also can be ingested 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.

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Possible Effects of Cannabis

- Interferes with divided attention
- Short attention span
- Varying speeds
- Failing to maintain a single lane
- Difficulty with depth perception

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B. Possible Effects of Cannabis

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, with brief attention spans. In particular, they do not divide their attention very successfully. **Clarification: They have a difficult time dealing with more than one or two tasks at once.** This can make them very unsafe drivers since driving requires the ability to divide attention among many simultaneous tasks. Short attention span would be indicated by varying speeds, failing to maintain a single lane, and difficulty with depth perception. Because Cannabis impairs attention, the Standardized Field Sobriety Tests (SFSTs) like Walk and Turn (WAT), One Leg Stand (OLS), and 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.

Loss of depth perception would be demonstrated by stopping improperly.

According to a study by the British Medical Journal (2005) 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.

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.

Effects of Cannabis

- Relaxation
- Euphoria
- Relaxed inhibitions
- Disoriented
- Altered time and distance perception
- Lack of concentration
- Impaired memory
- Alterations in thought process
- Drowsiness
- Sedation
- Mood changes

Pharmacological Effects of Cannabis:

Effects 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
- Alterations in thought process
- Drowsiness
- Sedation
- Mood changes

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Other Characteristic Indicators

- **Odor of Marijuana**
- **Marijuana debris in mouth**
- **Red, bloodshot eyes**
- **Body tremors**
- **Eyelid tremors**
- **Possible green coating on tongue**

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Other characteristic indicators:

- Odor of Marijuana
 - Marijuana debris in the mouth
 - Red, bloodshot eyes
 - Body tremors
 - Eyelid tremors
 - Possible green coating on the tongue
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Onset and Duration of Cannabis' Effects

- **Within minutes** – User begins to feel and exhibit effects
- **10-30 minutes** – Peak effects are reached
- **2-3 hours** – User continues to feel and exhibit effects
- **3-5 hours** – User feels “normal”

Note: Evidence of Marijuana use may be present in blood/urine tests for extended periods after use.

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 2 hours. Most behavioral and physiological effects return to baseline within 3-5 hours after drug use, although some residual effects in specific behaviors can last up to 24 hours.

The effects reach their peak within 10–30 minutes.

- 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

Depending on the amount smoked and on the concentration of THC in the Marijuana, the person will continue to feel and exhibit the effects for 2–3 hours.

- 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 3–5 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 through the liver. Because it takes longer, the user may end up consuming longer amounts of the drug while thinking the drug isn't working.

Cannabis Effects on Executive Function

- Attention
- Concentration
- Decision-making
- Impulsivity
- Inhibition



- Reaction Time
- Risk Taking
- Verbal Fluency
- Working Memory

Executive Function involves:

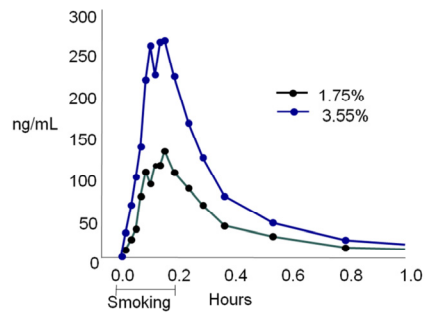
- Cognitive processes such as task switching and planning
- Mental skills – organize and act
- Working memory

Cannabis has shown to effect the executive function in the following areas:

- 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
- Working Memory - Ability to hold and manipulate information and remember it after a short delay

Onset and Duration of Cannabis' Effects

Smoked THC Time-Concentration Curve



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
- To about 20% of their peak 30 minutes after the end of smoking

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
- Urine tests may indicate the presence of inactive THC metabolites for up to a month
 - This could vary depending upon the frequency of use

Metabolites of THC

- **Hydroxy THC**
 - **Causes Impairment and Euphoria**
- **Carboxy THC**
 - **Not psychoactive**

There are two important metabolites, or chemical byproducts, of THC.

- Hydroxy THC, which causes the user to feel euphoric
 - Hydroxy THC is the main psychoactive metabolite of THC formed in the body after Marijuana consumption
 - Also referred to as 11-Hydroxy-THC
 - Hydroxy THC usually is eliminated from the blood plasma within six hours
- Carboxy THC, there is no evidence at this time it is psychoactive
 - Carboxy THC may be found in the blood plasma for several days following Marijuana use


Cannabis is a 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.

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Overdose Signs and Symptoms

- Paranoia
- Possible Psychosis



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D. Overdose Signs and Symptoms

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 paranoia and possible psychosis.

Long Term Effects

- Lung damage
- Chronic Bronchitis
- Lowering of Testosterone
- Possible birth defects
- Acute anxiety attacks
- Chronic reduction of attention span

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
- 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.

- Cannabinoid Hyperemesis Syndrome (may include excessive vomiting, compulsive bathing, abdominal pain, nausea, and excessive thirst)

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Evaluation of Subjects Under the Influence of Cannabis

- HGN – None
- VGN – None
- LOC – Present
- Psychophysical Impairment – Present

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E. Expected Results of the Evaluation

Observable Evidence of Impairment

Clinical Indicators

- Neither Horizontal Gaze Nystagmus (HGN) or Vertical Gaze Nystagmus (VGN) will generally be present

- Lack of Convergence (LOC) will generally be present

- Performance on the Modified Romberg Balance (MRB), WAT, OLS, and FTN tests will generally be impaired

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Evaluation of Subjects Under the Influence of Cannabis

Vital Signs:

- **Pulse – Up**
- **Blood pressure – Up**
- **Body temperature – Normal**

Muscle tone – Normal

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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.

Evaluation of Subjects Under the Influence of Cannabis

Dark Room:

- Pupil size – Dilated (6)
- Pupil reaction to light – Normal

(6) Possibly normal

Pupil size will generally be dilated or possibly normal (within DRE average ranges).

- The content and potency could affect pupil size
 - The higher THC content may increase the likelihood of pupil dilation
 - Cannabis does not normally cause pupil constriction

Pupil reaction to light will generally be normal.

Rebound Dilation

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 constricted size.

DREs report a phenomenon termed “Rebound Dilation” in subjects under the influence of Cannabis.

- Clarification: “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 constricted size
 - In a controlled study analyzing 302 Cannabis DRE evaluations, Rebound Dilation was present in 204 of the 302 cases (70.9%).

Evaluation of Subjects Under the Influence of Cannabis

General Indicators

- Body tremors
- Disoriented
- Debris in mouth (possible)
- Eyelid tremors
- Altered time and distance perception
- Increased appetite
- Red bloodshot eyes



General Indicators

- Body tremors
- Disoriented
- Debris in the mouth
- Eyelid tremors
- Altered time and distance perception
- Increased appetite
- Red bloodshot eyes

Visine causes vasoconstriction in the eyes and is often used to reduce reddening.

Evaluation of Subjects Under the Influence of Cannabis

General Indicators

- Odor of marijuana
- Possible paranoia
- Relaxed inhibitions
- Lack of concentration
- Impaired memory
- Alterations in thought formation
- Drowsiness



General Indicators

- Odor of Marijuana
- Possible paranoia
- Relaxed inhibitions
- Lack of concentration
- Impaired memory
- Alterations in thought formation
- Drowsiness

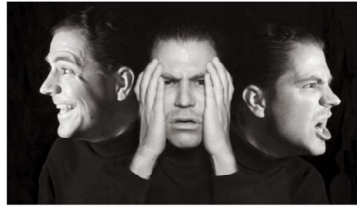
In addition, the user may experience:

- Sedation
- Mood changes
- Panic reactions
- Paranoia

Evaluation of Subjects Under the Influence of Cannabis

General Indicators

- Dry mouth and throat
- Mood changes
- Panic reactions
- Paranoia
- Sedation



General Indicators

- Dry mouth and throat
- Mood Changes
- Panic reactions
- Paranoia
- Sedation

Overdose signs may include:

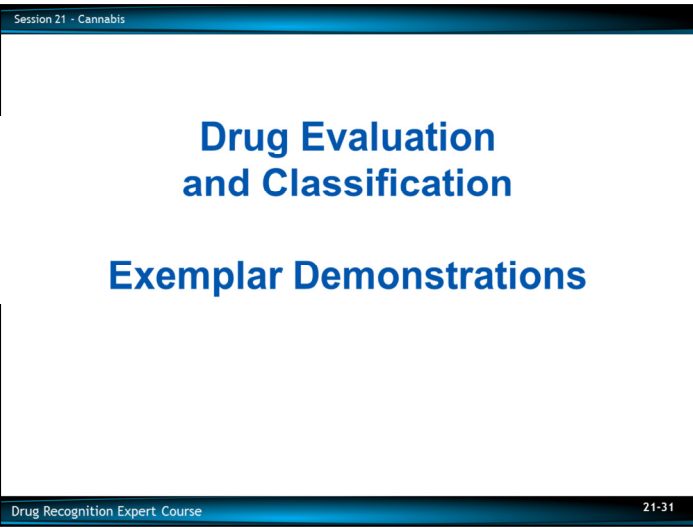
- Fatigue
- Paranoia
- Possible psychosis

Cannabis Symptomatology Chart

HGN	None
VGN	None
LOC	Present
Pupil Size	Dilated ⁽⁶⁾
Reaction to Light	Normal
Pulse Rate	Up
Blood Pressure	Up
Temperature	Normal
Muscle Tone	Normal

⁽⁶⁾ Possibly normal

Symptomatology Matrix




F. Classification Exemplars

The DRE narrative report should be detailed and complete, which clearly articulates the opinion of the DRE.

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Cannabis



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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 Marijuana?
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.

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 Marijuana?

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.

DRUG INFLUENCE EVALUATION

Evaluator Sgt Glenn Glaser		DRE # 9701	Rolling Log # 17-08-118	Evaluator's Agency California Highway Patrol	Case # 17-58775 Session XXI - 1										
Recorder/Witness Officer Gary Martens California HP		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency California Highway Patrol											
Arrestee's Name (Last, First, Middle) Blunt, Mary Jane		Date of Birth 05/24/1990	Sex F	Race W	Arresting Officer (Name, ID#) Officer Kevin Craig #7340										
Date Examined / Time / Location 08/05/2017 / 1753 / Valley CHP Office		Breath Test: Results: 0.00%		Test Refused <input type="checkbox"/> Instrument #: 13430	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: Officer Craig	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? Chips/cookies "Maybe 1 hour ago"		What have you been drinking? How much? "Just water" "A lot"	Time of last drink? N/A										
Time now/ Actual 7:30 pm / 1755	When did you last sleep? Last night	How long? "Maybe 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 don't do drugs. Just marijuana."		Attitude: Cooperative, Carefree		Coordination: Poor, Swaying											
Speech: Slow, Thick		Breath odor: Odor of burnt marijuana		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											
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>104</u> / <u>1800</u> 2. <u>102</u> / <u>1807</u> 3. <u>102</u> / <u>1837</u>	HGN Lack of Smooth Pursuit Maximum Deviation Angle of Onset	Left Eye None None None	Right Eye None None None	Convergence 25/30 One Leg Stand 26/30 L R L R Sways while balancing Uses arms to balance Hopping Puts foot down Laughing. Leg tremors											
Modified Romberg Balance Approx. 3" 3" 3" Circular sway/Eyelid tremors	Walk and Turn Test S M M M Laughing, Leg tremors. Swaying		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken		1 st Nine 2 nd Nine <table border="1"><tr><td><input checked="" type="checkbox"/></td><td><input 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><tr><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table>	<input checked="" 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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Time Estimation 43 estimated as 30 seconds	Describe turn Stopped and asked what to do	Cannot do test (explain) N/A		Type of footwear: Sandals											
Finger to Nose (Draw lines to spots touched) Laughing. Eyelid tremors. Slow movements		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)										
		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: Normal										
		RIGHT ARM 		LEFT ARM 											
		None observed													
Blood Pressure 154 / 106	Temperature 98.6 °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? "I smoked a little pot. What's the big deal?"		How much? "Small baggie"	Time of use? Around 3 pm	Where were the drugs used? (Location) Rest area and in car											
Date / Time of arrest: 08/05/17 / 1620	Time DRE was notified: 1720	Evaluation start time: 1750	Evaluation completion time: 1855	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation											
Officer's Signature: <i>Glenn Glaser</i>		Reviewed/approved by / date:			DRE # 9701										
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: Blunt, Mary Jane

- Location:** The evaluation was conducted in the Interview Room at the California Highway Patrol Valley Division Office in Sacramento. The room is well illuminated and has a tile floor with no obstructions. The darkroom examinations were conducted in the adjacent staff restroom.
- Witnesses:** Officer Gary Martens of the California Highway Patrol was present and recorded the evaluation. The arresting officer, Officer Kevin Craig of the CHP, observed the dark room examinations.
- Breath Alcohol Test:** A breath test was administered to the suspect by Officer Craig prior to my arrival. The result was a 0.00% BAC.
- Notification and Interview of the Arresting Officer:** I was on-duty and requested to assist Officer Craig with a drug influence evaluation at the Valley Division CHP Office in Sacramento. It was determined that Officer Craig had arrested Ms. Blunt for driving under the influence and her breath test result was negative for alcohol. According to Officer Craig, he observed her vehicle traveling southbound on I-5, north of the Del Paso Road exit. Her vehicle was drifting in and out of the outside traffic lane and was traveling approximately 15 miles per hour over the posted speed limit. After contacting the suspect, Officer Craig observed that she seemed unconcerned about her driving and told him that she was a little tired and that "everything was cool." Officer Craig noted that she had bloodshot eyes and droopy eyelids. He also detected an odor of burnt marijuana coming from inside her vehicle. After determining that she did not have any medical issues and/or injuries, he requested that she perform SFST's, which she agreed to do. Officer Craig administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests to the suspect. Officer Craig advised he did not observe any clues of HGN, but noted that on the W&T test, she had difficulty maintaining her balance and a total of four clues were observed. On the OLS test, the suspect again had difficulty with her balance. Several times she started laughing as she attempted the test, and three clues were observed. Officer Craig also administered the Modified Romberg Balance test and the Finger-to-Nose test and the suspect had difficulty maintaining her balance and was not able to touch her nose as directed. After placing her under arrest for DWI and securing her vehicle, he observed a marijuana pipe between the seats of her vehicle. The pipe was warm to the touch and smelled of marijuana. After advising the suspect of her Miranda warnings, he asked the suspect about the pipe. She stated, "It's mine. I've been driving a longways, and I decided I needed to relax a little." Due to Officer Craig's training and suspecting possible Cannabis impairment, and having received training about the rapid dissipation of THC in a person's blood, he took the suspect to the hospital for a blood draw immediately after the arrest. After obtaining the blood sample, he administered a breath test to the suspect which confirmed that alcohol was not involved. He then requested the assistance of a DRE.
- Initial Observation of the Suspect:** I first observed the suspect in the Interview Room at the CHP Valley Division Office. At times, she was laughing and seemed unconcerned about her circumstances. She commented several times to Officer Craig, "You know that marijuana is legal?" I observed that she had red bloodshot eyes and droopy eyelids. Her pupils appeared dilated, and her speech was slow and thick. The suspect was wearing cut-off blue jean shorts, a green tee-shirt and sandals. When she stood up from her chair, she swayed and appeared to have balance problems. I introduced myself to the suspect and requested that she participate in a drug evaluation. She stated, "Why? Do you think I'm a druggie?" After some discussion about the observations made by Officer Craig, and the drug evaluation process, she agreed to do the evaluation, but said, "I don't know why I'm doing this, they already got my damn blood."
- Medical Problems and Treatment:** During the preliminary questions, the suspect indicated she was not sick or injured and claimed she was an avid hiker. 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. I asked her if she was taking any medication or drugs, and she stated, "Just marijuana."

7. **Psychophysical Indicators of Impairment:** Each of the psychophysical tests were explained and demonstrated to the suspect prior to her attempting them. After each demonstration, the suspect confirmed that she understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: During this test, the suspect had an approximate three-inch circular sway. Pronounced eyelid tremors were present. Her time estimation was slow, estimating 30 seconds in 43 seconds.

Walk and Turn: For this test, a line on the tile floor was used. During the instructions stage, the suspect swayed and lost her balance moving her right foot off the line to regain her balance. During the walking stage, the suspect missed touching heel to toe three times, and used her arms for balance once during the first nine steps. At the end of the first nine steps, she stopped and asked what to do next. I instructed her again on how to make the turn and she continued with the test. She missed touching heel to toe four times and used her arms for balance twice during the second nine steps. Several times she started laughing during the test. I also observed that she had leg tremors during the test. She was given the opportunity to remove her sandals prior to attempting the test and she indicated that she'd prefer to keep them on.

One Leg Stand: While raising her right foot and standing on her left foot, the suspect swayed and used her arms to balance. She started laughing during the test and leg tremors were observed. When raising her left foot and standing on her right foot, the suspect swayed and used her arms for balance. She was also laughing during portions of the test.

Finger to Nose: On 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. She did touch the tip of her nose with the tip of her index finger on attempts #2 and #4. She used the pads of her fingers on attempts #5 and #6. The suspect was slow to react to which hand to lift on all the commands. She again laughed several times while doing the test. Eyelid tremors were also present during the test.

8. **Clinical Indicators of Impairment:**

Eye Signs: The suspect's pupil sizes were estimated in three lighting levels. In Room Light, the suspect's pupils were estimated at 5.5 mm in both eyes. In Near Total Darkness, they were estimated at 9.0 mm in both eyes. In Direct Light, the suspect 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 levels. Her pupil reaction to light was normal, and she was not able to converge her eyes as directed.

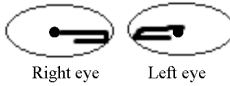
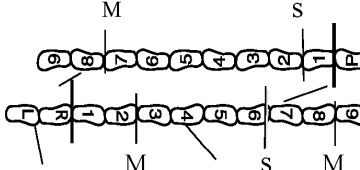
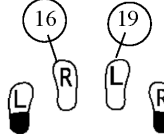
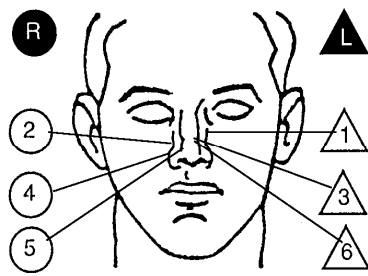
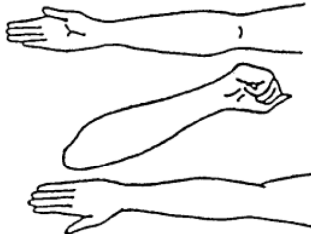
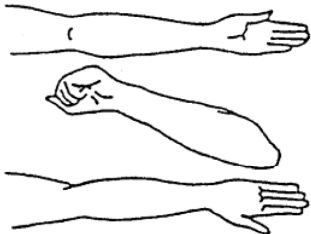
Vital Signs: The suspect's pulse rates were checked three times during the evaluation. All three were above DRE average ranges and found to be 104, 102, and 102 beats per minute. Her systolic and diastolic blood pressures were also both above the DRE average ranges, measured at 154/106 mm/hg. Her body temperature was checked at 98.6 degrees, which was within the DRE average range. Her muscle tone was normal.

9. **Signs of Ingestion:** The suspect had a greenish 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."
10. **Suspect's Statements:** The suspect admitted to smoking marijuana in her car just prior to being stopped. She asked, "what the big deal was" and felt it was okay to drive after smoking marijuana.
11. **DRE's Opinion:** It is the opinion as a certified Drug Recognition Expert that the suspect, Mary Jane Blunt, is under the influence of Cannabis and is unable to operate a motor vehicle safely.
12. **Toxicological Sample:** The suspect was transported to the hospital by the arresting officer soon after her arrest where she provided a blood sample. The sample was submitted as evidence by Officer Craig.

13. **Miscellaneous:** Refer to Officer Craig's arrest report for additional details.

Rev. 10/17

DRUG INFLUENCE EVALUATION

Evaluator Sergeant Robert Hayes		DRE # 6606	Rolling Log # 17-09-188	Evaluator's Agency Albany Police Department	Case # 17-90883 Session XXI #2								
Recorder/Witness Lt. Michael Iwai, Oregon State Police		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency Oregon State Police									
Arrestee's Name (Last, First, Middle) Toker, Bud		Date of Birth 2/21/1985	Sex M	Race W	Arresting Officer (Name, ID#) Trooper Donald Rummer #17144								
Date Examined / Time / Location 09/21/17 / 2014 / Linn County Jail		Breath Test: Results: 0.00%	Test Refused <input type="checkbox"/> Instrument #: 66454	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: Trooper Rummer	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? "Couple of burgers"	When? 5 pm	What have you been drinking? How much? Coke 2 cans	Time of last drink? N/A								
Time now/ Actual About 6 pm/ 1950	When did you last sleep? Last night	How long? About 7 - 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No "I smoke pot"		Attitude: Cooperative, Carefree		Coordination: Slow, Swaying, Unsteady									
Speech: Slow, Thick		Breath odor: Marijuana		Face: Normal appearance									
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 and Time 1. 94 / 1955 2. 92 / 2008 3. 92 / 2225		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" 3" 3"		Walk and Turn Test  M S M		Cannot keep balance <input checked="" type="checkbox"/> Starts too soon Stops walking Misses heel-toe Steps off line Raises arms Actual steps taken	28/30 One Leg Stand 24/30  L R <table border="1" style="display: inline-table;"><tr><td>L</td><td>R</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> Sways while balancing Uses arms to balance Hopping Puts foot down Leg tremors	L	R	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
L	R												
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
Time Estimation 18 estimated as 30 seconds		Describe turn Slow steps. As instructed.		Cannot do test (explain) N/A									
Type of footwear: Lace-up boots		Nasal area: Clear		Oral cavity: Green coating on tongue. Dry mouth.									
Finger to Nose (Draw lines to spots touched)  R L 2 1 4 3 5 6 Eyelid tremors		PUPIL SIZE	Room light	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)								
Blood Pressure 168 / 100		Temperature 98.4 °F		Reaction to Light: Normal									
Muscle Tone: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		RIGHT ARM 									
Comments:		LEFT ARM 		Nothing observed									
What drugs or medications have you been using? "I smoke pot. I'm not going to lie to you."		How much? "A pretty good sized bowl"		Time of use? "About 6 pm"									
Where were the drugs used? (Location) "South of Salem in my car"		Date / Time of arrest: 06/18/17 /		Time DRE was notified: 2110									
Evaluation start time: 2130		Evaluation completion time: 2225		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation									
Officer's Signature: <i>Robert Hayes</i>		Reviewed/approved by / date:		DRE #6606									
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: Toker Bud

- 1. Location:** The drug evaluation was conducted in the booking area at the Linn County Jail in Albany, Oregon. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting for conducting a drug evaluation and both have a smooth concrete floor.
- 2. Witnesses:** The evaluation was witnessed and recorded by Lieutenant Michael Iwai of the Oregon State Police. The arresting officer, Trooper Donald Rummer of the Oregon State Police witnessed the psychophysical tests.
- 3. Breath Alcohol Concentration:** Trooper Rummer administered the breath test to the suspect prior to my arrival. Using the Intoxilyzer 9000, he obtained a 0.00% BAC.
- 4. Notification and Interview of the Arresting Officer:** I was on-duty and requested to contact Trooper Rummer at the Linn County Jail for a drug evaluation. It was determined that the suspect had been reported as a possible DUI driver, and was unable to maintain a single lane of travel on I-5. Trooper Rummer advised that he located the suspect's vehicle at MP 142 on I-5. The vehicle was drifting in and out of the outside lane of I-5 and at times, crossed over the painted fog line. After stopping the suspect's vehicle, he noted that the suspect appeared relaxed and seemed unconcerned about being stopped. Trooper Rummer also noted that the suspect had difficulty retrieving his operator's license, vehicle registration and proof of insurance. According to Trooper Rummer, 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 the vehicle. After determining that the suspect was not injured and had no physical problems, he administered SFSTs. According to Trooper Rummer, the suspect had difficulty performing and completing the SFSTs as directed. Clues of Horizontal Gaze Nystagmus (HGN) were not observed. However, four clues on the Walk and Turn (W&T) test and two clues on the One Leg Stand (OLS) test were observed. Trooper Rummer also had the suspect complete several other tests which also demonstrated poor balance and coordination. Trooper Rummer arrested the suspect for DUI and transported him to the jail for processing. After obtaining a 0.00 BAC, Trooper Rummer requested the assistance of a DRE.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the booking area at the County Jail. He appeared to be calm, relaxed and carefree acting. His eyes were red, bloodshot and watery. 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 the suspect was wearing brown shorts, a black Bob Marley tee-shirt and lace-up black boots. He was also wearing a ballcap with the words "Green Leaf Dispensary" on the front. I introduced myself and advised that I had been requested to conduct a drug influence evaluation. The suspect seemed unconcerned and said, "Sure, whatever."
- 6. Medical Problems and Treatment:** The suspect indicated that he was not sick, 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 smoke pot. I'm not going to lie." He further related 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 with the suspect that he understood the instructions prior to having him attempt each test. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: During this test, the subject had an approximate three-inch circular sway. His time estimation was fast, estimating 30 seconds in 18 seconds. I asked how he estimated the 30 seconds and he stated he “counted in his head.” Eyelid tremors were present during the test.

Walk and Turn: For this test, a painted line of the floor was used. The suspect lost his balance once during the instructions and stepped 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. He stopped walking between steps six and seven, and then stepped off the line to his left on step seven. He also missed touching heel to toe between steps eight and nine. He made a slow, but correct turn. During the second nine steps, the suspect stopped after step one to steady himself. He missed heel to toe between steps seven and eight and stepped off the line to his left on step eight. Leg tremors were observed throughout the test along with a slow, deliberate walk.

One Leg Stand: While standing on his left foot and raising his right foot, the suspect swayed, used his arms to balance, and put his foot down at the count of 1,016. He counted to 1,024 in the 30 second time-period. While standing on his right foot and raising his left foot, he swayed, used his arms to balance, and put his foot down at the count of 1,019. Leg tremors were present during the test.

Finger to Nose: During this test, the suspect missed the tip of his nose with the tip of his index finger on all six attempts. On attempt #1 he touched the bridge of his nose. On attempt #2, he touched the side of his nose. On attempt #3 he again touched his upper nose. He touched the outside of his right nostril on attempt #4. On attempt #5, he touched the outside edge of his right nostril, and on attempt #6, he touched his upper nose area. Eyelid tremors were present during the test.

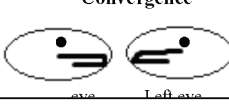
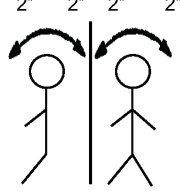
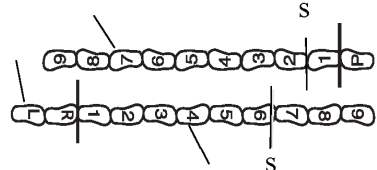
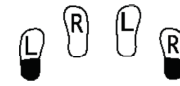
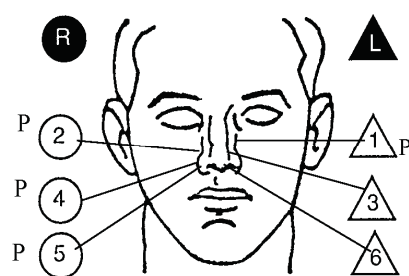

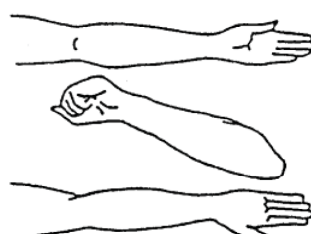
8. Clinical Indicators of Impairment:

Eye Signs: The suspect had watery, red, bloodshot eyes. A lack of convergence was observed. His pupils were dilated in all three lighting levels estimated at 6.5 mm in both eyes in Room Light, 9.0 mm in both eyes in Near Total Darkness. He had Rebound Dilation in Direct Light, with his pupils dilating from 6.0 mm to 7.5 mm in both eyes. His pupil reaction to light was normal.

Vital Signs: The suspect’s pulse rates were checked three times and were 94 beats per minute (bpm), 92 bpm, and 92 bpm. All were above the DRE average ranges. His blood pressure of 168/100 mm Hg was above the DRE average ranges. His body temperature of 98.4 degrees 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, the suspect stated it was “Probably from the pot I smoked.” No injection indicators were observed.
10. **Suspect’s Statements:** The suspect admitted smoking marijuana about 6 pm. When asked how much he had smoked, he stated, “It was a good-sized bowl.” When asked if he felt the effects of the marijuana, he said, “Well, it relaxed me. I’ve been driving most of the day.”
11. **DRE’s Opinion:** It is my opinion as a certified Drug Recognition Expert that Toker 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 by Trooper Rummer and will be forwarded to the Oregon State Police Crime Laboratory for analysis.
13. **Miscellaneous:** The suspect was found to be driving while suspended from a previous DUI arrest. He was cited for DWS. Refer to Trooper Rummer’s arrest report for additional information.

DRUG INFLUENCE EVALUATION

Evaluator Officer Jonathon Huber		DRE # 12367	Rolling Log # 17-06-118	Evaluator's Agency Seattle Police Department	Case # 17-90883 Session XXI #3								
Recorder/Witness Deputy Steve Johnson King County S.O.		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency Washington State Patrol									
Arrestee's Name (Last, First, Middle) Duby, Sharon A.		Date of Birth 12/20/95	Sex F	Race W	Arresting Officer (Name, ID#) Trooper John Axtman #17144								
Date Examined / Time / Location 06/18/17 / King County Jail		Breath Test: Results: 0.00%		Test Refused <input type="checkbox"/> Instrument #: 47755	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: Trooper Axtman	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Potato chips & cookies		When? 6 pm	What have you been drinking? How much? Energy drinks 2 cans								
Time now/ Actual About 10 pm/ 2135	When did you last sleep? Last night	How long? About 7 - 9 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No "Medical marijuana"			Attitude: Cooperative, Relaxed, Uninhibited		Coordination: Slow, Unsteady								
Speech: Slow, Thick		Breath odor: Marijuana		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									
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>96</u> / <u>2140</u> 2. <u>96</u> / <u>2156</u> 3. <u>94</u> / <u>2210</u>		HGN Lack of Smooth Pursuit: None Maximum Deviation: None Angle of Onset: None		Convergence  Right Left eye									
Modified Romberg Balance Approx 2" 2" 2" 2"  Eyelid tremors		Walk and Turn Test  S S Slow movements. Leg tremors		25/30 One Leg Stand 24/30  L R L R <table border="1" style="display: inline-table; vertical-align: middle;"><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 type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down Leg tremors		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
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<input type="checkbox"/>	<input type="checkbox"/>												
<input type="checkbox"/>	<input type="checkbox"/>												
Time Estimation <u>22</u> estimated as 30 seconds		Describe turn Slow steps		Cannot do test (explain) N/A									
Finger to Nose (Draw lines to spots touched)  Eyelid tremors, laughing		PUPIL SIZE		Room light	Darkness (5.0 - 8.5)								
		Left Eye		6.0	8.5	5.0 - 7.0							
		Right Eye		6.0	8.5	5.0 - 7.0							
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light: Normal									
Blood Pressure 148 / 92		Temperature 98.0 °F		RIGHT ARM 									
Muscle Tone: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Nothing observed		LEFT ARM 									
Comments:													
What drugs or medications have you been using? Medical Marijuana		How much? 2 or 3 grams		Time of use? 2 hours ago	Where were the drugs used? (Location) At home								
Date / Time of arrest: 06/18/17 / 2005	Time DRE was notified: 2110	Evaluation start time: 2130	Evaluation completion time: 2225	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation									
Officer's Signature: Jonathan Huber		Reviewed/approved by / date:			DRE # 12367								
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 checked="" type="checkbox"/> Cannabis									

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: DUBY, Sharon A.

- 1. Location:** The drug evaluation was conducted in the booking area of the King County Jail. The darkroom examinations were conducted in the staff restroom. Both areas have adequate lighting and have a smooth concrete flooring with no obstructions.
- 2. Witnesses:** The evaluation was observed and recorded by Deputy Steve Johnson from the King County Sheriff's Office.
- 3. Breath Alcohol Test:** The suspect provided a breath test to Trooper Axtman prior to my arrival with a 0.00 BAC result.
- 4. Notification and Interview of the Arresting Officer:** I was on duty and requested to contact Trooper Axtman of the Washington State Patrol for a drug evaluation at the King County Jail. When contacted, Trooper Axtman explained that Ms. DUBY had rear-ended another vehicle at a stop light on Highway 99. She was not injured and did not require medical treatment. An odor of marijuana was detected coming from the interior of her vehicle. She claimed to possess a Washington medical marijuana card and admitted smoking marijuana a short time prior to the crash. He observed that her eyes were red and bloodshot, and her speech was slow and thick. After confirming that she was not injured, Trooper Axtman administered SFSTs to her. According to Trooper Axtman, he administered the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and the One Leg Stand (OLS) tests. Trooper Axtman did not observe any clues of HGN, but did observe two clues on the W&T, and three clues on the OLS. Trooper Axtman also administered the Finger to Nose (FTN) and Modified Romberg Balance tests. On the FTN test, she had difficulty maintaining her balance and was not able to touch her nose as directed. She also had distinct eyelid tremors. Trooper Axtman suspected that DUBY was impaired by Cannabis and arrested her for DWI. Based on Trooper Axtman's training regarding the quick dissipation of THC in a person's blood, he transported her to the Harborview Hospital and requested a blood specimen. After obtaining a telephonic search warrant, she consented to the blood draw. After obtaining the blood sample, Trooper Axtman transported her to the King County Jail and requested a DRE.
- 5. Initial Observation of the Suspect:** My first contact with Ms. DUBY was upon entering the booking area at the King County Jail. She appeared to be relaxed and had a dazed appearance. Her eyes were red and bloodshot, and her pupils appeared dilated. She also had droopy eyelids. She was displaying poor balance and several times leaned against a chair to steady herself. Her speech was slow and thick. I introduced myself to her and requested that she complete a drug evaluation. She at first was hesitant, but then agreed to do the evaluation. I noted that she was wearing blue jeans, a blue Seattle Seahawks tee-shirt and slip-on canvas shoes.
- 6. Medical Problems and Treatment:** DUBY indicated that she occasionally gets migraine headaches and uses marijuana for them. She indicated she was not diabetic, not epileptic and had no injuries or physical defects. She also indicated that she was not injured in the crash earlier in the evening. She indicated that 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 marijuana. When asked how often she uses it, she indicated "at least once a day."
- 7. 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, she had an approximate two-inch front to back and side to side sway. While doing the test, she exhibited eyelid tremors. She opened her eyes at 22 seconds. I asked her how long she had her eyes closed and she indicated, "About 30 seconds." I asked how she estimated the time and she told me she "just counted in her head."

Walk and Turn: For this test, a painted line of the 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 stopped while walking once at step seven. When she got to ninth step, she seemed unsure of what to do next. After a short pause, she made an incorrect turn by taking a series of slow steps. On the second nine steps, she stopped after her first step. She used her arms to balance twice, and stepped off the line to her right on step seven. Duby was given the opportunity to remove her shoes for this test and she requested to keep them on.

One Leg Stand: During this test and while raising her right foot, Duby swayed and used her arms for balance. Leg tremors were observed. When standing on her right foot and raising her left foot, she swayed and used her arms for balance. She also had significant leg tremors. Her counting was slow and was only able to get to 1,025 and 1,024 in the 30 seconds.

Finger to Nose: During this test, Duby exhibited eyelid tremors and at one point, started laughing. 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. She had a lack of convergence in both eyes. 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 going from 5.0 mm to 7.0 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, at 96, 96 and 94 beats per minute (bpm). Her blood pressure was also above the DRE average ranges and was measured at 148/92 mm Hg. Her temperature was measured at 98.0 degrees and was within the DRE average range. Her muscle tone was near normal.

9. Signs of Ingestion: Duby had a greenish coating on her tongue and had several pieces of green matter in her teeth. No other signs of ingestion or injection were observed.

10. Suspect's Statements: Duby was asked if she remembered Trooper Axtman advising her of her Miranda rights. She indicated that she did. When asked about her self-medicating with marijuana to treat her migraines, she admitted to smoking 2-3 grams of marijuana at home about two hours before the crash. She said she needed to run some errands and did not think the marijuana had affected her, so she drove. She admitted to smoking marijuana at least once a day and has been smoking marijuana for the past 5 to 6 years. When asked what strain she usually smokes, she said she prefers Indica because of the relaxing effects. When asked about the crash she was in earlier, she indicated she was "just not paying attention" and when a car stopped in front of her at traffic light, she couldn't stop in time and "bumped" the car in front of her.

11. DRE's Opinion: It is my opinion as a certified Drug Recognition Expert that Duby is under the influence of Cannabis and is unable to operate a vehicle safely.

12. Toxicological Sample: As previously reported, Trooper Axtman obtained a blood sample from the suspect prior to the start of my evaluation. Trooper Axtman collected the blood sample at approximately 2030 hours and submitted it as evidence pending analysis by the Washington State Patrol Forensic Laboratory.

13. Miscellaneous: Refer to Trooper Axtman's arrest report for additional details.

Session 22

Overview of Signs and Symptoms



MAJOR INDICATORS	POSS EFFECTS	CNS DEPRESS	CNS STIM	HALLUC	DISS ANESTHETIC	NARC ANALGESIC	INHALANT	CANNABIS
HGN								
VGN								
LOC								
PUPIL SIZE								
REACTION TO LIGHT								
PUSE RATE								
BLOOD PRESSURE								
BODY TEMPERATURE								
MUSCLE TONE								

Learning Objectives

- Describe possible effects that may be observed in each clinical indicator of drug impairment
- Identify effects most likely to be observed with subjects under the influence of each drug category

Upon successfully completing this session, the participant will be able to:

- Describe the possible effects that may be observed in each clinical indicator of drug impairment
- Identify the effects that will most likely be observed with subjects under the influence of each drug category

CONTENT SEGMENTS

- A. The Clinical and General Indicators and their Possible Effects Associated with the Drug Categories
- B. Effects Associated with the Drug Categories and Developing a Drug Symptomatology Matrix

LEARNING ACTIVITIES

Interactive Discussions
Participant Activity

Clinical Indicators of Drug Impairment

- Horizontal Gaze Nystagmus
- Vertical Gaze Nystagmus
- Lack of Convergence
- Pupil Size
- Reaction to Light
- Pulse Rate
- Blood Pressure
- Body Temperature
- Muscle Tone

A. The Clinical and General Indicators and their Possible Effects Associated with the Drug Categories

Clinical and General Indicators

- For Drug Recognition Expert (DRE) purposes, Clinical 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.

Clinical Indicators of Drug Impairment

The Clinical Indicators of drug impairment are (point to the Clinical Indicators on the matrix):

- 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

Possible Effects: HGN

- Either HGN will be present
- Or it will be none (meaning it is not present)



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)**

PRESENT OR NONE

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

- Either VGN will be *present*
- Or it will be *none* (meaning it is not present)



Possible Effects: VGN

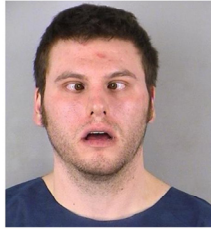
With VGN, there are also only two possible effects.

- Either it will be **present**
- Or it will be **none (meaning it is not present)**

PRESENT OR NONE

Possible Effects: LOC

- Either LOC will be *present*
- Or it will be *none* (meaning it is not present)



Possible Effects: LOC

For **LOC**, there are also only two possible effects.

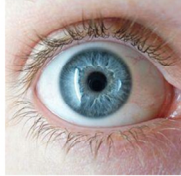
- Either LOC will be **present**
- Or it will be **none (meaning it is not present)**

PRESENT OR NONE

Just as with nystagmus, there is no drug that “cures” LOC.

Possible Effects: Pupil Size

- Pupils might be normal
- Or, pupils might be dilated
- Or, pupils might be constricted



Possible Effects: 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**

NORMAL OR DILATED OR CONSTRICTED

Session 22 - Overview of Signs and Symptoms

Possible Effects: Pupil Size

- Pupils might react in a normal manner
- Or, pupils might react slow
- Or, little or none visible



Drug Recognition Expert Course 22-8

Possible Effects: 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 or none visible

NORMAL OR SLOW OR LITTLE OR NONE VISIBLE

In some instances, you may observe very little, or no visible Reaction to Light. If there is a visible reaction of the pupils, it is possible Rebound Dilation was present.

Possible Effects: Vital Signs

Pulse Rate, or Blood Pressure, or Body Temperature could be:

- Normal
- Up
- Down



Possible Effects: Vital Signs

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**

NORMAL OR UP OR DOWN

Possible Effects: Muscle Tone

- Normal
- Flaccid
- Rigid

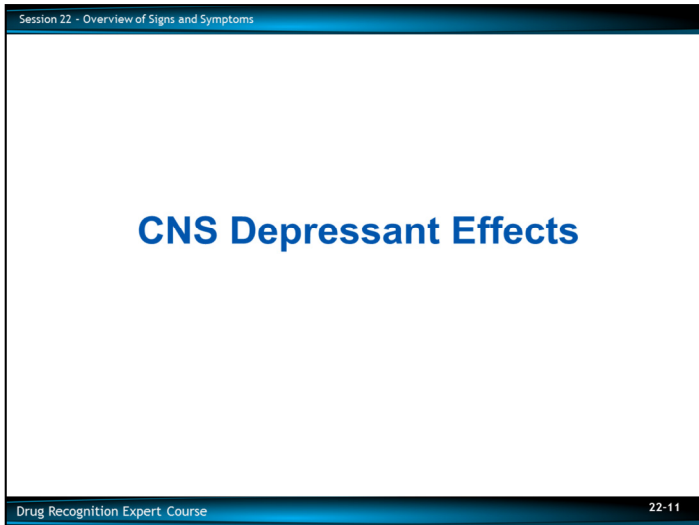


Possible Effects: Muscle Tone

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

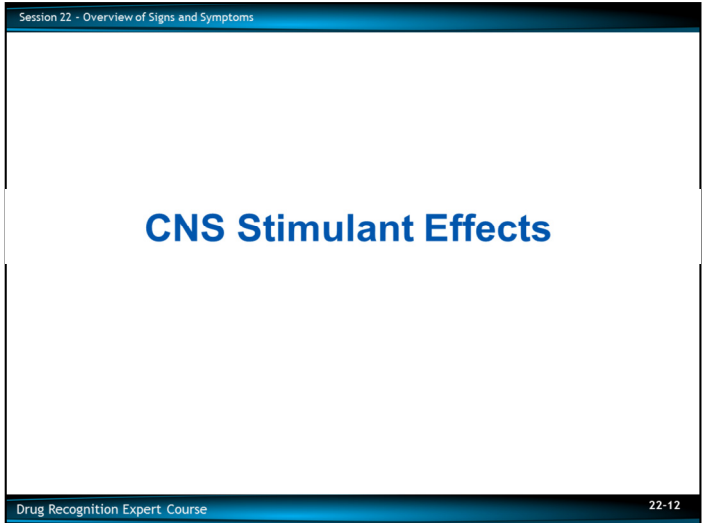
NORMAL OR FLACCID OR RIGID



B. Effects Associated with the Drug Categories and Developing a Drug Symptomatology Matrix

CNS Depressants

- HGN: **present**
- VGN: **present** (i.e., at high doses 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**



CNS Stimulants

- 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**
-
-
-
-
-
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-
-
-
-
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-
-
-
-

Hallucinogen Effects

Hallucinogens

- 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**

Dissociative Anesthetic Effects

Dissociative Anesthetics

- 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**

Narcotic Analgesic Effects

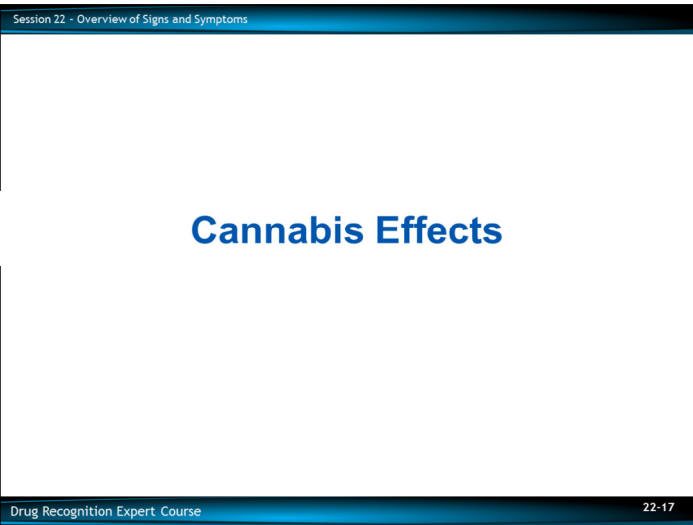
Narcotic Analgesics

- 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**
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-

Inhalant Effects

Inhalants

- 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**



Cannabis

- 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)

Session 22 - Overview of Signs and Symptoms

QUESTIONS?

Drug Recognition Expert Course 22-20

Drug Symptomatology Sources

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
LACK OF CONVERGENCE	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

FOOTNOTE: These indicators are those most consistent with the category, keep in mind that there may be variations due to individual reaction, dose taken and drug interactions.

- (1) Soma, Quaaludes and some antidepressants usually dilate pupils
- (2) Quaaludes, ETOH and some antidepressants may elevate
- (3) Certain psychedelic amphetamines may cause slowing
- (4) Normal, but may be dilated
- (5) Down with anesthetic gases, up with volatile solvents and aerosols
- (6) Pupil size possibly normal

MAJOR INDICATORS	CNS DEPRESSANTS	CNS STIMULANTS	HALLUCINOGENS	DISSOCIATIVE ANESTHETICS	NARCOTIC ANALGESICS	INHALANTS	CANNABIS
GENERAL INDICATORS	Disoriented Droopy eyelids Drowsiness Drunk-like behavior Slow, sluggish reactions Thick, slurred speech Uncoordinated Unsteady walk	Anxiety Body tremors Dry mouth Euphoria Exaggerated reflexes Excited Eyelid tremors Grinding teeth Increased alertness Insomnia Irritability Redness to nasal area Restlessness Runny nose Talkative	Body tremors Dazed appearance Difficulty with speech Disoriented Flashbacks Hallucinations Memory loss Nausea Paranoia Perspiring Poor perception of time and distance Synesthesia Uncoordinated NOTE: With LSD, Piloerection may be observed (goose bumps, hair standing on end).	Blank stare Confusion Chemical odor (PCP) Cyclic behavior Difficulty with speech Disoriented Early HGN Onset Hallucinations Incomplete verbal responses Increased pain threshold "Moon Walking" Non-communicative Perspiring Possibly violent Sensory distortions Slow, slurred speech Warm to touch	Constricted pupils Depressed reflexes Droopy eyelids Drowsiness Dry mouth Euphoria Itching Nausea "On the Nod" Puncture marks Slow, low, raspy speech Slowed breathing NOTE: Tolerant users exhibit relatively little psychomotor impairment.	Bloodshot eyes Confusion Disoriented Flushed face Intense headaches Lack of muscle control Non-communicative Odor of substance Possible nausea Residue of substance Slow, thick, slurred speech Watery eyes	Altered time/distance perception Alterations in thought formation Body tremors Bloodshot eyes Debris in mouth Disoriented Drowsiness Eyelid tremors Impaired memory Increased appetite Lack of concentration Mood changes Odor of Marijuana Panic reactions Paranoia Possible paranoia Possible vomiting Relaxed inhibition Sedation
DURATION OF EFFECTS	Ultra-Short: A few minutes Short: Up to 5 hours Intermediate: 6-8 hours Long: 8-14 hours	Cocaine: 5-90 minutes Amphetamines: 4-8 hours Meth: 12 plus hours	Duration varies widely from one hallucinogen to another. LSD: 10 - 12 hours Psilocybin: 2-3 hours	PCP Onset: 1-5 minutes Peak Effects: 15-30 minutes Exhibits effects up to 4-6 hours DXM: Onset 15-30 min. Effects 3-6 hours	Heroin: 4-6 hours Methadone: Up to 24 hours Others: Vary	6-8 hours for most volatile solvents Anesthetic gases and aerosols – very short duration	2-3 hours – exhibit and feel effects (Impairment may last up to 24 hours, without awareness effects.)
USUAL METHODS OF ADMINISTRATION	Injected (occasionally) Insufflation Oral	Insufflation Injected Oral Smoked	Injected Insufflation Oral Smoked Transdermal	Eye drops Injected Insufflation Oral Smoked	Injected Insufflation Oral Smoked	Insufflation	Oral Smoked Transdermal
OVERDOSE SIGNS	Clammy skin Coma Dilated pupils Rapid, weak pulse Shallow breathing	Agitation Hallucinations Increased body temperature	Long intense "trip"	Long intense "trip"	Cold, clammy skin Coma Convulsions Slow, shallow breathing	Cardiac arrhythmia Possible psychosis Respiration ceases Severe nausea/vomiting Risk of death	Excessive vomiting Fatigue Paranoia Possible psychosis

Session 23

Curriculum Vitae Preparation and Maintenance



Learning Objectives

- Describe and discuss purpose of DRE Curriculum Vitae
- Identify elements of DRE Curriculum Vitae
- Prepare basic Curriculum Vitae
- Update and extend Curriculum Vitae

Upon successfully completing this session, the participant will be able to:

- Describe and discuss the purpose of the Drug Recognition Expert (DRE) Curriculum Vitae (CV)
- Identify the elements of a DRE Curriculum Vitae
- Prepare a basic Curriculum Vitae summarizing their relevant training, education, experience, and accomplishments to date
- Update and extend the Curriculum Vitae as relevant achievements continue to expand

CONTENT SEGMENTS

- A. Purpose of the Curriculum Vitae
- B. Preparation for Court Qualification
- C. Curriculum Vitae Content
- D. Guidelines for Curriculum Vitae Preparation and Maintenance

LEARNING ACTIVITIES

Instructor-Led Presentations

Group Work Session

Reading Assignments

Lay Witness



A. Purpose of the Curriculum Vitae (CV)

The basic purpose of the CV is to record education, training, and experience in a single document for use in establishing qualifications when testifying in court.

Generally a witness can testify only to personal knowledge.



Basic rule is 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 the 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.

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.

Expert Witness

ONLY court can determine whether a witness is qualified to testify as an expert



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.

Voir Dire

To seek the truth
(Literally, "To see, to say")



Witnesses' qualification is achieved through Voir Dire Examination.

- Voir Dire – literally, French for "to see, to say;" loosely translated as "to seek the truth"

Preparation for Court Qualification



B. Preparation for Court Qualification

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 the 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.

Expertise/Qualifications



Drug Recognition Expert Course

DREs will base their expertise on the following areas:

- Formal education and training
- Relevant experience
- Outside readings and studies

Curriculum Vitae Content

Formal Education

- High Schools attended
- Colleges and Universities attended
- University level courses
- Specialized College



C. Curriculum Vitae Content

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

Curriculum Vitae Content Formal Training

- **Police Academy (recruit training)**
- **Specialized police or in-service training**
- **Other specialized training**
- **Military training**
- **Lectures and seminars**



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

Curriculum Vitae Content

Experience



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, assignments, etc.
- Prior law enforcement experience
 - List employer, dates, duties, assignments, etc. which provided experience in the area of drugs
- Other job related experience

Drug enforcement/evaluation experiences:

- Total vehicle stops
- Total DWI investigations
- Total DWI arrests
- Total drug evaluations
- Total filings
- Total convictions

Curriculum Vitae Content

Prior testimony

- Municipal court
- Superior court
- Number of times qualified as an expert in drug cases
- Number of times qualified as an expert in other cases



Prior Testimony


- Municipal court
- Superior court
- Number of times qualified as an expert in drug cases
- Number of times qualified as an expert in other cases

For bulleted items above: list dates, courts, judges, charges, areas qualified, etc.

Session 23 - Curriculum Vitae Preparation and Maintenance

Curriculum Vitae Content

Outside Readings and Studies



Drug Recognition Expert Course 23-13

Outside Reading and Studies

- Drug-related texts read
- List title(s), author(s), subject(s), etc.
- Departmental training bulletins
- Journals
- Research papers
- Drug-related videos viewed

Curriculum Vitae Content

Published Works



Published Works (if applicable)

List all relevant writings you authored or co-authored, including departmental briefing papers, training manuals/bulletins, magazine articles, books, etc.

Curriculum Vitae Preparation and Maintenance



D. Guidelines for Curriculum Vitae Preparation and Maintenance

- List information in chronological order
 - Formal education should be normal chronological order
 - Advanced/specialized training should be in reverse chronological order (most recent training first)
- Review and update CV frequently and record date of review

QUESTIONS?

Sample Curriculum Vitae

SAMPLE Curriculum Vitae NUMBER ONE

The Curriculum Vitae of:

Sgt. David C. Regan

Latest Update: 4/25/17

Sgt. David C. Regan

Introduction

Sergeant David Carroll Regan is a supervisor in the Traffic Division, Shelton Police Department. He currently commands the special Impaired Driving Enforcement Activities Squad (IDEAS), a unit he was instrumental in forming. Sgt. Regan is a 15-year veteran of law enforcement. Prior to joining the Shelton Police Department ten years ago, he served for five years as a deputy with the Fairfield County Sheriff's Department.

Sergeant Regan has been assigned to the Traffic Division since his promotion to sergeant on 11/18/15. His duties have included coordination of speed and DWI enforcement activities, the Joint Shelton-Derby Task Force for Sobriety Checkpoints, the Officer Friendly Program, the Motorcycle Safety Education Project, and general supervision of Traffic Division officers. He also serves as the Department's principal instructor for radar speed measurement, Standardized Field Sobriety Testing and Drug Recognition Expert training.

Sergeant Regan holds a Bachelor's Degree in the Administration of Justice from Fairfield University, and currently is a candidate for a Master's Degree in Police Science and Administration at the University of Stratford. He also holds an Instructor Certificate from the State Law Enforcement Training Board.

Sergeant Regan has served on two committees of the Governor's Task Force to Prevent Drunk Driving: The Standardized Field Sobriety Tests Committee and The Paperwork Reduction Committee. The one page Standard Notetaking Guide for Field Sobriety Testing that is employed by all departments statewide was designed by him.

Law Enforcement Experience

11/18/15 to Present	Sergeant, Traffic Division Shelton Police Department Supervisor, IDEAS Unit Drug Recognition Expert Program Coordinator
7/8/12 to 11/17/15	Patrol Officer First Class Training and Operations Shelton Police Department Unit Supervisor, Traffic Law Enforcement Training Branch
9/11/08 to 7/7/12	Patrol Officer Third Precinct, Motorcycle Shelton Police Department

Sgt. David C. Regan

Law Enforcement Experience (continued)

11/5/06 to 9/10/08	Patrol Officer First Precinct Shelton Police Department
10/10/05 to 11/4/06	Deputy Traffic Patrol Fairfield County Sheriff's Department

Special Police Training

10/14	NHTSA/IACP DRE Instructor Training (Certified as a DRE Instructor on 11/12/08)
8/13	Drug Enforcement Administration Drug Interdiction Seminar
11/11	NHTSA/IACP Drug Evaluation and Classification Training: DRE School (Certified as a DRE on 1/28/12)
10/11	NHTSA/IACP Drug Evaluation and Classification Training: PRE School
3/11	Southeastern University Institute of Police Technology Special Conference: Managing DWI Squads
4/10	International Association of Chiefs of Police Instructor Training in Horizontal Gaze Nystagmus and Divided Attention Field Sobriety Tests
10/09	University of Stanford, Northern Police Institute Standardized Field Sobriety Testing
6/09	Acme Scientific Instruments, Inc. (Certified to perform inspection and repair of the Intoxotector J2Z breath testing instrument on 6/22/09)

Sgt. David C. Regan

Court Qualification Record

8/17	Qualified as Drug Recognition Expert in a case involving Phencyclidine impairment. (Judge Sally Grey, 8 th District)
11/15	Qualified as Drug Recognition Expert in a case involving a combination of CNS Stimulant and Narcotic Analgesic. (Judge Lewis Buchanan, Superior Court)
3/14	Qualified as Drug Recognition Expert in a case involving Cannabis impairment. (Judge Sally Grey, 8 th District)
9/12	Qualified as Drug Recognition Expert in a case involving Narcotic Analgesic impairment. (Judge Jerome Byrnes, 8 th District)

Specialized Readings

<u>Title</u>	<u>Author</u>
A Primer of Drug Action	Robert Julien, Ph.D.
The Practitioner's Guide to Psychoactive Drugs	Alan J. Gelenberg and Ellen L. Bassuk, M.D.
Drug Abuse: A Manual for Law Enforcement Officers	Donald K. Fletcher
Licit and Illicit Drugs	Edward M. Brecher
Chocolate to Morphine	Andrew Weil, M.D. and Winifred Rosen
The Brain & the Actions of Cocaine Opiates, and Marijuana	National Institute on Drug Abuse
Marijuana Alert	Peggy Mann

SAMPLE Curriculum Vitae NUMBER TWO

TRUMBULL POLICE DEPARTMENT

The Curriculum Vitae of:

OFFICER ANN MARIE REED
Drug Recognition Expert

Latest Update: 4/25/17

Officer Ann M. Reed

Introduction

Officer Ann Marie Reed is an eight-year veteran with the Trumbull Police Department. She is currently assigned to the Special Operations Branch of the Administrative Division, where she serves as a Narcotics Enforcement Officer. Previously, she has served in the same Branch as a Vice Enforcement Officer, and as a patrol officer in the Department's first and second precincts.

Officer Reed is a graduate of Monroe College, with the Bachelor's Degree in Police Science and Administration. She is currently a candidate for the JD Degree at the Law School of the University of Bridgeport.

Law Enforcement Experience

5/12/16 to Present	Narcotics Enforcement Officer and Drug Recognition Expert Special Operations Branch Trumbull Police Department
3/26/14 to 5/11/16	Vice Enforcement Officer Special Operations Branch Trumbull Police Department
9/23/08 to 3/25/14	Patrol Officer First Precinct Trumbull Police Department
8/28/07 to 9/22/08	Patrol Officer Second Precinct Trumbull Police Department
5/15/07 to 8/25/07	Trainee Fairfield County Regional Police Academy (Graduated 8/25/07)

Special Police Training

2/15	University of Norwalk, Police Science Institute Seminar: Packaging and Transport of Illicit Drugs
10/14	University of Norwalk, Police Science Institute Seminar: Suppression of Drug-related Crime
3/12	NHTSA/IACP Drug Evaluation and Classification Training: DRE School (Certified as a DRE on 5/22/12)

Officer Ann M. Reed

Special Police Training (Continued)

- 2/12 Fairfield County Regional Police Academy
Drug Evaluation and Classification Training: PRE-School
- 10/08 Fairfield County Regional Police Academy
Standardized Field Sobriety Testing

Publications Authored

- Reed, Ann M. and Cockroft, Robert S., “Narcotics Enforcement Tactics for the Medium-sized Department”; The Police Chief. January 17, 2017.
- Reed, Ann M., Procedures for Requesting Drug Recognition Expert Services; Training Bulletin for the Trumbull Police Department. 6/13.
- Reed, Ann M., Recognizing the Heroin Addict; Training Bulletin for the Trumbull Police Department. 1/13.

Court Qualification Record

- 11/16 Qualified as an expert witness for identification of Heroin impairment. (Judge Michael Adkins, 7th District)
- 3/16 Qualified as a Drug Recognition Expert in a case involving a combination of CNS Stimulant and Narcotic Analgesic. (Judge Roberta Mayer, 7th District)
- 9/12 Qualified as an expert witness for identification of “track” marks. (Judge Charles Peltier, 7th District)

Specialized Readings

<u>Title</u>	<u>Author</u>
Signs and Symptoms Handbook	Susan R. Williams and Barbara McVan.
Drugs From A to Z	Richard R. Lingeman
Guide to Psychoactive Drugs	Richard Seymour, MA and David E. Smith, M.D.
Heroin: Its History, Pharmacology, and Treatment	Humberto Fernandez and Therissa A, Libby, Pd. D.
Report on Synthetic China White: Fentanyl	Det. James Miller, LAPD

Session 24

Drug Combinations



Learning Objectives

- **Explain prevalence of polydrug use**
- **Describe possible combinations of drug effects**

Upon successfully completing this session, the participant will be able to:

- Explain the prevalence of polydrug use 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

Learning Objectives

- Define terms “Null”, “Overlapping”, “Additive” and “Antagonistic”
- Identify specific effects most likely to be observed
- Describe novel psychoactive substances and their effects

- 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

CONTENT SEGMENTS

- A. The Prevalence of Polydrug and Polycategory Use
- B. Possible Effects of Drug Combinations
- C. Identifying Expected Indicators of Specific Combinations
- D. Novel Psychoactive Substances

LEARNING ACTIVITIES

Instructor-Led Presentations
Interactive Discussions
Worksheet Exercise

What is Polydrug Use?

Ingesting two or more drugs



A. The Prevalence of Polydrug and Polycategory Use

Polydrug use means ingesting two or more drugs.

In many cases, one drug is used as a base or primary drug with additional drugs to leaven or compensate for the side effects of the primary drug and make the experience more enjoyable with drug synergy effects, or to supplement for primary drug when supply is low.

What is Polycategory Use?

Ingesting drugs from two or more drug categories



Polycategory Use

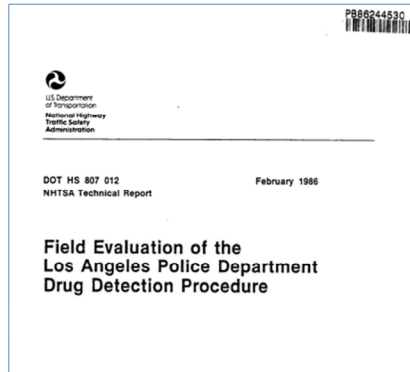
For our purposes, polycategory use is defined as: ingesting drugs from two or more drug categories.

Per the National Cannabis Prevention and Information Center (NCPIC), the most common type of polydrug mix is marijuana and alcohol. Alcohol may increase the rate of absorption of THC, the primary active component of cannabis, or marijuana.

Using alcohol with marijuana can strengthen the effect of the latter and cause a condition referred to as “greening out.” This is a term used to describe when marijuana users experience a nauseous sensation that kicks in when they feel sick and overwhelmed after getting too high and may experience paleness, feeling dizzy accompanied with a spinning sensation.

Alcohol was often found in combination with one or more drugs.

Prevalence of Polydrug Use



Prevalence of Polydrug Use

It is actually more common for a Drug Recognition Expert (DRE) to encounter polydrug users than single drug 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

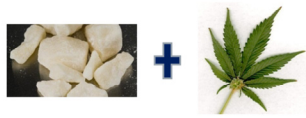
Prevalence of Polycategory Use

The National DRE database indicates approximately 36% of all DRE-reported cases revealed two or more drug categories detected.

Source: NHTSA/IACP DRE Database (2016)

- The National DRE database indicates approximately 36% of all DRE-reported cases revealed two or more drug categories detected

Common Combinations of Drugs



Cocaine and Cannabis



Cocaine and Heroin



PCP and Cannabis



Alcohol and practically anything else

Common Combinations

- Cocaine and Cannabis
- Cocaine and Heroin
- PCP and Cannabis
- Alcohol and practically anything else

Many of the subjects you examine will be exhibiting the effects of two or more drugs acting together.

Drug Combinations

- Cocaine and Heroin – “Speedball”
- PCP and Heroin – “Fireball”
- Crack and PCP – “Space base”
- Crack and Marijuana – “Primo”
- Xanax and Methamphetamine

B. Possible Effects of Drug Combinations

Combinations

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

Session 24- Drug Combinations

Null Effect

No action + No action = No action

Drug Recognition Expert Course 24-11

Four Effects

Null Effect

The first effect is called the “Null Effect.” If neither drug affects a particular indicator of impairment, their combination also will not affect that indicator.

No action plus no action equals no action

Session 24- Drug Combinations

Null Effect

Example #1:
HGN
Narcotic Analgesic and Cannabis

Drug Recognition Expert Course 24-12

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

Null Effect

Example #2:

Reaction to Light

Dissociative Anesthetics and Cannabis

Example #2: Reaction to Light - Dissociative Anesthetics and Cannabis

Another example of the Null Effect:

- Neither drug affects reaction to light

Session 24- Drug Combinations

Null Effect

Example #3:
Body Temperature
CNS Depressants and Cannabis

Drug Recognition Expert Course 24-14

Example #3: Body Temperature – Central Nervous System (CNS) Depressants and Cannabis

Another example of the Null Effect:

- Neither a CNS Depressant nor Cannabis usually affects body temperature; the combination of the two leaves body temperature in the DRE average range
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Overlapping Effect



Overlapping Effect

The second effect is called the “Overlapping Effect.”

Overlapping Effect

Example #1:

Pupil Size

CNS Stimulants and Dissociative Anesthetics

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

Overlapping Effect

Example #2:

HGN

CNS Depressants and Narcotic Analgesics

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

Session 24- Drug Combinations

Overlapping Effect

Example #3:
Body Temperature
Dissociative Anesthetics and
CNS Depressants

Drug Recognition Expert Course 24-18


Example #3: Body Temperature - Dissociative Anesthetics and CNS Depressants

Another example of the "Overlapping Effect":

- Dissociative Anesthetics cause an elevated temperature. CNS Depressants typically do not effect temperature.
 - Under the influence, body temperature should be up or elevated

Session 24- Drug Combinations

Additive Effect



The diagram illustrates the concept of an additive effect. It features three rectangular boxes. The first box on the left is dark blue with the word "Action" in white. To its right is a plus sign (+). The second box is also dark blue with the word "Action" in white. To its right is an equals sign (=). The final box on the right is red with the words "Greater Action" in white. The entire diagram is centered on a white background.

Drug Recognition Expert Course 24-19

Additive Effect

The third effect is called the Additive Effect.

- If two drugs independently affect some indicator in the same way, their use in combination will also affect the indicator and the effect may be reinforced
- Action plus the same action produces reinforced action

Session 24- Drug Combinations

Additive Effect

Example #1:
Pulse Rate
Cannabis and Inhalants

Drug Recognition Expert Course 24-20

Example #1: Pulse Rate - Cannabis and Inhalants

- Cannabis and Inhalants both elevate pulse rate
 - Therefore, pulse rate should be elevated, or up

Additive Effect

Example #2:

Pupil Size

CNS Stimulants and Hallucinogens

Example #2: Pupil Size - CNS Stimulants and Hallucinogens

- CNS Stimulants and Hallucinogens both dilate the pupils
 - Therefore, pupils should be dilated

Additive Effect

Example #3:

Blood Pressure

CNS Depressants and Narcotic Analgesics

Example #3: Blood Pressure - CNS Depressants and Narcotic Analgesics

- CNS Depressants and Narcotic Analgesics both depress blood pressure
 - Therefore, the blood pressure should be depressed or down

Session 24- Drug Combinations

Antagonistic Effect

Action + Opposite Action = Unpredictable

Drug Recognition Expert Course 24-23

Antagonistic Effect

The fourth effect is called the Antagonistic Effect.

When two drugs produce an “Antagonistic Effect,” they tend to try to override or compete with the effect of the other drug(s) until the drug with the longest duration of effects prevails. Normally, whichever drug is more psychoactive at the time determines what we’ll see.

Antagonistic Effect

- There is not an Antagonistic Effect for:
 - HGN
 - VGN
 - LOC
 - Reaction to Light

Whichever drug is more psychoactive at the time determines what will be observed. This is based upon the potency of the drug, the quantity ingested, the time of ingestion, and the duration of effects.

There is not an Antagonistic Effect for :

- HGN
 - Vertical Gaze Nystagmus (VGN)
 - LOC
 - Reaction to Light
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Antagonistic Effect

Example #1:

Pulse Rate

CNS Stimulants and CNS Depressants

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

Session 24- Drug Combinations

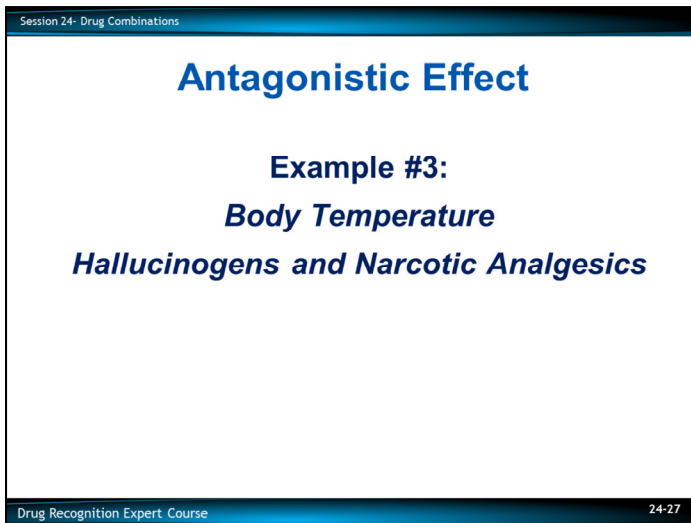
Antagonistic Effect

Example #2:
Pupil Size
CNS Stimulants and Narcotic Analgesics

Drug Recognition Expert Course 24-26

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



Example #3: Body Temperature - Hallucinogens and Narcotic Analgesics

- Hallucinations elevate body temperature, Narcotic Analgesics depress body temperature
 - Body temperature will be up, down or within the DRE average ranges

With an “Antagonistic Effect,” we just can’t predict what we will see.

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.

Cannabis and CNS Stimulant

Impairment Indicator	Cannabis	CNS Stimulant	Type of Effect	What Should We See?

(6) Pupil Size Possibly Normal.

HGN

A specific example: consider a person who is under the influence of a combination of Cannabis and a CNS Stimulant.

Neither Cannabis nor a CNS Stimulant causes HGN.

This is a case of no action plus no action equals no action. We will not see HGN with this combination.

VGN

Neither Cannabis nor a CNS Stimulant causes VGN. This is another Null Effect. We won't see VGN.

LOC

Cannabis causes LOC; a CNS Stimulant does not.

This is a case of action plus no action equals action. We will see LOC with this combination.

Pupil Size

CNS Stimulants dilate pupils; Cannabis either dilates pupils or has no effect on them.

This may be a case of action plus no action equals 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.

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?

Drug Recognition Expert Course 24-29

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.

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.

Body Temperature

Cannabis usually does not affect body temperature. But CNS Stimulants usually elevate 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.

Session 24- Drug Combinations

Dissociative Anesthetic and Narcotic Analgesic

Impairment Indicator	Dissociative Anesthetic	Narcotic Analgesic	Type of Effect	What Should We See?

Drug Recognition Expert Course 24-30

Dissociative Anesthetics and Narcotic Analgesics

Another specific example: consider a person under the influence of a combination of a Dissociative Anesthetic and a Narcotic Analgesic.

HGN

A Dissociative Anesthetic causes HGN, Narcotic Analgesics do not. This is an Overlapping Effect. We can expect to see HGN with this subject.

VGN

A Dissociative Anesthetic should cause VGN, especially at high doses. A Narcotic Analgesic will not cause VGN. This is another Overlapping Effect. We should see VGN in this subject.

LOC

A Dissociative Anesthetic causes LOC; Narcotic Analgesics do not. Another Overlapping Effect. We can expect to see LOC.

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.

Session 24- Drug Combinations

Dissociative Anesthetic and Narcotic Analgesic

Impairment Indicator	Dissociative Anesthetic	Narcotic Analgesic	Type of Effect	What Should We See?

Drug Recognition Expert Course 24-31

Reaction to Light

A Dissociative Anesthetic doesn't affect pupil's Reaction to Light; but a Narcotic Analgesic usually produces a "little or none visible" reaction.

This, too, is an Overlapping Effect. We can expect a "little or none visible" reaction in this subject's pupils.

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.

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.

Dissociative Anesthetic and Narcotic Analgesic

Impairment Indicator	Dissociative Anesthetic	Narcotic Analgesic	Type of Effect	What Should We See?

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.

Muscle Tone

A Dissociative Anesthetic usually causes rigid muscle tone. A Narcotic Analgesic usually causes flaccid muscle tone. This could be an Antagonistic Effect. Muscle tone could be normal, rigid, or flaccid.

Cannabis, CNS Stimulant, and Hallucinogen

Impairment Indicator	Cannabis	CNS Stimulant	Hallucinogen	Type of Effect	What Should We See?

Cannabis, CNS Stimulant, and Hallucinogens

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.

The pupils should be dilated.

Session 24- Drug Combinations

Cannabis, CNS Stimulant, and Hallucinogen

Impairment Indicator	Cannabis	CNS Stimulant	Hallucinogen	Type of Effect	What Should We See?

Drug Recognition Expert Course 24-34

Reaction to Light

Cannabis does not effect 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.

We could probably see a slow Reaction to Light.

Pulse Rate

Cannabis will normally elevate the pulse rate as will CNS Stimulants and Hallucinogens. This is an example of an Additive Effect.

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.

Blood pressure should be elevated with this combination.

Cannabis, CNS Stimulant, and Hallucinogen

Impairment Indicator	Cannabis	CNS Stimulant	Hallucinogen	Type of Effect	What Should We See?

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.

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.

The muscle tone should be rigid with this combination.

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.

Drug Recognition Expert Course 24-36

C. Identifying Expected Indicators of Specific Combinations

Drug Symptomatology Matrix

The Matrix outlines the expected results of the drug influence evaluation for each drug category.

Novel Psychoactive Substances

Synthetic Cannabinoids



D. Novel Psychoactive Substances

The ever-increasing number of Novel Psychoactive Substances (NPS) emerging and the parallel changes in drug scenarios represent a challenge for DREs. NPS include Synthetic Cannabinoids, Cathinone Derivatives, Psychedelic Phenethylamines, novel Stimulants, Synthetic Opioids, Tryptamine Derivatives, and many more.

Users are typically attracted by these substances due to their intense psychoactive effects and likely lack of detection in routine drug screenings. These drugs act on a range of neurotransmitter receptors including Dopamine, Cannabinoid, and Opioid receptors.

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
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Novel Psychoactive Substances

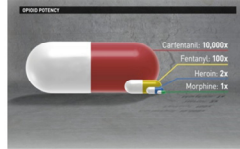
Synthetic Cathinones



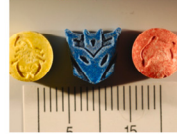
Novel Stimulants



Synthetic Opioids

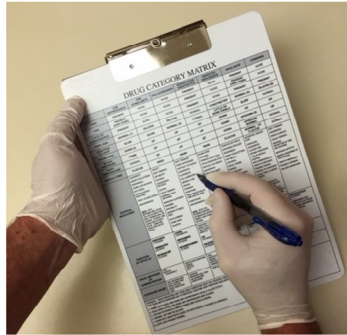


Novel Tryptamine Derivatives



- Synthetic Cathinones – Structurally similar to amphetamines/catecholamines 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 Methyone
 - 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 analogues
 - 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
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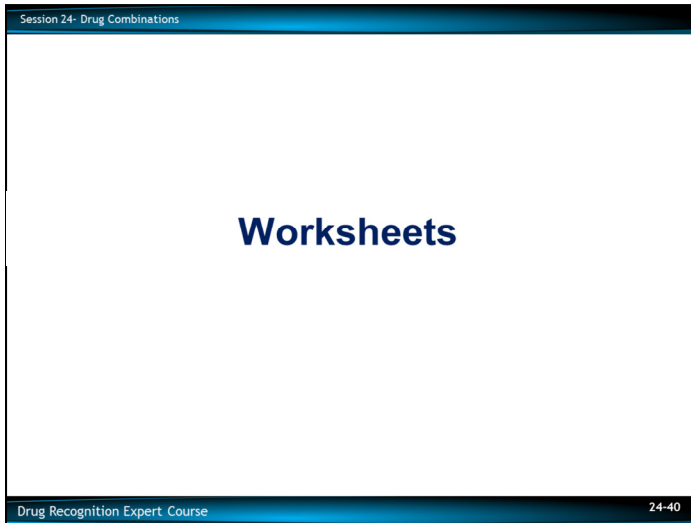
Novel Psychoactive Substances Call What You See!



Calling the Category or Categories

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 ingesting 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.



Worksheet Exercises

Worksheet #1: Dissociative Anesthetic and a Hallucinogen

Worksheet #2: Cannabis and CNS Depressant

Worksheet #3: CNS Depressant and CNS Stimulant

Discussion of Worksheets

Session 24- Drug Combinations

QUESTIONS?

Drug Recognition Expert Course 24-41

Specific Examples of Drug Combinations: An Exercise for the Student

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**

Impairment Indicator	Effect Due to Cannabis	Effect Due to CNS Stimulant	Type of Combined Effect	What Will We See
Vertical Gaze Nystagmus	None	None	Null	None
Lack of Convergence	Present	None	Overlapping	Present
Pupil Size	Dilated Or Normal	Dilated	Overlapping Or Additive	Dilated
Reaction to Light	Normal	Slow	Overlapping	Slow
Pulse Rate	Up	Up	Additive	Up
Blood Pressure	Up	Up	Additive	Up
Body Temperature	Normal	Up	Overlapping	Up
Muscle Tone	Normal	Rigid	Overlapping	Rigid

**DISSOCIATIVE ANESTHETIC AND NARCOTIC ANALGESIC
IN COMBINATION**

Impairment Indicator	Effect Due to Phencyclidine	Effect Due to Heroin	Type of Combined Effect	What Will We See
Horizontal Gaze Nystagmus	Present	None	Overlapping	Present
Vertical Gaze Nystagmus	Present	None	Overlapping	Present
Lack of Convergence	Present	None	Overlapping	Present
Pupil Size	Normal	Constricted	Overlapping	Constricted
Reaction to Light	Normal	Little Or None Visible	Overlapping	Little Or None Visible
Pulse Rate	Up	Down	Antagonistic	Down/Normal/Up
Blood Pressure	Up	Down	Antagonistic	Down/Normal/Up
Body Temperature	Up	Down	Antagonistic	Down/Normal/Up
Muscle Tone	Rigid	Flaccid	Antagonistic	Rigid/Flaccid/ Normal

WORKSHEET #1

Impairment Indicator	Effect Due to Dissociative Anesthetics	Effect Due to Hallucinogen (Hall)	Type of Combined Effect*	What Will We See
Horizontal Gaze Nystagmus				
Vertical Gaze Nystagmus				
Lack of Convergence				
Pupil Size				
Reaction to Light				
Pulse Rate				
Blood Pressure				
Body Temperature				
Muscle Tone				

*Null; Overlapping; Additive; or, Antagonistic

WORKSHEET #2

Impairment Indicator	Effect Due to Cannabis	Effect Due to CNS Depressant	Type of Combined Effect*	What Will We See
Horizontal Gaze Nystagmus				
Vertical Gaze Nystagmus				
Lack of Convergence				
Pupil Size				
Reaction to Light				
Pulse Rate				
Blood Pressure				
Body Temperature				
Muscle Tone				

*Null; Overlapping; Additive; or, Antagonistic

WORKSHEET #3

Impairment Indicator	Effect Due to CNS Stimulant	Effect Due to CNS Depressant	Type of Combined Effect*	What Will We See
Horizontal Gaze Nystagmus				
Vertical Gaze Nystagmus				
Lack of Convergence				
Pupil Size				
Reaction to Light				
Pulse Rate				
Blood Pressure				
Body Temperature				
Muscle Tone				

*Null; Overlapping; Additive; or, Antagonistic

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Session 25

Practice: Test Interpretation



Learning Objectives

- **Analyze completed drug influence evaluations**
- **Identify category or categories of drugs causing the impairment**
- **Describe basis for drug category identification**

Upon successfully completing this session, the student will be able to:

- Analyze completed drug influence evaluations
- Identify the category or categories of drugs causing the impairment
- Describe the basis for the drug category identification

CONTENT SEGMENTS

- A. Interpretation Demonstrations
- B. Interpretation Practice

LEARNING ACTIVITIES

Instructor-Led Demonstrations
Small Group Practice
Participant-Led Presentations

Case One: Subject Allen

- Preliminary Examination
- Eye Examinations
- Psychophysical Tests
- Vital Signs Examinations

A. Interpretation Demonstrations

Case One: Subject Allen
Preliminary Examination

Eye Examinations

Psychophysical Tests

Vital Signs Examinations

Case One: Subject Allen

- Dark Room Examinations
- Other Evidence
- Opinions of the Evaluator

Dark Room Examinations

Other Evidence

Opinions of Evaluator

Case Two: Subject Brown

- Preliminary Examination
- Eye Examinations
- Psychophysical Tests
- Vital Signs Examinations

Case Two: Subject Brown
Preliminary Examination

Eye Examinations

Psychophysical Tests

Vital Signs Examinations

Case Two: Subject Brown

- Dark Room Examinations
- Other Evidence
- Opinions of the Evaluator

Dark Room Examinations

Other Evidence

Opinions of Evaluator

Session 25 - Practice: Test Interpretation

Interpretation Practice

- Team Practice
- Feedback of Results

Drug Recognition Expert Course 25-7

B. Interpretation Practice

Team Practice

Feedback of Results

Session Wrap-Up

Session 25 - Practice: Test Interpretation

QUESTIONS?

Drug Recognition Expert Course 25-9

DRUG INFLUENCE EVALUATION

Evaluator Trooper Aaron Turcotte		DRE # 12459	Rolling Log # 17-03-077	Evaluator's Agency Maine State Police	Case# 17-8890 Session XXV - #1
Recorder/Witness Tom Regan, Maine LEL		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Bangor Police Department	
Arrestee's Name (Last, First, Middle) Allen, Thomas G.		Date of Birth 09/03/88	Sex M	Race W	Arresting Officer (Name, ID#) Officer Steve Pelletier #12459
Date Examined / Time / Location 04/20/17 2140 Bangor PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 878400	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: Ofc. Pelletier	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Cold cereal & chips		When? Around noon	What have you been drinking? Water
Time now/ Actual "About 8 pm" 2145	When did you last sleep? This morning	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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Sore right wrist		
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Long pause before answering)			Attitude: Cooperative		Coordination: Poor
Speech: Slow, Thick, Slurred 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 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		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pulse/Time	HGN	Left Eye	Right Eye	Convergence	26/30
1. 102 / 2148	Lack of Smooth	None	None		
2. 100 / 2202	Maximum Deviation	None	None		
3. 100 / 2220	Angle of Onset	None	None		
Modified Romberg Balance Approx. 2" 2" 2" 2"	Walk and Turn Test		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
			Starts too soon	1 st Nine	
Circular Sway. Eyelid tremors	Leg tremors throughout the test.		Stops walking	2 nd Nine	
			Misses heel-toe		
			Steps off line		
			Uses arms		
			Actual steps taken	9 9	
Time Estimation 38 estimated as 30 seconds	Describe turn Slow, walking turn		Cannot do test (explain) N/A		Type of footwear: Lace-up work boots
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	6.0	9.0	6.0-8.0
Slow movements. Eyelid tremors.		Right Eye	6.0	9.0	6.0-8.0
		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Reaction to Light: Normal
		RIGHT ARM		LEFT ARM	
		Nothing observed			
Blood Pressure 160 / 90	Temperature 98.4 °F	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? "Just some vitamins."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A	
Date / Time of arrest: 04/20/17 2050	Time DRE was notified: 2122	Evaluation start time: 2140	Evaluation completion time: 2235	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: Aaron Turcotte		Reviewed/approved by / date:			DRE# 12459
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"/> 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: Allen, Thomas G.

1. **Location:** The evaluation was conducted in the Interview Room at the Bangor Police Department. The room had adequate lighting with a tile floor with no obstructions. The darkroom examination was conducted in an adjacent interview room.
2. **Witnesses:** Tom Reagan, a Maine LEL and former DRE instructor 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 2112 hours resulting in a 0.00% BAC.
4. **Notification and Interview of the Arresting Officer:** At approximately 2122 hours I was contacted by dispatch requesting a drug influence evaluation at the Bangor Police Department. I met Officer Pelletier at the PD where I was advised that 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 that he was disoriented and had slow, lethargic movements. When he exited his vehicle, he had poor balance and coordination, and appeared to be disoriented. 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 four clues were observed on the W&T test, and two clues were observed on the OLS test. No odor of an alcoholic beverage was detected on the suspect's breath. However, Officer Pelletier did notice that the suspect had bloodshot and watery eyes, and that his pupils were dilated. After obtaining a .00 BAC, Officer Pelletier requested the assistance of a DRE.
5. **Initial Observations of the Suspect:** I first observed the suspect in the Interview Room at the Bangor PD. He seemed disinterested and unconcerned about his arrest. When he stood, he was unstable on his feet and appeared disoriented. His speech was slow and thick. His eyes were bloodshot and watery, and his pupils appeared to be dilated. Numerous times he asked Officer Pelletier why he had been arrested, and what he was being charged with. I contacted the suspect and introduced myself and asked if he would complete a drug influence evaluation, which he agreed to do. I noted that he was wearing long green pants, a long sleeve blue sweatshirt, and brown laced-up boots.
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 advised that 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.
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, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect:

Modified Romberg Balance: During this test, the suspect exhibited an approximate two-inch circular sway. He also had slowed time estimation, estimating the passage of 30 seconds in 38 seconds. When asked how he had estimated the 30 seconds, the suspect stated, "I was counting, but I forgot what number I was on." Eyelid tremors were present throughout the test.

Walk and Turn: During this test, the suspect lost his balance twice during the instructions stage, missed touching heel to toe once on the first nine steps and twice on the second nine steps. He also raised his arms for balance twice on first nine steps and three times on the second nine steps. He made an improper turn by walking around slowly, instead of the turn he was instructed to do. Leg tremors were present.

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 standing on his left foot and raising his right foot, the suspect swayed while balancing, used his arms to balance, and put his foot down once at 1,009. While standing on his right foot and raising his left foot, he again swayed while balancing, used his arms to balance and put his foot down at 1,008 and 1,017. Leg tremors were observed throughout the test. The suspect's counting was slow on each of the tests.

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 all 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 present. 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 6.0 mm to 8.0 mm in both eyes. A lack of convergence was also present in both eyes. The suspect's eyes were watery and bloodshot.

Vital Signs: The suspect's pulse rates were checked three times per DRE protocol and were 102, 100 and 100 beats per minute (bpm). All three results were above the DRE average range. The suspect's blood pressure was checked at 160/90, which is also above the DRE average range. 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. He indicated he was not aware why they would be elevated. He also indicated that 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, the suspect had no explanation. No indicators of injection sites were located on the suspect's arms and hands.

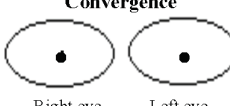
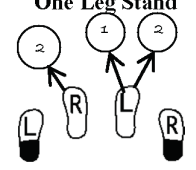
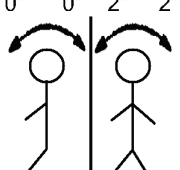
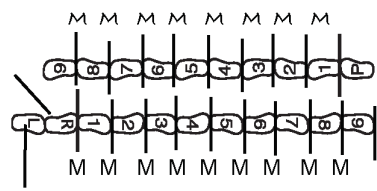
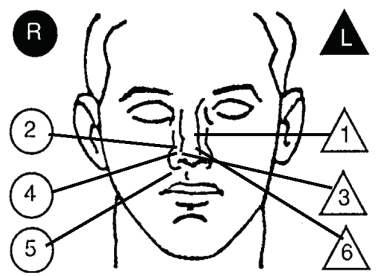
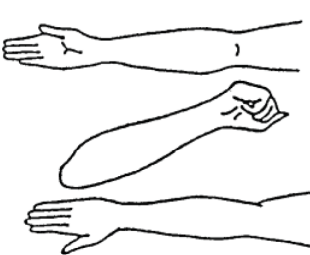
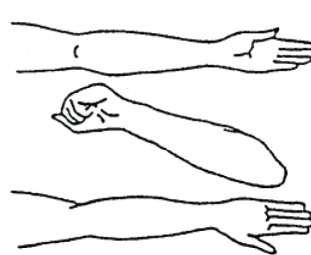
10. Suspect's Statements: The suspect denied using any drugs. When asked about possible drug use, the suspect stated, "Just some vitamins." At no time during the evaluation did the suspect indicate he had used drugs. Additional questions about drug use were ignored by the suspect.

11. DRE's Opinion: It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of _____ and is unable to operate a vehicle safely.

12. Toxicological Sample: After completing the drug influence evaluation, the suspect was transported to the Saint Joseph Hospital where a blood sample was collected from the suspect at 2150 hours.

13. Miscellaneous: Refer to Officer Pelletier's arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator Sgt. Matt Shapiro New Hampshire SP		DRE # 5754	Rolling Log # 17-08-045	Evaluator's Agency New Hampshire SP	Case# 233453 Session XXV - #2										
Recorder/Witness Trooper Marc Beaudoin NH SP		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Bedford PD											
Arrestee's Name (Last, First, Middle) Brown, Jerome A.		Date of Birth 04/06/87	Sex M	Race W	Arresting Officer (Name, ID#) Officer Jessica Humphrey #16387										
Date Examined / Time /Location 08/08/17 2218 Bedford PD		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 8901	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: Officer Humphrey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? No response	When?	What have you been drinking? How much? No response	Time of last drink? N/A										
Time now/ Actual "It's dark" 2215	When did you last sleep? "Not sure"	How long?	Are you sick or injured? <input type="checkbox"/> Yes <input type="checkbox"/> No No response	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 "I'm not sick"	Do you have any physical defects? <input type="checkbox"/> Yes <input type="checkbox"/> No No response	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 checked="" type="checkbox"/> No Answered "No" very slowly		Attitude: Passive, Cooperative	Coordination: Poor, Staggering												
Speech: Non-responsive at times, Slow		Breath odor: Rancid	Face: Blank stare, 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 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 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>2226</u> 2. <u>112</u> / <u>2238</u> 3. <u>112</u> / <u>2250</u>	HGN Lack of Smooth Pursuit Present Maximum Deviation Present Angle of Onset 30	Left Eye Present	Right Eye Present	Convergence  Right eye Left eye	One Leg Stand /30  /30										
Modified Romberg Balance Approx Approx 0" 0" 2" 2"  Rigid. Eyelid tremors	Walk and Turn Test  Slow, rigid movements throughout	Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Uses arms _____ Actual steps taken 9 9		1 st Nine 2 nd Nine <table border="1" style="display: inline-table;"><tr><td>(All)</td><td>(All)</td></tr></table> <table border="1" style="display: inline-table;"><tr><td>(All)</td><td>(All)</td></tr></table> <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></table> Test stopped for safety reasons		(All)	(All)	(All)	(All)	✓	✓	✓	✓	✓	✓
(All)	(All)														
(All)	(All)														
✓	✓														
✓	✓														
✓	✓														
Time Estimation <u>55</u> estimated as 30 seconds	Describe turn Slow movements	Cannot do test (explain) N/A		Type of footwear: Lace-up running shoes											
Finger to Nose (Draw lines to spots touched)  Slow, rigid movements. Eyelid tremors.		PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)										
		Left Eye	5.0	7.5	6.0 - 7.5										
		Right Eye	5.0	7.5	6.0 - 7.5										
		Rebound Dilatation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Reaction to Light: Normal										
		RIGHT ARM		LEFT ARM											
															
		Nothing observed													
Blood Pressure 168 / 110	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? No response		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A											
Date / Time of arrest: 08/08/17 2100	Time DRE was notified: 2152	Evaluation start time: 2215	Evaluation completion time: 2310	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation											
DRE/Officer's Signature: Matt Shapiro		Reviewed/approved by / date:			DRE# 5754										
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"/> 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: Brown, Jerome A.

- 1. Location:** The evaluation was conducted in Bedford Police Department Interview Room. The room is well illuminated and has a short pile carpeting with no obstructions. The darkroom examinations were conducted in a separate interview room adjacent to the main interview room.
- 2. Witnesses:** Trooper Beaudoin of the New Hampshire State Police witnessed and recorded the evaluation.
- 3. Breath Alcohol Test:** The arresting officer, Officer Humphrey of Bedford Police Department administered a breath test to the suspect at 2137 hours obtaining a 0.00% BAC result.
- 4. Notification and Interview of the Arresting Officer:** On 08/08/17 at approximately 2152 hours I was contacted by Officer Humphrey requesting a drug influence evaluation at the Bedford Police Department. Upon my arrival, I met Trooper Beaudoin and Officer Humphrey where it was determined that the suspect had nearly hit a Bedford PD officer while on a traffic stop on 6th Street. The suspect was later observed parked in the Burger Shack parking lot. When contacted by Officer Humphrey, the suspect appeared dazed and confused. He was also non-responsive, had a blank stare, and was sweating profusely. It was determined that he had driven to his location. When asked for his operator's license, vehicle registration and proof of insurance, he handed Officer Humphrey a traffic ticket he had received several weeks prior for disobeying a stop sign. Officer Humphrey suspected the driver was under the influence and requested that he perform SFSTs. According to Officer Humphrey, the suspect had difficulty understanding the instructions and completing the tests as instructed. However, six clues of Horizontal Gaze Nystagmus (HGN) and Vertical Gaze Nystagmus (VGN) were observed. The suspect's balance and coordination were so poor, 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 the PD for processing. After obtaining a .00 BAC, a DRE was requested to assist with the investigation.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the main Interview Room at BPD. 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. He was unstable on his feet and when he stood, he would stagger, and several times nearly fell. The suspect was perspiring heavily. I also noted that his eyes were bloodshot. I introduced myself to the suspect and asked if he would participate in a drug evaluation. The suspect was slow to respond and then stated, "Okay." I noted that he was wearing jeans with holes in both knees, a dirty white tee-shirt and lace-up athletic running shoes.
- 6. Medical Problems and Treatment:** When asked about any medical conditions he may be suffering from, the suspect was once again slow to respond and I had to repeat the question several times. He then stated, "I'm not sick." I asked if there was anything that would prevent him from participating in the drug influence evaluation, the suspect stated, "No, I'm not sick." The suspect did not report any medical conditions during the evaluation 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, the suspect confirmed that he understood the instructions. 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. He was also rigid throughout the test, and eyelid tremors were present.

Walk & Turn: The suspect lost his balance twice during the instructions stage. Once he began the walking stage, he walked slowly with rigid movements. He also missed touching heel to toe on every step on both the first nine steps and the second nine steps. He also raised his arms for balance during the entire test. His turn was slow and deliberate, but was made as instructed.

One Leg Stand: The suspect lost his balance while attempting this test. He nearly fell when trying to stand on his left foot, putting his foot down at 1,002. While attempting to stand on his right foot, he immediately put his foot down at 1,001 and 1,002, 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 to put his arm back at this side. 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 can be adequately darkened for the examination process. Six clues of HGN were present, with a 30-degree angle of onset. VGN was also present. The suspect's pupils were dilated in all three lighting conditions. They were estimated at 5.0 mm in both eyes in Room Light and 8.0 mm in both eyes in Near Total Darkness. Rebound dilation was present in Direct Light with his pupils ranging from 6.0 mm to 7.5 mm in both eyes. The suspect was unable to convergence his eyes and looked straight ahead during the test.

Vital Signs: The suspect's pulse rates were checked three times per DRE protocol and were at 110, 112 and 112 beats per minute. All three results were above the DRE average range. The suspect's blood pressure was checked at 168/110, which is also above the DRE average range. His body temperature was 99.8 degrees, which is also above the DRE average range. The suspect was questioned about his elevated pulse rates and blood pressure and he indicated he was not aware of why they would be elevated. The suspect's 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, which can be an indicator of someone who has recently smoked marijuana. When questioned about the green coating, he had no explanation. No indicators of injection sites were located on the suspect's arms and hands.

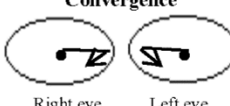
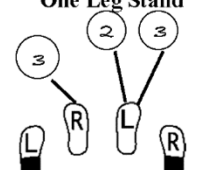
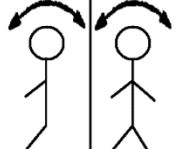
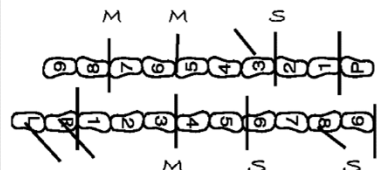
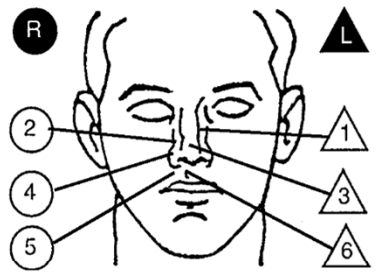
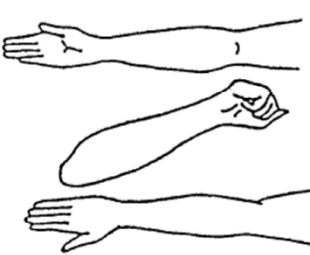
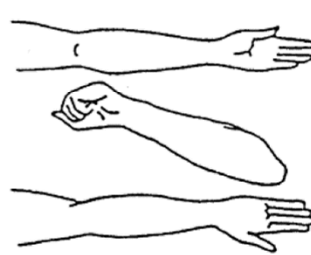
10. Suspect's Statements: The suspect did not respond when asked about drug use.

11. DRE's Opinion: It is my opinion as a certified Drug Recognition Expert the suspect is under the influence of a _____ and is unable to operate a vehicle safely.

12. Toxicological Sample: After completing the evaluation, the suspect was requested to provide a urine sample. The sample was collected at 2303 hours and was placed into evidence pending delivery to the state laboratory for analysis.

13. Miscellaneous: The suspect was also booked on an arrest warrant for Possession of a Dangerous Drug.

DRUG INFLUENCE EVALUATION

Evaluator Officer Cullen Kau Honolulu PD		DRE # 5992	Rolling Log # 17-05-61	Evaluator's Agency Honolulu PD	Case# 17-70785 Session XXV - #3
Recorder/Witness Lt. Ben Moszkowicz Honolulu PD		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Honolulu PD	
Arrestee's Name (Last, First, Middle) Cole, Ricky Lee		Date of Birth 06/04/94	Sex M	Race W	Arresting Officer (Name, ID#) Officer Michelle Yoshiki #13052
Date Examined / Time /Location 05/07/17 0200 HPD Intake		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 98902	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: Officer Yoshiki	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Rice bowl	When? 7:00 pm	What have you been drinking? How much? Red Bull One can	Time of last drink? N/A
Time now/ Actual "3 am" / 0208	When did you last sleep? Last night	How long? 4 or 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: Passive, Cooperative		Coordination: Poor, Staggering at times	
Speech: Slow, Slurred, Thick		Breath odor: Rancid		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 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		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Eyelids <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Droopy					
Pulse/Time	HGN	Left Eye	Right Eye	Convergence	One Leg Stand
1. 106 / 0214	Lack of Smooth Pursuit	Present	Present		
2. 102 / 0222	Maximum Deviation	Present	Present		
3. 96 / 0240	Angle of Onset	35	35		
Modified Romberg Balance Approx. 2" 2" 2" 2"	Walk and Turn Test	Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		Sways while balancing	
		Starts too soon		Uses arms to balance	
Circular sway	walked slowly.	Stops walking		Hopping	
		Misses heel-toe		Puts foot down	
		Steps off line		N/A	
		Uses arms		N/A	
		Actual steps taken		N/A	
Time Estimation 45 estimated as 30 seconds	Describe turn Slow, deliberate steps	Cannot do test (explain) N/A		Type of footwear: Flip-flops	
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	4.5	6.5	4.0
Swaying. Opened eyes on each attempt.		Right Eye	4.5	6.5	4.0
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Normal	
		RIGHT ARM		LEFT ARM	
					
		Chemical-like odor on hands and fingers			
Blood Pressure 146/98	Temperature 98.8 °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? "None. I'm not using drugs."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A	
Date / Time of arrest: 05/07/17 0115	Time DRE was notified: 0140	Evaluation start time: 0200	Evaluation completion time: 0255	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: <i>Cullen Kau</i>		Reviewed/approved by / date:			DRE# 5992
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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Inhalant
				<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Cole, Ricky L.

1. **Location:** The evaluation was conducted in the Interview Room at the Honolulu Police Department. The room is well illuminated and has short pile carpeting with no obstructions. The darkroom examination was conducted in the staff restroom.
2. **Witnesses:** Lt. Ben Moszkowicz of the HPD witnessed and recorded the drug evaluation.
3. **Breath Alcohol Test:** Officer Michelle Yoshiki, who was arresting officer, administered a breath test to the suspect at the HPD at 0130 hours obtaining a 0.00% BAC result.
4. **Notification and Interview of the Arresting Officer:** At approximately 1040 hours on 5/07/17, I was contacted by Dispatch requesting that I conduct a drug evaluation for Officer Yoshiki at HPD. Upon my arrival and contacting Officer Yoshiki, it was determined that she had detained the suspect after observing his vehicle fail to stop at a red traffic light at King Street and University Ave. The suspect's speech was slow, slurred and thick. The suspect also had difficulty concentrating and appeared confused. Officer Yoshiki conducted SFSTs and observed six clues of Horizontal Gaze Nystagmus (HGN). In addition, Vertical Gaze Nystagmus (VGN) was also observed. However, no odor of an alcoholic beverage was detected on the suspect's breath. The suspect had difficulty performing the SFSTs and several times nearly fell while attempting them at roadside. Officer Yoshiki detected a strong chemical-like odor on the suspect's hands and clothing. The suspect was arrested for DWI and transported to the HPD for processing. After obtaining a .00 BAC result, she requested the assistance of a DRE.
5. **Initial Observation of the Suspect:** I first observed the suspect in the interview room at HPD. He appeared passive and confused, but was cooperative. His speech was slow and thick, and at times slurred. He had poor balance and coordination, and several times steadied himself using the desk and the wall. He also had difficulty walking and bumped into the interview table several times. His face was flushed and his eyes appeared to be bloodshot and watery. When I introduced myself, and asked if he would complete a drug influence evaluation, he was slow to respond and appeared to be having problems concentrating. I noted that he was wearing white multi-colored shorts, a Hilo Hattie's tee shirt, and flip-flops. I noted that he had a chemical-like odor on his clothing.
6. **Medical Problems and Treatment:** I questioned the suspect about medical problems and other conditions which may 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 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, the suspect acknowledged that he understood the instructions. The following tests were administered to the suspect:

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: The suspect lost his balance twice during the instructions stage. On the walking stage, he missed touching heel to toe once, stopped while walking once, and stepped off the line once on the first nine steps. Once he got to the end of the first nine steps, he stopped and appeared confused on what to do next. He was reminded to turn around and proceed back down the line. His turn was slow and made with deliberate steps, but completed it as directed. On the second nine steps, he stopped while walking once, stepped off the line once, and missed touching heel-to-toe twice. He also used his arms for balance one time on the first nine steps and twice on the second nine steps.

One Leg Stand: The suspect had difficulty with this test. He swayed while balancing, used his arms to balance, began hopping, and put his foot down to keep from falling when attempting to stand on his left and right foot. Due to his poor balance and coordination difficulties, the test was stopped for safety reasons.

Finger to Nose: During this test, the suspect swayed noticeably and opened his eyes on each attempt. He was unable to touch the tip of his nose on any of the six attempts. His hand and arm movements were slow and rigid.

8. Clinical Indicators of Impairment:

Eye Signs: The eye examinations were conducted in the HPD restroom which could be darkened for the examinations. Six clues of HGN were present with an angle of onset detected at approximately 35 degrees in each eye. VGN and a Lack of Convergence were also present. The suspect's eyes were bloodshot and watery. His pupils were all within the DRE average ranges in all three lighting conditions.

Vital Signs: The suspect's pulse rates were elevated at 106, 102 and 96 beats per minute, and were all above the DRE average ranges. His blood pressure was 146/98, which was also above the DRE average range. The suspect was asked about his high pulse rates and blood pressure. He appeared to be confused with the question and had no explanation for them being high.

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 on his hands and clothing, he indicated that earlier in the day he was helping a friend clean his car engine and they were using a lot of engine cleaner and he must have gotten the cleaner on his hands and clothes.

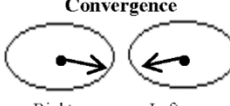
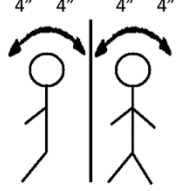
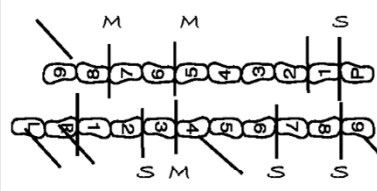
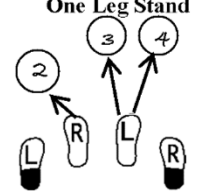
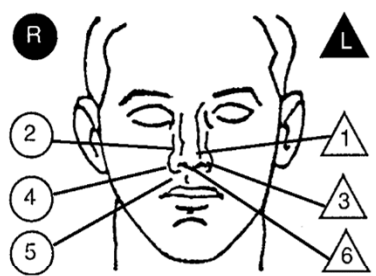
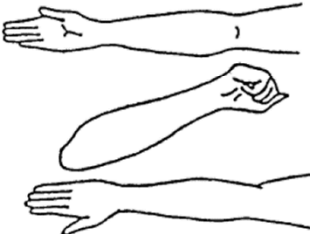
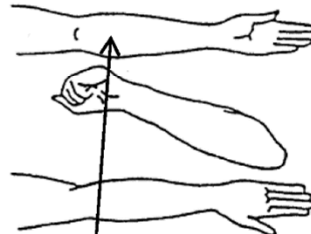
10. Suspect's Statements: The suspect denied using any medications or drugs. He admitted smoking marijuana occasionally, but claimed he had not smoked marijuana in over a month.

11. DRE's Opinion: It is my opinion as a certified Drug Recognition Expert that the suspect is under the influence of a _____ and is unable to operate a vehicle safely.

12. Toxicological Sample: A urine sample was collected from the suspect at 0255 hours and entered into evidence 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 Yoshiki's DUI arrest report for additional details.

DRUG INFLUENCE EVALUATION

Evaluator Trooper Andrew Martinek		DRE # 22701	Rolling Log # 17-02-088	Evaluator's Agency Minnesota State Patrol	Case# 17-45902 Session XXV - #4
Recorder/Witness Deputy Chad Myers, Winona County SO		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency New Brighton Police Department	
Arrestee's Name (Last, First, Middle) Davis, Paul J.		Date of Birth 01/21/85	Sex M	Race W	Arresting Officer (Name, ID#) Officer Matt Farmer #25448
Date Examined / Time / Location 6/02/17 1525 Ramsey Co. Detention Center		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 45665	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: Officer Farmer	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? When? Pancakes 9 am		What have you been drinking? How much? Time of last drink? Coffee, Water N/A N/A	
Time now/ Actual "About 5pm" /	When did you last sleep? "Took a nap today"	How long? 2 hours	Are you sick or injured? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I'm cold"		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 Sore left shoulder		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 "Sometimes I take some pain medication."			Attitude: Cooperative, Slow		Coordination: Poor, Unstable at times
Speech: Slow, 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	
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		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pulse/Time 1. 56 / 154 2. 58 / 155 3. 56 / 1618		HGN Lack of Smooth Pursuit: None Maximum Deviation: None Angle of Onset: None		Convergence  Right eye Left eye	
Modified Romberg Balance Approx. 4" 4" 4" 4"  Head nodded forward		Walk and Turn Test  Slow, deliberate steps		One Leg Stand  L R 1 1 1 1 1 2 Sways while balancing Uses arms to balance Hopping Puts foot down Nearly fell. Tests stopped.	
Time Estimation 68 estimated as 30 seconds		Describe turn As instructed, but slow		Cannot do test (explain) N/A	
Type of footwear: Lace-up work boots		Finger to Nose (Draw lines to spots touched)  Slow, deliberate movements. Used pads of fingers on attempts 1, 3 and 5.		PUPIL SIZE Room light (2.5-5.0) Darkness (5.0-8.5) Direct (2.0-4.5) Left Eye: 2.0 4.5 1.5 Right Eye: 2.0 4.5 1.5	
Blood Pressure 112/64		Temperature 97.5 °F		Rebound Dilatation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		RIGHT ARM 		LEFT ARM  Fresh injection mark on inside of arm.	
Comments: What drugs or medications have you been using? "I'm not using anymore."		How much? N/A		Time of use? N/A	
Date / Time of arrest: 06/02/17 1420		Time DRE was notified: 1505		Where were the drugs used? (Location) N/A	
Evaluation start time: 1525		Evaluation completion time: 1630		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/Officer's Signature: Andrew Martinek		Reviewed/approved by / date:			DRE# 22701
Opinion of Evaluator: Medical		<input type="checkbox"/> Not Impaired <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 type="checkbox"/> Cannabis	

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Davis, Paul J.

- 1. Location:** The evaluation was conducted in Booking Room at the Ramsey County Detention Center. The Booking Room is well illuminated and has a concrete floor with no obstructions and provides an adequate location for conducting a drug influence evaluation. The staff restroom was used for the dark room examinations.
- 2. Witnesses:** Deputy Chad Myers from the Winona County S.O. was present and recorded the drug influence evaluation.
- 3. Breath Alcohol Test:** At 1450 hours, the arresting officer, Officer Matt Farmer, conducted a breath test on the suspect at the Ramsey County Detention Center. Officer Farmer obtained a 0.00% BAC result, which, according to Officer Ramsey, was not consistent with the degree of impairment he had observed during his roadside contact with the suspect.
- 4. Notification and Interview of the Arresting Officer:** At approximately 1505 hours on 06/02/17, I was on duty and requested to respond to the Ramsey County Detention Center for a drug influence evaluation. Upon my arrival, I contacted Officer Farmer of the New Brighton PD. Officer Farmer advised me that he located the suspect slumped over the steering wheel of his vehicle parked along the shoulder of Long Lake Road. The vehicle was in gear and the engine was running. The vehicle was resting up against a roadside cement barrier and was not moving when he contacted the suspect. The suspect was coherent, but appeared dazed and confused. He also noted that the suspect's speech was slow, low and raspy. His movements were slow and deliberate and at times, he was licking his lips. When Officer Farmer had the suspect exit his vehicle, his movements were slow and he was unstable on his feet. After determining that the suspect was not experiencing a medical emergency, Officer Farmer attempted to administer SFSTs at roadside. However, the suspect had difficulty completing the SFSTs and was arrested for DUI. Officer Farmer noted that the suspect's pupils were constricted. He also observed what appeared to be a bloody spot on his forearm area on the inside of his left sleeve. When placed into Officer Farmer's patrol vehicle, the suspect appeared to be "on the nod." After obtaining a .00 BAC, Officer Farmer requested the assistance of a DRE.
- 5. Initial Observation of the Suspect:** I first observed the suspect in the Booking Room at the County Detention Center. The suspect was having difficulties keeping his eyes open. His head was continually nodding forward, and he had droopy eyelids. 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 introduced myself to the suspect and explained that I had been requested to conduct a drug influence evaluation by the arresting officer. After several minutes of explaining the process to the suspect, he agreed to participate. During my initial contact with the suspect, he continued to appear to be "on the nod" and numerous times I had to repeat my questions and wait for his delayed responses. When asked if was taking any medications or drugs, the suspect did indicate that sometimes takes pain medication. The suspect stated several times that felt cold and at times nauseous. The room temperate in the Booking Room as set at approximately 70 degrees, which is the normal setting for the time of year. I noted that the suspect was wearing jeans, a long sleeve plaid shirt and black lace-up boots.
- 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 pain medication to help him with some pain issues from a sore shoulder. He explained that he had hurt his shoulder about two or three years ago while moving pallets at work, but was not under a doctor's care for it. When asked if he needed medical assistance for his shoulder or any other medical problem he may be experiencing, he stated, "No, I'm okay." During the evaluation, no medical situations 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, the suspect 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 four inches front to back and side to side. His head also nodded forward and it appeared he was on the nod. His time estimation was slow, estimating 30 seconds in 68 seconds. During the test, the suspect also scratched his arms and face numerous times.

Walk and Turn: During this test, the suspect lost his balance twice during the instructions stage. Once he began the walking stage, on the first nine steps he stopped while walking three times, missed touching heel to toe once, and used his arms for balance once. As he made his turn, the suspect took very slow and deliberate steps, but completed the turn as instructed. On the second nine steps, the suspect stopped while walking once, missed touching heel to toe twice and stepped off the line once. He also raised his arms for balance three times.

One Leg Stand: On this test, the suspect had difficulty maintaining his balance while standing on both the left and right foot. While attempting to stand on his left foot and raise his right foot, he began swaying, used his arms to balance, put his foot down immediately, and lost his balance nearly falling. The test was stopped at that point for safety reasons. When attempting to stand on his right foot and raise his left foot, he again swayed, used his arms to balance, put his foot down on counts 1,0003 and 1,004, and again nearly fell. The test was then stopped for safety reasons.

Finger to Nose: On this test, the suspect made slow and very 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 was on attempt #6. He used the pads of his fingers for attempts #1, #3, and #5. At times during this test, the suspect appeared to be on the nod.

8. **Clinical Indicators of Impairment:**

Eye Signs: No clues of HGN were observed. Vertical Gaze Nystagmus and Rebound Dilation were also not observed. The suspect was able to converge his eyes as directed. The suspect's pupils were constricted in all three lighting levels. They were estimated at 2.0 mm in both eyes in Room Light, 4.5 mm in both eyes in Near Total Darkness, and 1.5 mm in both eyes in Direct Light. The suspect's pupil reaction to light was little to none visible.

Vital Signs: The suspect's pulse rates of 56 beats per minute (bpm), 58 bpm and 56 bpm were below the DRE average ranges, as was his blood pressure of 112/64 mm Hg. His body temperature was measured at 97.5 degrees, which was also below the DRE average range. His muscle tone was flaccid.

9. **Signs of Ingestion:** A fresh injection mark was located on the inside of the suspect's left arm. When questioned about the mark, the suspect indicated he had scratched himself when loading pallets at work.
10. **Suspect's Statements:** After completed the evaluation I asked the suspect about drug use. The suspect admitted that he used to use pain meds, but state "I'm not using anymore."
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Evaluator that the suspect is under the influence of a _____ and is unable to operate a vehicle safely.
12. **Toxicological Specimen:** A urine sample was collected from the suspect by Officer Farmer and was submitted as evidence pending analysis by the State Crime Lab.
13. **Miscellaneous:** Refer to Officer Farmer's arrest report for additional information.

DRUG INFLUENCE EVALUATION

Evaluator Lt. Dale Lewis		DRE # 12258	Rolling Log # 17-04-034	Evaluator's Agency Oklahoma University Police	Case# 17-30238 Session XXV - #5	
Recorder/Witness Officer Kyle Cavanaugh, Norman Police Dept.		Crash: <input type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input checked="" type="checkbox"/> Property		Arresting Officer's Agency Oklahoma Highway Patrol		
Arrestee's Name (Last, First, Middle) Elliott, John B.		Date of Birth 06/01/80	Sex M	Race W	Arresting Officer (Name, ID#) Trooper Christopher Sherman #20270	
Date Examined / Time / Location 04/05/17 1810 Oklahoma County Jail		Breath Test: Results: 0.00	Test Refused <input type="checkbox"/> Instrument #: 42331	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. Sherman	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Tuna sandwich	When? 1 pm	What have you been drinking? How much? Water and coffee N/A	Time of last drink? N/A	
Time now/ Actual "I don't know" / 1816	When did you last sleep? Last night	How long? "Maybe 5 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		Are you under the care of a doctor or dentist? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I used to see a doctor"			
Are you taking any medication or drugs? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No "I probably should."		Attitude: Emotional changes (Laughing / Crying)		Coordination: Poor, Unsteady		
Speech: Sturred, Rambling, Incoherent at times		Breath odor: Normal		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 checked="" 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 type="checkbox"/> Equal <input checked="" type="checkbox"/> Unequal Right pupil larger than left		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. 68 / 182 2. 66 / 1840 3. 66 / 185	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	One Leg Stand L R 1 1 1 1 1 2 Sways while balancing Uses arms to balance Hopping Puts foot down Nearly fell. Test stopped	
Modified Romberg Balance Approx. 2" 2" 2" 2" Eyelid tremors	Walk and Turn Test Fell against wall. Test stopped for safety reasons.	Cannot keep balance ✓✓✓ Starts too soon Stops walking Misses heel-toe Steps off line Uses arms Actual steps taken		1 st Nine N/A N/A N/A N/A N/A	2 nd Nine N/A N/A N/A N/A N/A	
Time Estimation 32 estimated as 30 seconds	Describe turn N/A	Cannot do test (explain) Lost balance - Nearly fell		Type of footwear: Lace-up dress shoes		
Finger to Nose (Draw lines to spots touched) Using pads of fingers on all attempts.		PUPIL SIZE	Room light (2.5-5.0)	Darkness (5.0-8.5)	Direct (2.0-4.5)	Nasal area: Clear
		Left Eye	5.0	6.5	4.0	Oral cavity: Clear
		Right Eye	6.5	7.5	5.5	
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			Reaction to Light: Normal	
		RIGHT ARM 		LEFT ARM 		
Blood Pressure 178/118	Temperature 99.0 °F	Nothing observed				
Muscle Tone: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid						
Comments: What drugs or medications have you been using? "I don't use drugs, but probably should."		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A		
Date / Time of arrest: 04/05/17 1722	Time DRE was notified: 1750	Evaluation start time: 1810	Evaluation completion time: 1920	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation		
DRE/Officer's Signature: Dale Lewis		Reviewed/approved by / date:			DRE# 12258	
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

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Elliott, John B.

- 1. Location:** The evaluation was conducted in the booking area at the Oklahoma County Jail in Oklahoma City. The room is well illuminated and has a smooth concrete flooring with no obstructions. The darkroom examinations were conducted in the staff restroom.
- 2. Witnesses:** The evaluation was observed and recorded by DRE instructor Officer Kyle Canaan from the Norman Police Department who was at the jail lodging a subject.
- 3. Breath Alcohol Test:** Trooper Sherman had administered a breath test to Elliott prior to my arrival and obtained a 0.00% result.
- 4. Notification and Interview of the Arresting Officer:** On 04/05/17, at approximately 1750 hours, I was on duty and requested to contact Trooper Sherman for a drug evaluation at the Oklahoma County Jail. According to Trooper Sherman, Elliott had been involved in a minor crash in a construction zone on I-40. Construction workers at the scene reported that Elliott was very confused and appeared intoxicated. Trooper Sherman arrived at the scene and observed Elliott wandering in traffic and very emotional acting. According to Trooper Sherman, Elliott's speech was slurred, rambling and at times incoherent. Elliott had difficulties maintaining his balance and several times nearly fell when walking. Trooper Sherman determined that Elliott was not injured and suspected that he may be impaired. After determining that Elliott could perform SFSTs, Trooper Sherman attempted to administer the Horizontal Gaze Nystagmus (HGN) test, the Walk and Turn (W&T) test and One Leg Stand (OLS) test. No clues of HGN were observed. However, Elliott did have difficulty completing the other SFSTs as directed. Both tests had to be stopped for safety reasons. Elliott was found to be operating 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 Oklahoma County Jail for processing. After obtaining a .00 BAC, a DRE was requested to assist with the investigation.
- 5. 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. At times he was laughing, and then he would get emotional and cried several times. He was talking to himself and his speech was rambling, and at times incoherent. I introduced myself to Elliott and requested to conduct the drug evaluation, which he agreed to do by stating, "Alright, but I'm not drunk!" I noted that his face was flushed and his moods were changing, going from cooperative to agitated. He was wearing dress pants, a brown long sleeve shirt and lace-up dress shoes.
- 6. Medical Problems and Treatment:** Elliott stated that he had been seeing a doctor for some "issues" but stopped going to his appointments about a year ago. When I attempted to discuss the "issues" he had mentioned, Elliott got very evasive and would not comment or answer my questions. He indicated that he was not taking any medication or drugs, but commented, "I probably should." I asked Elliott if he needed medical assistance and he responded angrily, "For what! I'm okay! Just do what you've got to do!"
- 7. 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 instructions. The following psychophysical tests were administered per DRE protocol:

Modified Romberg Balance: During this test, Elliott swayed approximately two inches front to back and side to side. He estimated 30 seconds in 32 seconds. Eyelid tremors were present during the test.

Walk and Turn: Elliott could not maintain his balance in the instructions stage, losing his balance three times. On the third time he lost his balance, he stated, "I can't do this!" and the test was stopped for safety reasons. After trying to complete the test, Elliott began rubbing his head.

One Leg Stand: For this test, Elliott was not able stand on one foot and nearly fell several times. The tests were stopped for safety reasons.

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.

8. Clinical Indicators of Impairment:

Eye Signs: No clues of HGN were present and Vertical Gaze Nystagmus was not observed. He was able to converge his eyes as instructed. Rebound dilation was not observed. Elliott's pupils were found to be unequal in size. In Room Light, his left pupil was estimated at 5.0 mm and his right pupil was estimated at 6.5 mm. In Near Total Darkness, his left pupil was estimated at 6.5 mm and his right pupil was estimated at 7.5 mm. In Direct Light, his left pupil was estimated at 4.0 mm and his right pupil was estimated at 5.5 mm. All the estimations were within the DRE average ranges for each of the lighting conditions. When asked about his unequal pupil sizes, Elliott was unable to explain the differences.

Vital Signs: The suspect'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 rates. His blood pressure was checked at 178/118, which was above the DRE average range for blood pressure. His body temperature was 99.0 degrees, which was within the DRE average range. The suspect 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. After obtaining the high blood pressure and observing Elliott's unequal pupil sizes, the jail nurse was advised of the situation.

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 stated that his doctor wanted to prescribe him some medications, but he refused because he felt there was nothing wrong with him. When asked if he had ever consumed drugs, he did indicate that several years ago he was prescribed medication for anxiety and stress. He further indicated that the drugs became too expensive and he quit taking them.

11. DRE's Opinion: It is my opinion as a certified Drug Recognition Expert that Elliott is under the influence of a _____ and is 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: After completing the evaluation, the jail nurse checked Elliott's vital signs and recommended that he be transported to the emergency room for a medical assessment. At approximately 1920 hours, Elliott was transported to the OU Medical Center.

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Session 26

Preparing the Narrative Report



Learning Objectives

- Discuss essential elements of drug influence evaluation report
- Prepare a clear and concise drug influence evaluation report

Upon successfully completing this session, the participant will be able to:

- Discuss the essential elements of the drug influence evaluation report
- Prepare a clear and concise drug influence evaluation report

CONTENT SEGMENTS

- A. Components of the Process
- B. Components of the Drug Evaluation Report
- C. Drug Evaluation Narrative Report Format
- D. Sample Report

LEARNING ACTIVITIES

Instructor-Led Presentations
Interactive Discussion

Session 26- Preparing the Narrative Report

The DRE Report

- **Complete, clear, convincing**
- **Well written**
- **Descriptive, detailed and complete**
- **Organized, clearly documented, and compelling**

Drug Recognition Expert Course 26-3

A. Components of the Process

The Drug Recognition Expert (DRE) Report

Successful prosecution depends on how clearly, completely, and convincingly the DRE presents their observations, measurements, and conclusions.

A well-written, clear, and convincing drug 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

- The defense is less likely to contest the charge when the report is descriptive, detailed, and complete

Sample Drug Influence Evaluation Facesheet

B. Components of the Drug Influence Evaluation Report

The Facesheet

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.

Examples:

- Subject's pulse rate was elevated on all three measurements
- Subject's eyes failed to converge
- Subject's pupils were constricted

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



Drug Recognition Expert Course 26-5

Most importantly, the Drug Influence Evaluation Facesheet is a technical document.

- Trained DREs know how to complete and interpret the Facesheet

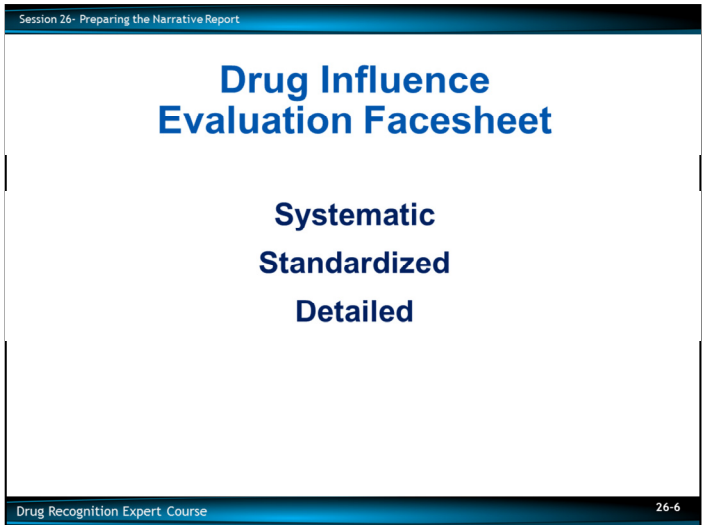
Boxes on the Facesheet should not be left blank. It is recommended “N/A” or “None Observed” be used.

Examples:

- Information obtained during the interview of the arresting officer
- Elaborate or lengthy statements made by the subject
- Paraphernalia found in the subject’s possession

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, plain English, written report so the prosecutor, the judge, and the jury will understand what you observed and what it means



To ensure the information contained on the Facesheet is systematic and standardized, the results of the tests should be recorded as follows:

Lack of Convergence (LOC)

- A dot should be made where the pupil is and draw an arrow to indicate the movement and where the pupil stops

Modified Romberg Balance (MRB)

- The first figure indicates the sway from front to back and should be estimated in inches from center
- The second figure indicates the sway from side to side and is estimated in inches from center
- Put the approximate number of inches from center the subject's sways on either end of the arrows
- Record actual elapsed time of the time estimation

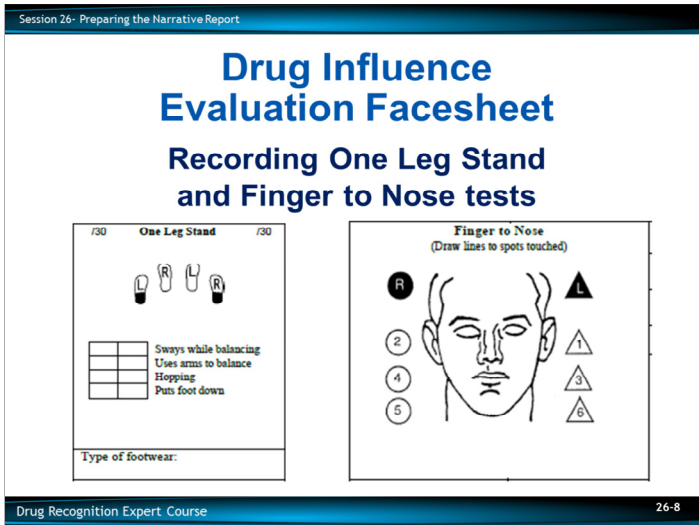
Drug Influence Evaluation Facesheet

Recording Walk and Turn Test Results

Walk and Turn Test		Cannot keep balance	
Starts too soon		_____	
Stops walking		1 st Nine	2 nd Nine
Misses heel-toe		_____	_____
Steps off line		_____	_____
Raises arms		_____	_____
Actual steps taken		_____	_____
Describe turn		Cannot do test (explain)	

Walk and Turn (WAT)

- The first two – cannot keep balance and starts too soon – are observed during the instruction stage
- Indicate by a check mark the number of times the subject stops, misses heel-to-toe, steps off line, or uses arms
- Record the actual number of steps taken
- 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.



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.

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, it enables them to draw a straighter line

Session 26- Preparing the Narrative Report

Drug Influence Evaluation Narrative Report Components

- **Location**
- **Witnesses**
- **Breath Alcohol Test**
- **Notification and Interview of Arresting Officer**

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C. Drug Influence Evaluation Narrative Report Components

The Narrative Report

The typical Drug Influence Evaluation Narrative Report format contains 13 components.

First component: Location (i.e., 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

Session 26- Preparing the Narrative Report

Drug Influence Evaluation Narrative Report Components

- **Initial observations of subject**
- **Medical problems and treatment**
- **Psychophysical indicators of impairment**

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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

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.

Session 26- Preparing the Narrative Report

Drug Influence Evaluation Narrative Report Components

- **Clinical indicators of impairment**
- **Signs of ingestion**

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Eighth component: Clinical Indicators of Impairment

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 suspect's eyes

Vital Signs

- Briefly summarize the suspect's pulse rate, blood pressure, and temperature

Ninth component: Signs of Ingestion

- Record the results of examinations of oral and nasal cavities
- Document the results of examinations for injection marks
- Document any odors detected on suspect's breath, hands, clothing, etc.
- Document physical debris of drugs or drug paraphernalia found on suspect's person

Session 26- Preparing the Narrative Report

Drug Influence Evaluation Narrative Report Components

- **Suspect's statements**
- **DRE's opinion**
 - Example: "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."

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Tenth component: Subject's Statements and other Observations.

- "Miranda" waiver and responses
- 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 suspect's perception of their impairment, if applicable

Eleventh component: DRE's Opinion.

- State the category or categories of drugs you believe is/are affecting the suspect
- State your opinion concerning the suspect's ability to operate a vehicle safely, if applicable to this case

"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."

Session 26- Preparing the Narrative Report

Drug Influence Evaluation Narrative Report Components

- Toxicological sample
- Miscellaneous

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Twelfth component: Toxicological Sample

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.



D. Sample Report

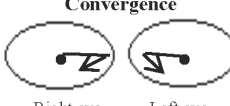
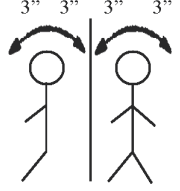
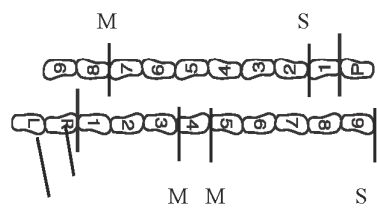
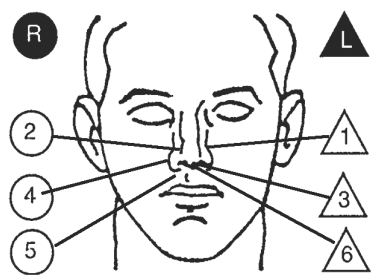
A copy of this report is found at the end of this session, for your reference. This report is a suggested guide for preparing clear, concise, detailed reports. Even if your State or prosecutor requires a different narrative report format, you should still include all 13 reporting components in a detailed manner.

Session 26- Preparing the Narrative Report

QUESTIONS?

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DRUG INFLUENCE EVALUATION

Evaluator Officer Kemp Layden		DRE # 7022	Rolling Log # 17-10-155	Evaluator's Agency Phoenix Police Department	Case# 17-22354 (Session XXXVI)
Recorder/Witness Deputy Ryan Castro, Maricopa Co. S.O.		Crash: <input checked="" type="checkbox"/> None <input type="checkbox"/> Fatal <input type="checkbox"/> Injury <input type="checkbox"/> Property		Arresting Officer's Agency Arizona Department of Public Safety	
Arrestee's Name (Last, First, Middle) Roach, Robert A.		Date of Birth 04/02/90	Sex M	Race W	Arresting Officer (Name, ID#) Officer Trevor Graff #15681
Date Examined / Time / Location 10/21/17 / 2130 / 4 th Ave Jail Jail		Breath Test: Results: 0.00		Test Refused <input type="checkbox"/> Instrument #: 68100	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: Ofc. Graff	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	What have you eaten today? Doritos & Cookies		When? "All day"	What have you been drinking? How much? Arizona Ice Tea "2 or 3 cans"
Time now/ Actual 9 pm/ 2135	When did you last sleep? Last night	How long? 7 or 8 hours	Are you sick or injured? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sore back <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 "I smoke a little pot for my back"			Attitude: Cooperative, Carefree	Coordination: Slow, Unsteady	
Speech: Slow, Thick, Low		Breath odor: Marijuana		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 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		Tracking: <input checked="" type="checkbox"/> Equal <input type="checkbox"/> Unequal	
Pulse/Time	HGN	Left Eye	Right Eye	Convergence	
1. 98 / 2142	Lack of Smooth Pursuit	None	None		
2. 96 / 2154	Maximum Deviation	None	None	Right eye Left eye	
3. 98 / 2212	Angle of Onset	None	None		
Modified Romberg Balance Approx 3" 3" 3" 3" 	Walk and Turn Test		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
			Starts too soon _____		
Circular sway / Eyelid tremors	M M S		Stops walking <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
	Walked slowly. Leg tremors.		Misses heel-toe <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
Time Estimation 42 estimated as 30 seconds		Describe turn Stopped, walked in a circle		Cannot do test (explain) N/A	
Finger to Nose (Draw lines to spots touched)		PUPIL SIZE		Room light (2.5-5.0)	Darkness (5.0-8.5)
		Left Eye		6.0	9.0
		Right Eye		6.0	9.0
Slow movements. Eyelid tremors. Laughing		Rebound Dilatation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light: Normal	
Blood Pressure 162 / 98		Temperature 98.2 °F		RIGHT ARM	
Muscle Tone: <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Nothing observed		LEFT ARM	
Comments: What drugs or medications have you been using? "I smoke pot for my back pain."		How much? "A couple bowls"		Time of use? 10 am and 8 pm	Where were the drugs used? (Location) "At home and in my car."
Date / Time of arrest: 10/21/17 2025	Time DRE was notified: 2115	Evaluation start time: 2130	Evaluation completion time: 2225	<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation	
DRE/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					

DRUG INFLUENCE EVALUATION NARRATIVE

Suspect: Roach, Robert A.

- Location:** The drug influence evaluation was conducted in the holding cell and hallway at the Maricopa County 4th Avenue Jail. Both areas have adequate lighting for conducting a drug evaluation and have a concrete floor with no obstructions. The darkroom examinations were conducted in the staff restroom.
- Witnesses:** Deputy Ryan Castro of the Maricopa County S.O. witnessed and recorded the drug influence evaluation.
- Breath Alcohol Test:** Officer Graff administered a breath test to the suspect at 2055 hours and obtained a 0.00 BAC result using an Intoxilyzer 8000, serial number 68100.
- Notification and Interview of the Arresting Officer:** On 10/21/17, I was on duty and at approximately 2115 hours was requested to contact Officer Graff at the 4th Avenue Jail for a drug evaluation. At the jail, I was advised by Officer Graff that he had arrested the suspect during a West Valley DUI Task Force enforcement operation. According to Officer Graff, the suspect was driving 15 miles over the posted speed limit on Grand Avenue and failed to stop at a red traffic light at West Greenway Road. When Officer Graff activated his overhead emergency lights to stop the suspect's vehicle, the suspect continued for approximately a half mile before stopping. When the suspect pulled his vehicle over, he stopped in a position partially blocking an intersection. When asked for his operator's license, vehicle registration and proof of insurance, the suspect appeared confused and several times asked Officer Graff why he had been stopped. Officer Graff noted that the suspect's movements were slow and deliberate. After exiting his vehicle, the suspect had to steady himself against his vehicle several times. During the contact, Officer Graff did not detect the odor of an alcoholic beverage on the suspect's breath. When asked about consuming alcohol, the suspect denied consuming any. Officer Graff had the suspect perform SFSTs at roadside which included the Horizontal Gaze Nystagmus (HGN), Walk and Turn (W&T) and One Leg Stand (OLS) tests. According to Officer Graff, no HGN clues were observed. The suspect had difficulty performing the W&T and OLS tests. Officer Graff indicated he detected an odor of marijuana on the suspect's clothing and coming from his vehicle. Officer Graff arrested the suspect for DUI and transported him to the DPS Office where a breath test was conducted and a blood sample obtained. After obtaining a .00 BAC result, Officer Graff requested a DRE to assist with the investigation. Once I arrived to assist with the investigation, Officer Graff returned to the DUI Task Force operation.
- Initial Observation of the Suspect:** I first observed the suspect in the booking area of the 4th Avenue Jail. He appeared to be cooperative and appeared to be confused. He was slow to respond to questions and several times appeared confused when trying to relate information. His speech was slow, slurred, and at times difficult to hear. When he stood up from the booking bench, he used the wall to steady himself. His pupils appeared to be dilated, and his eyes were bloodshot and watery. I noted that the suspect was wearing tan colored shorts, a multi-colored tee shirt, and unlaced brown athletic shoes.
- Medical Problems and Treatment:** When asked about any medical conditions, the suspect indicated he had a "sore back" and was smoking marijuana to try and relieve the pain. When asked if he had a medical marijuana card, he indicated he did not, but was planning to get one. When asked if his sore back would prevent him from participating in the drug influence evaluation, the suspect stated, "I should be okay, dude." When asked if he required any medical assistance for his back pain, he indicated he did not. The suspect 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 the suspect prior to him attempting them. After each demonstration, the suspect confirmed that he understood the instructions. The following psychophysical tests were administered to the suspect per DRE protocol:

Modified Romberg Balance: During this test, the suspect exhibited a circular sway of approximately three inches. His time estimation was slow, estimating 30 seconds in 42 seconds. When asked how he had estimated the 30 seconds, the suspect stated, "I was trying to count, but I kind of forgot." Eyelid tremors were present throughout the test.

Walk and Turn: Prior to starting the test, the suspect was asked if his shoes would create any difficulties in properly completing the test. He replied he did not think so, and agreed to do the test with them on. For the test, a painted white line on the concrete floor was used. During the instruction stage of the test, the suspect lost his balance to the right twice. After regaining his balance and starting the walking stage, his steps were slow and deliberate. He failed to touch heel to toe on his 3rd and 4th steps, raised his arms for balance once, and stopped on the 9th step and appeared to be confused on how to continue. He then asked, "What now?" He was advised to make his turn as directed and continue with the remainder of the test following the instructions. He then made an improper turn by taking multiple steps with both feet, turning around in a circle. On the second nine steps, the suspect stopped walking on his first step and again appeared to be confused. He raised his arms for balance three times on the second nine steps and failed to touch heel to toe on his 7th and 8th steps. Leg tremors were present throughout the test. Several times the suspect laughed out loud and appeared to be amused as he attempted the test.

One Leg Stand: Per DRE protocol, this test was conducted twice, once standing on the left foot and once standing on the right foot. While standing on his left foot and raising his right foot, he counted out loud slowly, counting to 1,024, when the test was stopped after 30 seconds. He swayed while balancing and twice used his arms for balance while standing on his left foot. He lost his balance once and put his foot down at count 1,015. While standing on his right foot and raising his left foot, the suspect again counted slowly reaching 1,022 when 30 seconds had elapsed. He swayed while balancing throughout the test, used his arms for balance once, and put his foot down at 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 the count, he began laughing.

Finger to Nose: During this test, the suspect'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. Eyelid tremors were present throughout the test. Several times the suspect began laughing as he attempted to touch his nose.

8. **Clinical Indicators of Impairment:**

Eye Signs: The eye examinations were conducted in the jail staff restroom which is equipped with a glow stick on the wall. The room can be adequately darkened for the examination process. No clues of HGN were present. VGN was also not 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. Rebound dilation was present with his pupils ranging from 5.0 mm to 6.5 mm in 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.

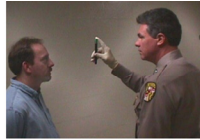
Vital Signs: The suspect's pulse rates were checked three times per DRE protocol and were 98, 96 and 98 beats per minute. All three results were above the DRE average range for pulse rates. The suspect's blood pressure was checked at 162/98, which was also above the DRE average range for blood pressure. His body temperature was 98.2 degrees, which is 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 that 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 greenish coating on the back of his tongue, which can be an indicator of someone who has recently smoked marijuana. When questioned about the green coating, he had no explanation. No indicators of injection sites were located on the suspect's arms and hands.
10. **Suspect's Statements:** The suspect admitted smoking a bowl of marijuana about 30 minutes prior to being stopped. He stated he had been at a friend's house and his back was hurting, so he smoked some marijuana and was driving home when he was pulled over. He also admitted smoking marijuana earlier in the day at about 10 am just before he left his house for work. He also indicated that he now uses marijuana more than he used to, and has been smoking marijuana several times a week since he was about 20 years old. When asked if the marijuana he had smoked prior to being stopped had affected him, he stated, "Maybe just a little. It was some pretty good weed." He further indicated that he enjoys smoking marijuana because it relaxes him. He also stated that when he smokes marijuana he usually drives slower and considers himself a safer driver.
11. **DRE's Opinion:** It is my opinion as a certified Drug Recognition Expert that Robert Roach is under the influence of Cannabis and is unable to operate a vehicle safely.
12. **Toxicological Sample:** A blood sample was collected from the suspect at 2100 hours in accordance with state statutory requirements and was submitted into evidence for laboratory testing.
13. **Miscellaneous:** The suspect was also cited for DWS and Driving Uninsured. Refer to Officer Graff's arrest report for additional details.

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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**

Upon successfully completing this session, the student will be able to:

- Administer selected portions of the examinations that constitute the drug influence evaluation
- Describe the evaluation procedures
- Document the results of the examinations

CONTENT SEGMENTS

- A. Procedures for this Session
- B. Hands-On Practice
- C. Session Wrap-Up

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Coaching
Participant-Led Coaching

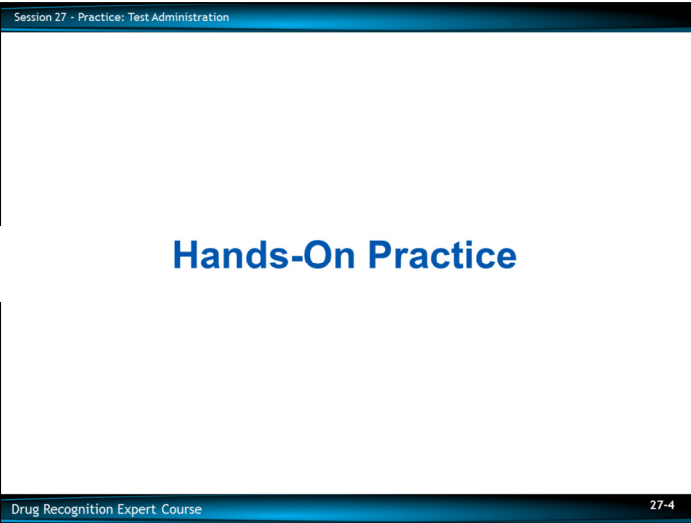
Procedures for this Session

- **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**

A. Procedures for this Session

Team Assignments

- Participants will work in two or three member teams
- 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



B. Hands-On Practice

Drug Influence Evaluation

- **Begin with Preliminary Examination**
- **Ask all prescribed questions**
- **Conduct initial check of eyes**
- **Check pulse for first time**

Drug Influence Evaluation

For this practice session, each participant will conduct a complete drug influence evaluation.

Begin with the Preliminary Examination.

Ask all of the prescribed questions.

Conduct the initial check of the eyes.

Check the pulse for the first time.

Drug Influence Evaluation

- **Conduct test of HGN, VGN and LOC**
- **Administer four divided attention psychophysical tests**
- **Check vital signs**

Conduct the test of Horizontal Gaze Nystagmus (HGN), Vertical Gaze Nystagmus (VGN), and Lack of Convergence (LOC).

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

Check the vital signs.

- Blood pressure
- Temperature
- Check the pulse for the second time

Dark Room Examinations

- Conduct dark room examinations
- Check for muscle tone
- Examine participant's (subject's) neck, arms, and ankles for signs of injection
- Check pulse for third time

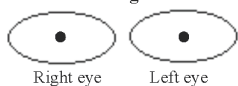

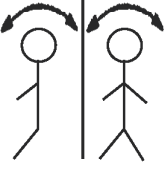
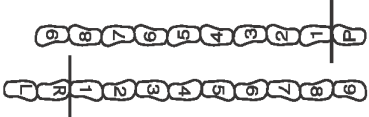
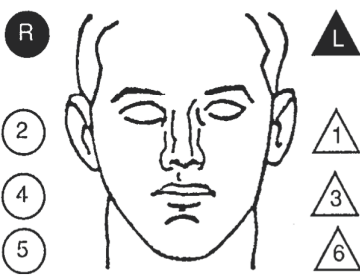
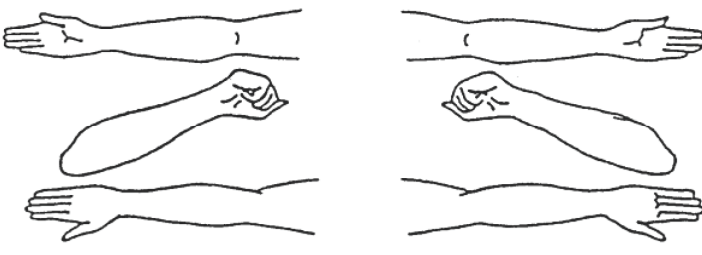
Dark Room Examinations

- Conduct the dark room examinations
- 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

QUESTIONS?

C. Session Wrap-Up

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 1. ___ / ___ 2. ___ / ___ 3. ___ / ___	HGN	Left Eye	Right Eye	Convergence  Right eye Left eye		/30 One Leg Stand /30  L R L R								
	Lack of Smooth Pursuit													
	Maximum Deviation													
	Angle of Onset													
Modified Romberg Balance Approx. Approx. 	Walk and Turn Test 		Cannot keep balance _____		L R <table border="1" style="width: 100%; text-align: center;"> <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> Sways while balancing Uses arms to balance Hopping Puts foot down									
Starts too soon _____		1 st Nine	2 nd Nine											
Stops walking _____														
Misses heel-toe _____														
Steps off line _____														
Raises arms _____														
Actual steps taken _____														
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)	Nasal area:								
		Left Eye				Oral cavity:								
		Right Eye												
		Rebound Dilation: <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"/> 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														

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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**

Upon successfully completing this session, participants will be able to:

- 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

CONTENT SEGMENTS

- A. Guidelines for Case Preparation
- B. Guidelines for Direct Testimony
- C. Typical Defense Tactics

LEARNING ACTIVITIES

Instructor-Led Presentations
Instructor-Led Demonstrations
Reading Assignments

Preparation

- **Begins during your initial investigation**
- **Review all records and reports**
- **Review all evidence and your conclusion**
- **Review notes with arresting officer**
- **Review any weak areas**
- **Clarify or resolve any discrepancies**

A. Guidelines for Case Preparation

Preparation

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.

When you receive the trial notice, you should schedule a pre-trial conference with the prosecutor.

- 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

Preparation

- Review questions prosecutors will be asking
- Review and prepare for defense tactics
- Review CV and other credentials



- Review questions the prosecutors will be asking
- Review typical tactics the prosecutors expect the defense to use
- 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 can not 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)

Session 28 - Case Preparation and Testimony

Direct Testimony

- **Relate training and experience**
- **If possible, don't allow defense to stipulate you are an expert**

Drug Recognition Expert Course 28-5

B. Guidelines for Direct Testimony

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.

Qualifications will be established during Voir Dire:

- Voir Dire is 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

When testifying, relate training and experience to the type of arrest being tried (e.g., DWI, Methamphetamine, Cocaine, 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
- If possible, do not allow the defense to stipulate you are an expert

Direct Testimony

- Document and record evaluations conducted
- Establish your credibility
- Make sure to include minor details
- Be fair and impartial

- 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

New Scientific Principle

American courts employ either Frye or Daubert standards



New Scientific Principle

- The scientific principles are unfamiliar to the jury or judge

Your task is to establish your hard work through training will be acceptable in the court.

- American courts employ either the Frye or the Daubert standards for determining the admissibility of scientific evidence

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.

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

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

General Guidelines



General Guidelines

- 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"
- 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.

- Remember, some jurors focus on an officer's demeanor more than content of testimony

General Guidelines



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

When describing subject’s performance on Standardized Field Sobriety Tests (SFSTs), explicitly describe exactly what the subject did or neglected to do.

- 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

Typical Defense Tactics

- **Challenging observations and interpretations**
- **Challenging credentials**



C. Typical Defense Tactics

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.

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

Session 28 - Case Preparation and Testimony

Typical Defense Tactics

- **Inconsistencies**
- **Past testimony**
- **Testimony at odds with other experts**
- **Lack of recall**
- **Parts of drug evaluation were conducted incorrectly**

Drug Recognition Expert Course 28-11

Some examples of challenging your credibility are:

Inconsistencies:

- Arresting officer's and examining officer's testimony must be complimentary
 - Any differences must be explained
- Get your facts straight and stick to them

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

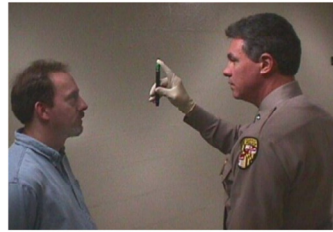
Lack of recall:

- 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.

Role of Defense Expert

Pupillary Examinations



Role of Defense Expert

To impeach credibility of the arresting officer and/or the prosecution expert.

- My expert vs. your expert
 - Usually they are 180 degrees apart in their opinions

To present alternative conditions and states could have produced the same or similar symptoms.

Typical Defense Questions

Pupillary 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

Role Play

- What is a DRE?
- What is involved in DEC Training Program?
- How do you properly identify drug category or categories?
- How do you explain DRE opinion?
- What are the components of a drug influence evaluation?

To prepare for possible DRE-related testimony, a DRE should be familiar with 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?

QUESTIONS?

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?

Review of the DRE School



Review of the 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”

Drug Recognition Expert Course Review-2

How do we define the term “drug” for Drug Recognition Expert (DRE) purposes?

Review of the 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?**

Drug Recognition Expert Course Review-3

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?

Review of the 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?

Drug Recognition Expert Course Review-4

- 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?

Review of Symptomatology

- Name six different CNS Depressants
- Name four different CNS Stimulants
- Name two naturally-occurring Hallucinogens
- Name four different synthetic Hallucinogens

Review of Symptomatology

- Name six different Central Nervous System (CNS) Depressants
- Name four different CNS Stimulants
- Name two naturally-occurring Hallucinogens
- Name four different synthetic Hallucinogens

Review of the 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?

Drug Recognition Expert Course Review-6

- Name a major analog of PCP

- Name the three sub-categories of Inhalants

- What is the active ingredient in Cannabis?

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 points
 - Indicate where they are located
- What is the “average” range of adult human pulse rate, for DRE purposes?

Review of Vital Signs

- Define “Pulse”

- True or False: Pulse rate is measured in units of “millimeters of mercury”

- Name three different pulse points, and indicate where they are located.

- What is the “average” range of adult human pulse rate, for DRE purposes?

Review of the 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?

Drug Recognition Expert Course Review-8

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?

Review of the 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?**

Drug Recognition Expert Course Review-9

- 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?

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?

Review of the Eye Examinations: Horizontal Gaze Nystagmus (HGN)

- 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?

Review of the 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?

Drug Recognition Expert Course Review-11

Review of the Eye Examinations: Vertical Gaze Nystagmus (VGN)

- True or False: Any drug that causes HGN may also produce VGN.

- What category of drugs causes VGN but not HGN?

Review of the 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?**

Drug Recognition Expert Course Review-12

Review of the Eye Examinations: Lack of Convergence (LOC)

- 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?

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**

Review of the 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.

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?**

- 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?

Review of the DRE School

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?

Drug Recognition Expert Course Review-15

- 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?

Review of the DRE School

Review of Divided Attention Tests

- Name the four Divided Attention Tests administered during the DRE drug influence evaluation

Drug Recognition Expert Course Review-16

Review of the Divided Attention Tests

- Name the four Divided Attention Tests administered during the DRE drug influence evaluation.

Review of the 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?

Drug Recognition Expert Course Review-17

- Why is the Modified Romberg Balance (MRB) the first test administered?

- What four validated clues of impairment have been established for the One Leg Stand (OLS) Test?

- How many times is the OLS administered during the DRE drug influence evaluation?

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?

- Which foot must the subject stand on first when performing the OLS?

- How many validated clues of impairment have been established for the Walk and Turn (WAT) test? Name them.

- In what sequence is the subject instructed to touch the index fingers to the nose on the Finger to Nose (FTN) test?

Review of the DRE School

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?**

Drug Recognition Expert Course Review-19

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?

Review of the 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?

Drug Recognition Expert Course Review-20

- 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?

Review of the 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?**

Drug Recognition Expert Course Review-21

- 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?

Review of the DRE School

Review of Physiology

- Name the ten major body systems

Drug Recognition Expert Course Review-22

Review of Physiology

Review of the 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?**

Drug Recognition Expert Course Review-23

- 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?

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?**

- 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?

Review of the 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**

Drug Recognition Expert Course Review-25

- 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.

Review of the 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”?**

Drug Recognition Expert Course Review-26

- Name the two sub-divisions of Autonomic Nerves and describe their functions.

- What does it mean to say a drug is “sympathomimetic”?

- What does it mean to say a drug is “parasympathomimetic”?

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?

- 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?

Review of the 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?

Drug Recognition Expert Course Review-28

- What are the Pulmonary Arteries, and what are unique about them?

- What are the Pulmonary Veins and what is so special about them?

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. metasympathetic
 - C. postsympathetic
 - D. mesosympathetic
 - E. pilosympathetic

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. **Chloral Hydrate** is an example of
- A. a Non-Barbiturate
 - B. an Antipsychotic Tranquilizer
 - C. an Antidepressant
 - D. a Barbiturate
 - E. an Anti-Anxiety Tranquilizer
6. **Numorphan** is an example of
- A. a Synthetic Opiate
 - 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

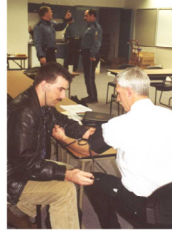
20. **Phencyclidine** is best described as
- A. parasympathomimetic
 - B. an antidepressant
 - C. a cellular stimulant
 - D. psychotrophic
 - E. a dissociative anesthetic
21. Which of the following usually **will not cause** the pupils to dilate? (Circle all that usually do not cause dilation.)
- A. 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 arms for 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 **Hycodan** 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 an Anti-Anxiety Tranquilizer. (Circle all that are Anti-Anxiety Tranquilizers.)
- A. Librium
 - B. Valium
 - C. Amobarbital
 - D. Chloral Hydrate
 - E. Xanax

Session 29

Classifying a Suspect (Role Play)



Learning Objectives

- **Conduct a complete drug influence evaluation**
- **Compile a complete, clear and accurate report documenting results of the evaluation**

Upon successfully completing this session, the student will be able to:

- 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

CONTENT SEGMENTS

- A. Scenarios: Simulated Examinations
- B. Report Preparation Practice
- C. Report Review and Critique

LEARNING ACTIVITIES

Interview Practice
Note-Taking Practice
Small Group Work Session
Instructor-Led Presentations
Participant-Led Presentations
Participant-Led Critiques

A. Scenarios: Simulated Examinations

Team Assignments

The total number of student 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.

Procedures

- **Teams will examine as many of the “role players” as possible**
- **Each examination will be carried out fully**
- **At certain points in examination, “role player” will inform team what to record**

Procedures

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. At certain points in the examination, the “role player” will inform the team what to record.

- Example: the “role players” will instruct the teams concerning the evidence to be recorded from the Horizontal Gaze Nystagmus (HGN) test

Role Playing

- **Some “role players” will be simulating signs and symptoms of exactly one category of drugs**
- **Some “role players” may be simulating signs and symptoms of two or more categories in combination**
- **All students will participate in critiquing reports**

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 PCP and Marijuana

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 examination, the team will discuss the evidence obtained and reach a consensus concerning the category or categories of drugs present.

Subsequently, each team will be assigned the responsibility of preparing and presenting a complete narrative report on one “role player.”

All students will participate in critiquing the reports.

Drug Evaluation and Classification Practice

Practice will continue for approximately 2
hours or until each team has completed
the evaluation of at least three "role
players"

Drug Evaluation and Classification Practice

Session 29 - Classifying a Suspect (Role Play)

Report Preparation Practice

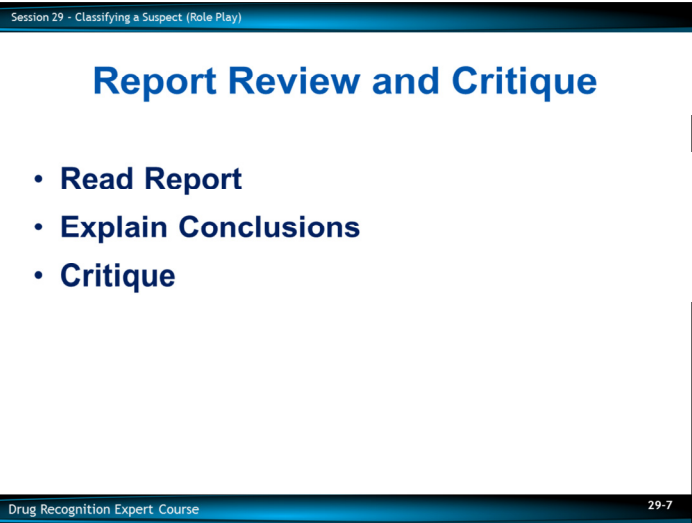
- Team Assignments
- Group Writing Exercise

Drug Recognition Expert Course 29-6

B. Report Preparation Practice

Team Assignments

Group Writing Exercise



C. Report Review and Critique

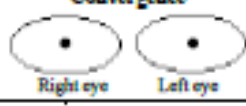
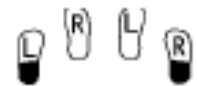
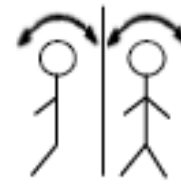
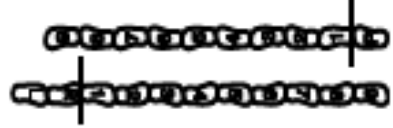
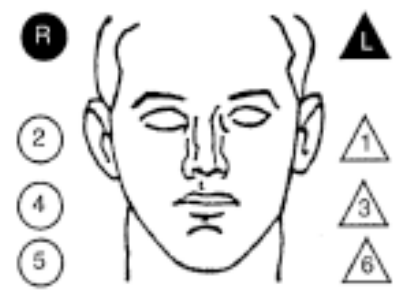






Report Presentation

- Each team should appoint a spokesperson to read their report and explain exactly what led the team to its conclusion concerning the category or categories of drugs

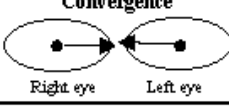
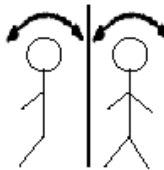
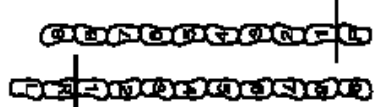







Report Critique

QUESTIONS?


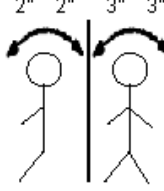
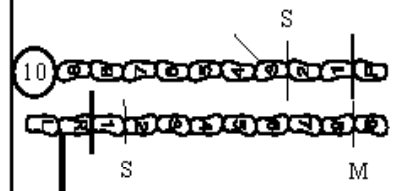
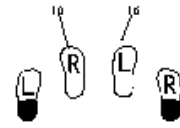
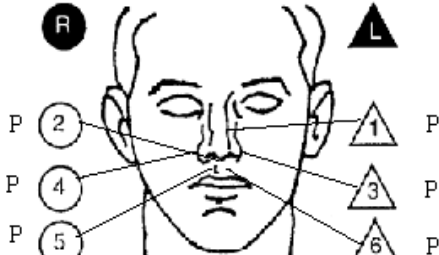

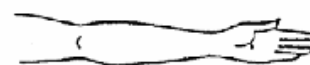
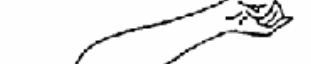

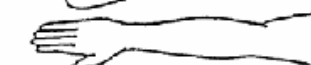

DRUG INFLUENCE EVALUATION

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	Right Eye	Convergence		/30 One Leg Stand /30		
1. _____ / _____ 2. _____ / _____ 3. _____ / _____		Lack of Smooth Pursuit								
Modified Romberg Balance Approx. Approx.		Walk and Turn Test		Cannot keep balance _____						
				Starts too soon _____		1 st Nine		L R		
				Stops walking _____		2 nd Nine		Sways while balancing Uses arms to balance Hopping Pats foot down		
				Mixes heel-toe _____						
				Steps off line _____						
				Raises arms _____						
				Actual steps taken _____						
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)	Nasal area:		
				Left Eye				Oral cavity:		
				Right Eye				Reaction to Light:		
				Rebound Dilatation: <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"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis				

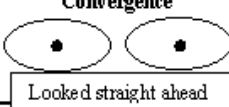

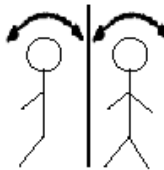
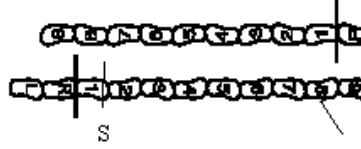
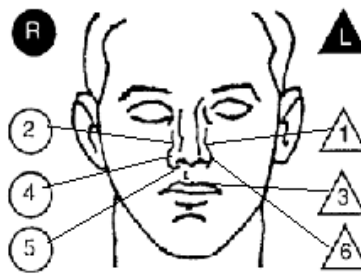
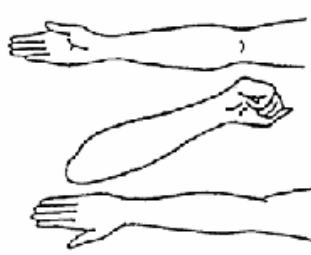
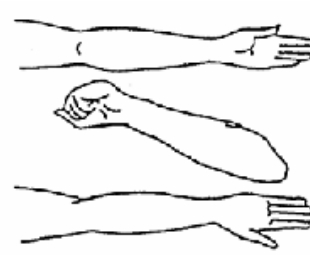
DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29-1
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) ALPHA		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? "Cereal"		When? "This morning"	What have you been drinking? How much? "Just coffee"	
Time now/ Actual /	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, passive		Coordination: Slow	
Speech: Normal		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 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	Left Eye	Right Eye	Convergence	
1. 80 / _____		Lack of Smooth Pursuit	None	None		
2. 76 / _____		Maximum Deviation	None	None	Right eye Left eye	
3. 76 / _____		Angle of Onset	None	None		
Modified Romberg Balance		Walk and Turn Test		30/30 One Leg Stand 32/30		
Approx. 1" 1" Approx. 0" 0" 				Cannot keep balance _____		
				Starts too soon _____		
				Stops walking _____		
				Misses heel/toe _____		
				Steps off line _____		
				Raises arms _____		
				Actual steps taken 9 9		
Time Estimation 32 estimated as 30 seconds		Describe turn Slow but correct		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)	
		Left Eye	4.5	6.5	3.5	
		Right Eye	4.5	6.5	3.5	
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Normal		
		RIGHT ARM		LEFT ARM		
						
						
						
		Nothing observed.				
Blood Pressure 128 / 84		Temperature 98.6 °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. I'm just need some sleep."		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 type="checkbox"/> Cannabis						

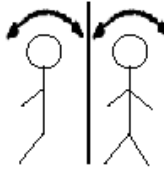
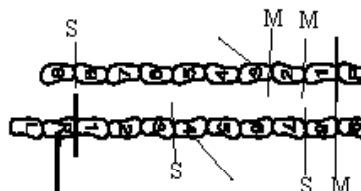
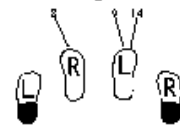
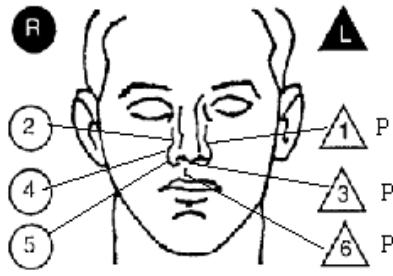

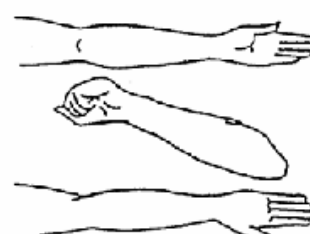
DRUG INFLUENCE EVALUATION

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) BRAVO		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? "Bag of chips"		When? "Noon"	What have you been drinking? How much? "Juice" 3 or 4 bottles									
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 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	Left Eye	Right Eye	Convergence		26/30								
1. 120 / _____	Lack of Smooth Pursuit	None	None			24/30								
2. 116 / _____	Maximum Deviation	None	None											
3. 118 / _____	Angle of Onset	None	None											
Modified Romberg Balance Approx. 2" 2" 3" 3" 	Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/>		One Leg Stand 									
Eyelid tremors	Walked slowly. Leg tremors		Starts too soon <input checked="" type="checkbox"/>		L R <table border="1" style="display: inline-table;"><tr><td></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			X	X	X			X	X
	X													
X	X													
X	X													
Stops walking <input type="checkbox"/>		1 st Nine <input checked="" type="checkbox"/>		2 nd Nine <input checked="" type="checkbox"/>		Leg tremors								
Misses heel-toe <input checked="" type="checkbox"/>														
Steps off line <input type="checkbox"/>														
Raises arms <input checked="" type="checkbox"/>														
Actual steps taken		9		10										
Time Estimation 22 estimated as 30 seconds	Describe turn Slow		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: Clear								
		Left Eye	6.5	8.5	5.5	Oral cavity: Green coating								
		Right Eye	6.5	8.5	5.5									
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Normal										
		RIGHT ARM		LEFT ARM										
														
														
														
		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 type="checkbox"/> Cannabis								


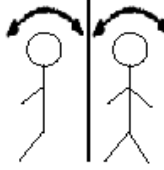
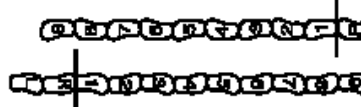

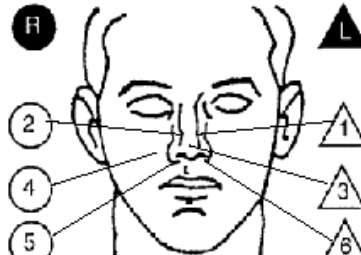
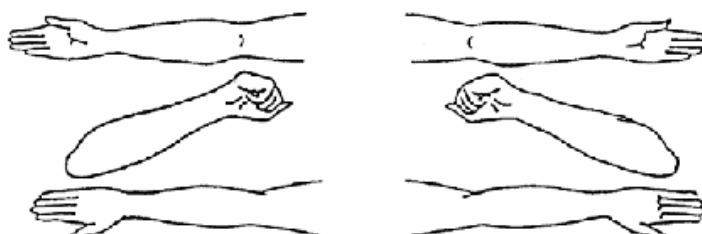
DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency	Case # Session 29-3																																				
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) CHARLIE		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? "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																																					
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 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	HGN	Left Eye	Right Eye	Convergence	38/30 One Leg Stand 24/30																																				
1. 112 / _____	Lack of Smooth Pursuit	Present	Present	 <p>Looked straight ahead</p>																																					
2. 116 / _____	Maximum Deviation	Present	Present																																						
3. 114 / _____	Angle of Onset	Immed	Immed																																						
Modified Romberg Balance	Walk and Turn Test		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Cannot keep balance</td> <td colspan="2"></td> </tr> <tr> <td>Starts too soon</td> <td colspan="2"><input checked="" type="checkbox"/></td> </tr> <tr> <td>Stops walking</td> <td>1st Nine</td> <td>2nd Nine</td> </tr> <tr> <td>Misses heel toe</td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td>Steps off line</td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td>Raises arms</td> <td><input checked="" type="checkbox"/></td> <td></td> </tr> <tr> <td>Actual steps taken</td> <td colspan="2" style="text-align: center;">9</td> </tr> </table>		Cannot keep balance			Starts too soon	<input checked="" type="checkbox"/>		Stops walking	1 st Nine	2 nd Nine	Misses heel toe	<input checked="" type="checkbox"/>		Steps off line	<input checked="" type="checkbox"/>		Raises arms	<input checked="" type="checkbox"/>		Actual steps taken	9		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>L</td> <td>R</td> <td></td> </tr> <tr> <td>X</td> <td>X</td> <td>Sways while balancing</td> </tr> <tr> <td>X</td> <td>X</td> <td>Uses arms to balance</td> </tr> <tr> <td></td> <td></td> <td>Hopping</td> </tr> <tr> <td></td> <td></td> <td>Puts foot down</td> </tr> </table>	L	R		X	X	Sways while balancing	X	X	Uses arms to balance			Hopping			Puts foot down
Cannot keep balance																																									
Starts too soon	<input checked="" type="checkbox"/>																																								
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		Puts foot down																																							
<p>Approx. 2" 2" 3" 3"</p> 					Rigid. Reminded to count out loud.																																				
Time Estimation 52 estimated as 30 seconds	Describe turn Did not attempt the turn		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)																																				
		Left Eye	4.5	6.5	3.5																																				
		Right Eye	4.5	6.5	3.5																																				
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Normal																																					
		RIGHT ARM		LEFT ARM																																					
																																									
		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:																																									
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<input type="checkbox"/> Medical		<input type="checkbox"/> CNS Depressant		<input type="checkbox"/> Dissociative Anesthetic																																					
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				<input type="checkbox"/> Narcotic Analgesic																																					
				<input type="checkbox"/> Cannabis																																					

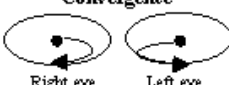
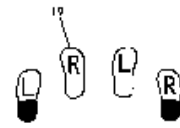
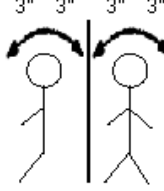
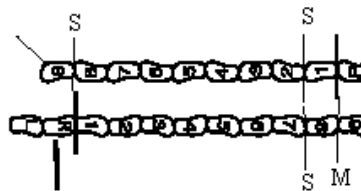
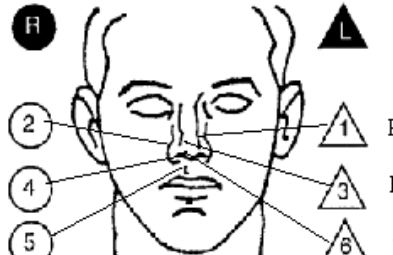


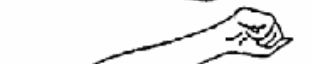
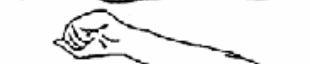
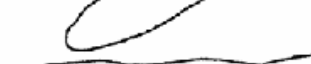

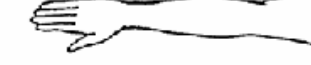
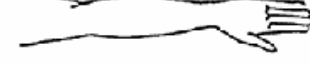
DRUG INFLUENCE EVALUATION

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) DELTA		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 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 Nystagnus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagnus <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									
1. 52 / _____ 2. 50 / _____ 3. 50 / _____		Lack of Smooth Pursuit Maximum Deviation Angle of Onset		Left Eye None None None		Right Eye None None None									
Modified Romberg Balance Approx. 3" 3" 3" 3"  Scratching arm s.		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		22/30 One Leg Stand 24/30  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		X	X	X	X			X	X
X	X														
X	X														
X	X														
Time Estimation 90 estimated as 30 seconds		Describe turn Slow, deliberate turn		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)									
		Left Eye		2.0	3.5	2.0									
		Right Eye		2.0	3.5	2.0									
Nasal area: Clear		Oral cavity: White coating dry		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Little to none									
Blood Pressure 102 / 52		Temperature 97.2 °F		RIGHT ARM 		LEFT ARM 									
Muscle Tone: <input type="checkbox"/> Normal <input checked="" type="checkbox"/> Flaccid <input type="checkbox"/> Rigid		Two fresh injection marks on left forearm.													
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 checked="" 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									

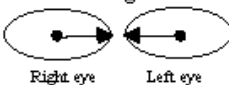
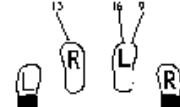
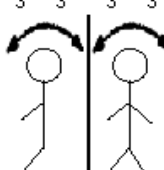
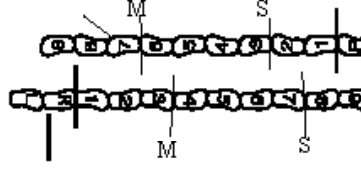
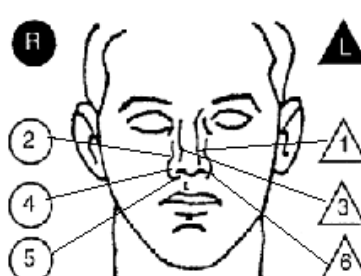


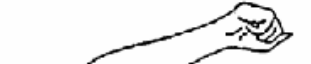
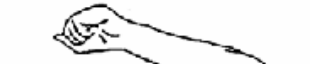

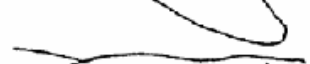
DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29-5												
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) ECHO		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 Nystagnus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagnus <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	Left Eye	Right Eye	Convergence													
1. 48 / _____		Lack of Smooth Pursuit	Present	Present														
2. 46 / _____		Maximum Deviation	Present	Present														
3. 46 / _____		Angle of Onset	40	40														
Modified Romberg Balance Approx. 3" 3" 3" 3" 		Walk and Turn Test  Test stopped when subject nearly fell three times in the instruction stage.		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken _____		/30 One Leg Stand /30  <table border="1" style="margin-left: auto; margin-right: auto;"> <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>X</td><td>X</td></tr> </table> Sways while balancing Uses arms to balance Hopping Puts foot down	L	R	X	X	X	X	X	X				
L	R																	
X	X																	
X	X																	
X	X																	
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)		<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>2.5</td> <td>3.5</td> <td>2.0</td> </tr> <tr> <td>Right Eye</td> <td>2.5</td> <td>3.5</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	2.5	3.5	2.0	Right Eye	2.5	3.5	2.0	Nasal area: Clear		Oral cavity: Clear
PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)															
Left Eye	2.5	3.5	2.0															
Right Eye	2.5	3.5	2.0															
 Head nodded forward. Slow, deliberate movements		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Little to None														
Blood Pressure 104 / 60		Temperature 97.4 °F		RIGHT ARM		LEFT ARM												
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 stopped using about 2 years ago."		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"/> Inhaled												
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis												

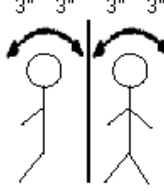
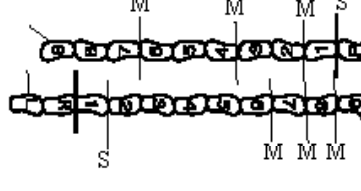
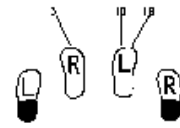
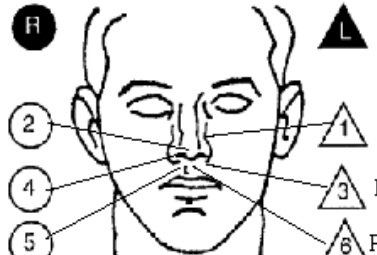
DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case #								
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) FOXTROT		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? "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 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	Left Eye	Right Eye	Convergence		25/30								
1. 112 / _____	Lack of Smooth Pursuit	None	None			23/30								
2. 116 / _____	Maximum Deviation	None	None											
3. 116 / _____	Angle of Onset	None	None											
Modified Romberg Balance Approx. 3" 3" 3" 3" 		Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/>			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>X</td><td></td></tr><tr><td>X</td><td></td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down	X	X	X	X	X		X
X	X													
X	X													
X														
X														
Eyelid tremors		Starts too soon _____		1 st Nine <input checked="" type="checkbox"/> 2 nd Nine <input checked="" type="checkbox"/>										
		Stops walking _____												
		Misses heel-toe <input checked="" type="checkbox"/>												
		Steps off line _____												
		Raises arms <input checked="" type="checkbox"/>												
		Actual steps taken		9 9										
Time Estimation 22 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: Clear								
		Left Eye	5.5	8.0	5.0	Oral cavity: Raised Taste Buds								
		Right Eye	5.5	8.0	5.0									
Eyelid tremors. Used pads of fingers on 1, 3, 5, & 6		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Reaction to Light: Normal								
		RIGHT ARM		LEFT ARM										
														
														
														
														
		Nothing observed.												
Blood Pressure 164 / 98		Temperature 98.0 °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? "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:	<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"/> Inhaled								
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis								

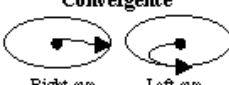

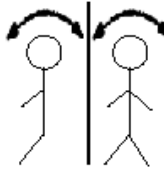
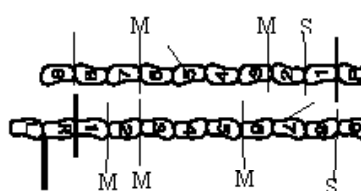
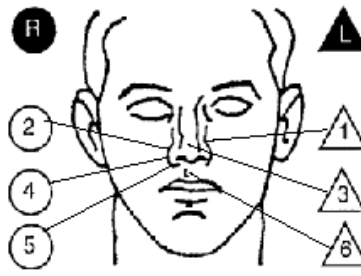


DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29-7																
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) GOLF		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: Oral Fluid <input type="checkbox"/>	Urine <input type="checkbox"/>	Blood <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? Red Bull	How much? 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 Nystagnus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagnus <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	Left Eye	Right Eye	Convergence		38/30																
1. 112 / _____	Lack of Smooth Pursuit	None	None			One Leg Stand 42/30																
2. 106 / _____	Maximum Deviation	None	None																			
3. 110 / _____	Angle of Onset	None	None			<table border="1" style="margin-left: auto; margin-right: auto;"><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>X</td><td>X</td></tr><tr><td>X</td><td>X</td></tr></table>	L	R	X	X	X	X	X	X	X	X						
L	R																					
X	X																					
X	X																					
X	X																					
X	X																					
Modified Romberg Balance Approx. 3" 3" Approx. 3" 3" 	Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/>		<table border="1" style="margin-left: auto; margin-right: auto;"><tr><td>1st Nine</td><td>2nd Nine</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 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>Actual steps taken</td><td></td></tr><tr><td>9</td><td>9</td></tr></table>		1 st Nine	2 nd Nine	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" 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"/>	Actual steps taken		9	9
1 st Nine	2 nd Nine																					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
<input checked="" type="checkbox"/>	<input checked="" 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"/>																					
Actual steps taken																						
9	9																					
Eyelid tremors		Took quick steps. Slammed heel to toes.		Starts too soon <input checked="" type="checkbox"/>																		
				Stops walking <input type="checkbox"/>																		
				Misses heel/toe <input checked="" type="checkbox"/>																		
				Steps off line <input type="checkbox"/>																		
				Raises arms <input checked="" type="checkbox"/>																		
				Counted quickly. Slurred numbers																		
Time Estimation 22 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																
		Left Eye	6.5	8.5	5.5	Oral cavity: Clear																
		Right Eye	6.5	8.5	5.5	Reaction to Light: Slow																
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																				
		RIGHT ARM		LEFT ARM																		
																						
																						
																						
		Nothing observed.																				
Blood Pressure 174 / 102		Temperature 99.8 °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? "I'm not answering that."		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"/> Inhaled																
		<input type="checkbox"/> Medical	<input type="checkbox"/> CNS Depressant	<input type="checkbox"/> Hallucinogen	<input type="checkbox"/> Narcotic Analgesic	<input type="checkbox"/> Cannabis																

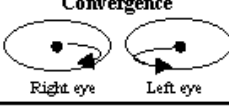
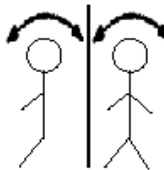
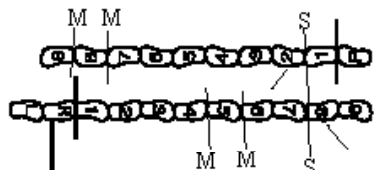
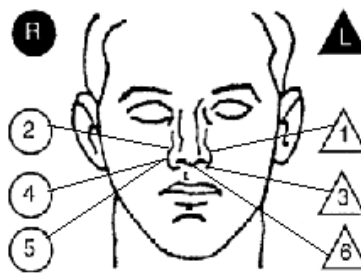
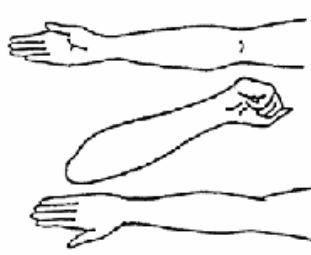
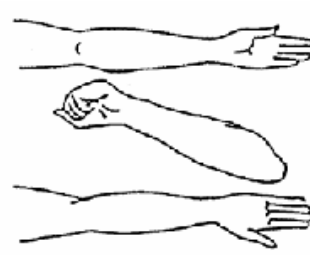
DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29-8	
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) HOTEL		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 No response			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 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		HGN		Convergence	
1. 112 / _____ 2. 114 / _____ 3. 120 / _____		Lack of Smooth Pursuit Present		Left Eye Present		Right Eye Present	
Modified Romberg Balance Approx. 3" 3" 3" 3" 		Maximum Deviation Present		Angle of Onset Immed		22/30	
Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/>		Starts too soon <input checked="" type="checkbox"/>		One Leg Stand 26/30 	
Time Estimation 52 estimated as 30 seconds		Describe turn Staggered to the right		Cannot do test (explain) N/A		Type of footwear: Boots	
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		7.0	9.0	6.5-7.5	
Had to be reminded to remove his finger each time.		Right Eye		7.0	9.0	6.5-7.5	
Blood Pressure 184 / 112		Temperature 100 °F		Rebound Dilation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Reaction to Light: Normal	
Muscle Tone: <input type="checkbox"/> Normal <input type="checkbox"/> Flaccid <input checked="" type="checkbox"/> Rigid		Comments:		RIGHT ARM		LEFT ARM	
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:	
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	

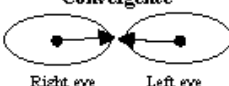

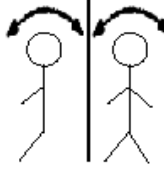
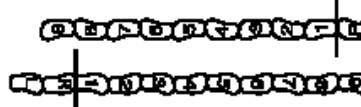
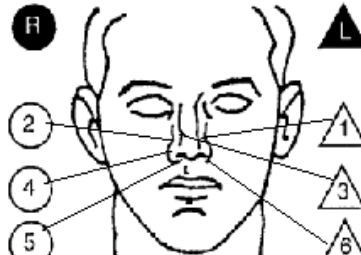


DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29-9																
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) INDIA		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? "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 Nystagnus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagnus <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. 96 / _____ 2. 92 / _____ 3. 88 / _____	HGN Lack of Smooth Pursuit Present Maximum Deviation Present Angle of Onset 30	Left Eye Present Right Eye Present	Convergence  Right eye Left eye	22/30	One Leg Stand 	26/30																
Modified Romberg Balance Approx. 3" 3" 3" 3"  Circular sway. Eyelid tremors.	Walk and Turn Test  Rigid movements. Did not count steps.	Cannot keep balance <input checked="" type="checkbox"/> Starts too soon <input checked="" type="checkbox"/> Stops walking <input checked="" type="checkbox"/> Misses heel-toe <input checked="" type="checkbox"/> Steps off line <input checked="" type="checkbox"/> Raises arms <input checked="" type="checkbox"/> Actual steps taken 9	1 st Nine 2 nd 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>	<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"/>	L R <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 type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr></table> Sways while balancing Uses arms to balance Hopping Puts foot down	<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 type="checkbox"/>	Nearly fell	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																					
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<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 type="checkbox"/>																					
Time Estimation 40 estimated as 30 seconds	Describe turn Staggered. Lost balance.	Cannot do test (explain) N/A	Type of footwear: Boots																			
Finger to Nose (Draw lines to spots touched)  Had to be reminded to actually touch his nose.	PUPIL SIZE	Room light (2.5 - 5.0)	Darkness (5.0 - 8.5)	Direct (2.0 - 4.5)	Nasal area: Redness. Running nose																	
	Left Eye	5.0	7.0	4.0	Oral cavity: Red																	
	Right Eye	5.0	7.0	4.0	Reaction to Light: Slow																	
	Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																					
	RIGHT ARM 	LEFT ARM 	Nothing observed.																			
Blood Pressure 148 / 98	Temperature 98.8 °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 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:	<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																	


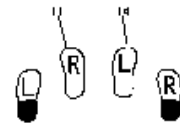
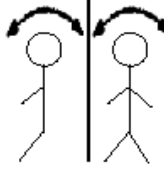
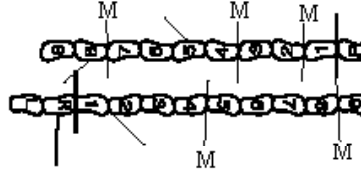
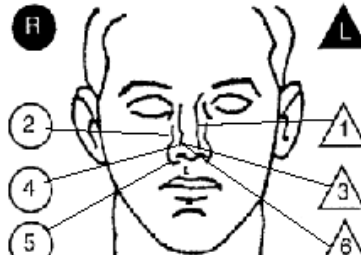


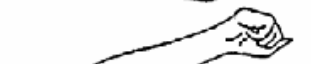
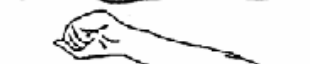
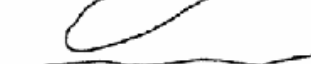

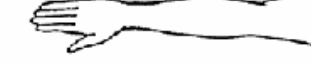

DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29-10											
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) JULIET		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)												
Date Examined / Time / Location / /		Breath Test: Results: 0.06	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? "Cereal"	When? "About 7 am"	What have you been drinking? How much? "Beer"	"A couple"	Time of last drink? "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			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 Nystagnus <input type="checkbox"/> Yes <input type="checkbox"/> No	Vertical Nystagnus <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	Left Eye	Right Eye	Convergence												
1. 82 / _____		Lack of Smooth Pursuit	Present	Present													
2. 80 / _____		Maximum Deviation	Present	Present	32/30												
3. 80 / _____		Angle of Onset	45	45	One Leg Stand 28/30												
Modified Romberg Balance Approx. 2" 2" 3" 3"  Circular sway.		Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/>		<table border="1" style="width: 100%;"> <tr> <td>L</td> <td>R</td> <td rowspan="5">Sways while balancing Uses arms to balance Hopping Puts foot down</td> </tr> <tr> <td>X</td> <td>X</td> </tr> <tr> <td>X</td> <td>X</td> </tr> <tr> <td>X</td> <td>X</td> </tr> <tr> <td>X</td> <td>X</td> </tr> </table>	L	R	Sways while balancing Uses arms to balance Hopping Puts foot down	X	X	X	X	X	X	X	X
L	R	Sways while balancing Uses arms to balance Hopping Puts foot down															
X	X																
X	X																
X	X																
X	X																
		Starts too soon _____		1 st Nine													
		Stops walking		2 nd Nine													
		Misses heel/toe															
		Steps off line															
		Raises arms															
		Actual steps taken		9 9													
Time Estimation 36 estimated as 30 seconds		Describe turn Slow turn		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)												
		Left Eye	4.5	6.0	3.5												
		Right Eye	4.5	6.0	3.5												
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Normal													
		RIGHT ARM		LEFT ARM													
																	
		Nothing observed.															
Blood Pressure 128 / 84		Temperature 98.7 °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 had a couple beers."															
Date / Time of arrest: / /		Time DRE was notified:		How much? N/A	Time of use? N/A	Where were the drugs used? (Location) N/A											
Officer's Signature:		Evaluation start time:		Evaluation completion time:		<input type="checkbox"/> Subject refused entire evaluation <input type="checkbox"/> Subject stopped participating during evaluation											
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																	

DRUG INFLUENCE EVALUATION

Evaluator		DRE #	Rolling Log #	Evaluator's Agency		Case # Session 29-11
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) KILO		Date of Birth	Sex	Race	Arresting Officer (Name, ID#)	
Date Examined / Time / Location / /		Breath Test: Results: 0.05	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 checked="" type="checkbox"/> No	What have you eaten today? Chicken dinner	When? 6 pm	What have you been drinking? How much? Wine Two 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 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	Left Eye	Right Eye	Convergence		/30 One Leg Stand /30
1. 60 / _____	Lack of Smooth Pursuit	Present	Present	 Right eye Left eye		 L R L R
2. 58 / _____	Maximum Deviation	None	None			
3. 58 / _____	Angle of Onset	None	None			
Modified Romberg Balance Approx. 2" 2" 3" 3"  Head nodded forward.	Walk and Turn Test  Lost balance three times. Test stopped.		Cannot keep balance <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Starts too soon _____ Stops walking _____ Misses heel-toe _____ Steps off line _____ Raises arms _____ Actual steps taken _____			
Time Estimation 40 estimated as 30 seconds	Describe turn Slow turn		Cannot do test (explain) N/A		Type of footwear: Slip-on 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
 Slow movements.		Left Eye	1.5	2.0	1.5	Oral cavity: Clear
		Right Eye	1.5	2.0	1.5	
		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Little to None		
		RIGHT ARM		LEFT ARM		
						
		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 type="checkbox"/> Alcohol <input type="checkbox"/> CNS Stimulant <input type="checkbox"/> Dissociative Anesthetic <input type="checkbox"/> Inhaled <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 29-12											
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) LIMA		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 checked="" type="checkbox"/> No	What have you eaten today? Pizza		When? 7 pm	What have you been drinking? How much? Beer 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 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	Left Eye	Right Eye	Convergence		22/30											
1. 102 / _____	Lack of Smooth Pursuit	Present	Present			One Leg Stand 24/30											
2. 100 / _____	Maximum Deviation	None	None														
3. 102 / _____	Angle of Onset	None	None														
Modified Romberg Balance Approx. 2" 2" 3" 3" 	Walk and Turn Test 		Cannot keep balance <input checked="" type="checkbox"/>		<table border="1" style="width: 100%;"> <tr> <td>L</td> <td>R</td> <td rowspan="5">Sways while balancing Uses arms to balance Hopping Puts foot down</td> </tr> <tr> <td>X</td> <td>X</td> </tr> <tr> <td>X</td> <td>X</td> </tr> <tr> <td>X</td> <td>X</td> </tr> <tr> <td>X</td> <td>X</td> </tr> </table>		L	R	Sways while balancing Uses arms to balance Hopping Puts foot down	X	X	X	X	X	X	X	X
L	R	Sways while balancing Uses arms to balance Hopping Puts foot down															
X	X																
X	X																
X	X																
X	X																
Bruxism. Eyelid tremors.		Walked quickly.		1 st Nine													
				2 nd Nine													
				<table border="1" style="width: 100%;"> <tr> <td>Misses heel-toe</td> <td>✓✓</td> <td>✓✓✓</td> </tr> <tr> <td>Steps off line</td> <td>✓</td> <td>✓✓</td> </tr> <tr> <td>Raises arms</td> <td>✓✓✓</td> <td>✓✓✓</td> </tr> <tr> <td>Actual steps taken</td> <td>9</td> <td>9</td> </tr> </table>		Misses heel-toe	✓✓	✓✓✓	Steps off line	✓	✓✓	Raises arms	✓✓✓	✓✓✓	Actual steps taken	9	9
Misses heel-toe	✓✓	✓✓✓															
Steps off line	✓	✓✓															
Raises arms	✓✓✓	✓✓✓															
Actual steps taken	9	9															
				Counted quickly.													
Time Estimation 22 estimated as 30 seconds	Describe turn Quick spin		Cannot do test (explain) N/A		Type of footwear: Slip-on boots												
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	7.5	9.0	6.0												
		Right Eye	7.5	9.0	6.0												
Quick, jerky movements. Jammed fingers to nose.		Rebound Dilation: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Reaction to Light: Slow													
		RIGHT ARM		LEFT ARM													
																	
																	
																	
																	
		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 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											

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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**

Upon successfully completing this session, the participant will be able to:

- 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

CONTENT SEGMENTS

- A. Summary
- B. Post Test
- C. Session Wrap-Up
- D. Certification Process, Training Assignments and Schedule
- E. Closing Remarks

LEARNING ACTIVITIES

Participant-Led Presentations
Participants' Anonymous Critique of Course
Knowledge Examination
Instructor-Led Presentation

The Seven Categories of Drugs

- CNS Depressants
- CNS Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

A. Summary

The Seven Categories of Drugs

- Central Nervous System (CNS) Depressants
 - CNS Stimulants
 - Hallucinogens
 - Dissociative Anesthetics
 - Narcotic Analgesics
 - Inhalants
 - Cannabis
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DEC Program Procedures

- **Breath Alcohol Test**
- **Interview of Arresting Officer**
- **Preliminary Examination**
- **Examinations of Eyes**
- **Divided Attention Tests**

The Drug Evaluation and Classification (DEC) Program Procedures

- Breath Alcohol Test
- Interview of Arresting Officer
- Preliminary Examination
- Examinations of Eyes
- Divided Attention Tests

DEC Program Procedures

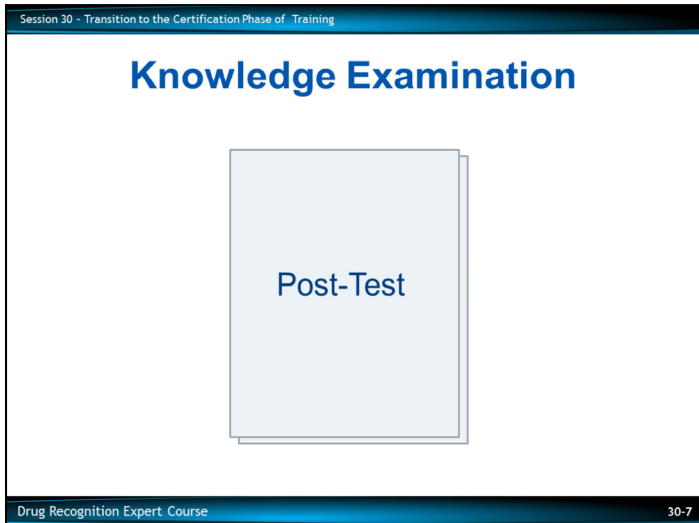
- **Vital Signs Examinations**
- **Check for Muscle Tone**
- **Inspection for Injection Sites**
- **Statements and Observations**
- **Opinion of the Evaluator**
- **Toxicological Examination**

- Vital Signs Examinations
- Check for Muscle Tone
- Inspection for Injection Sites
- Statements and Observations
- Opinion of the Evaluator
- Toxicological Examination

Symptomatology Matrix Review

- **CNS Depressants**
- **CNS Stimulants**
- **Hallucinogens**
- **Dissociative Anesthetics**
- **Narcotic Analgesics**
- **Inhalants**
- **Cannabis**

Symptomatology Matrix Review




B. Post-Test

Knowledge Examination

Session 30 - Transition to the Certification Phase of Training

Critique



Critique Form

Drug Recognition Expert Course 30-8

C. Session Wrap-Up

Critique

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

30-9

Drug Recognition Expert Course

D. Certification Training Assignments and Schedule

Field Evaluations Requirements



- 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



Field Certifications

Should include the following:

- DRE kits
- Certification Progress Log
- DRE Participant Manual
- Rolling Log
- A “prepared mind”

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 three drug evaluations***

- 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

Certification Knowledge Examination

- A multi-part, comprehensive examination
- No significant errors or omissions allowed
- Examines candidate's overall knowledge



Final Certification Knowledge Examination

- Prior to concluding the certification process, the candidate DRE must satisfactorily complete an 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

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

Drug Recognition Expert Course 30-15

- After each component required for certification is completed, a DRE Instructor must sign off on the DRE candidate's log
- The candidate DRE must be recommended for certification by two DRE instructors

Certification Timelines

- DRE Certification is good for two years
- Required to renew their certificate of continuing proficiency every two years

DRE Certification

DRE certification is for a period of two years.

DREs shall be required to renew their certificate of continuing proficiency every two years.

Maintaining Proficiency

IACP International Standard 3.4...A DRE shall demonstrate continuing proficiency by:

- **Performing a minimum of four (4) acceptable evaluations since the date of last certification**
- **Completing a minimum of eight (8) hours of recertification training**
- **Presenting an updated Curriculum Vitae and Rolling Log to the appropriate coordinator for review and approval**

Once certified, DREs shall be required to renew their certificates of continuing proficiency every two years.

Continuing proficiency requires:

- Performing a minimum of four (4) acceptable drug evaluations since the last date of certification
- 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

QUESTIONS?

Congratulations!



E. Closing Remarks

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 students 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 manual 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 Manual; 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 Manual.

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:	<input type="checkbox"/> None Observed	<input type="checkbox"/> None Observed

Comments/Observations: _____

Eye Examination:	<input type="checkbox"/> None Observed	<input type="checkbox"/> None Observed
------------------	--	--

Comments/Observations: _____

Psychophysical Tests:	<input type="checkbox"/> None Observed	<input type="checkbox"/> None Observed
-----------------------	--	--

Comments/Observations: _____

Vital Signs:	<input type="checkbox"/> None Observed	<input type="checkbox"/> None Observed
--------------	--	--

Comments/Observations: _____

Dark Room Examination:	<input type="checkbox"/> None Observed	<input type="checkbox"/> None Observed
------------------------	--	--

Comments/Observations: _____

Opinion of Student: _____ Agree Disagree

Toxicology Sample: Urine Blood Other Result: _____

Comments: _____

DRE Instructor: _____ DRE#: _____