

Participant Manual

DWI Detection and Standardized Field Sobriety Testing (SFST)



Revised: 02/2018

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DWI Detection
and
Standardized
Field Sobriety
Testing

Session 1 – Introduction
and Overview



February 2018

Session 1 - Introduction

DWI Detection and Standardized Field Sobriety Testing



Location
Date

DWI Detection and Standardized Field Sobriety Testing 1-2

CONTENT SEGMENTS

- A. Welcoming Remarks and Objectives
- B. Administrative Details
- C. Pre-Test


LEARNING ACTIVITIES

- Instructor-Led Presentation
- Written Examination

Session 1 - Introduction 30 Minutes

Session 1

Introduction and Overview



DWI Detection and Standardized Field Sobriety Testing 1-3

A. Welcoming Remarks

Welcome to the DWI Detection and Standardized Field Sobriety Testing (SFST) Course. The SFST training focuses on a set of examination procedures that provide officers knowledge and tools for DWI detection. The SFST course provides detailed explanations of the evaluation procedures, careful demonstrations of these procedures (both "live" and via video), and ample opportunities for the participants to practice administering the evaluations.

Session 1 - Introduction

Learning Objectives

- State goals and objectives of course
- Describe course schedule and activities
- Recognize Participant Manual contents
- Demonstrate pre-training knowledge of course topics



DWI Detection and Standardized Field Sobriety Testing 1-6

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

- State the goals and objectives of the course
- Describe the course schedule and activities
- Recognize the Participant Manual contents
- Demonstrate their pre-training knowledge of course topics

Course Goal

Increase deterrence of DWI violations; thereby reducing the number of crashes, deaths, and injuries caused by impaired drivers.




The goal of this course is to ultimately increase deterrence of DWI violations; thereby reducing the number of crashes, deaths, and injuries caused by impaired drivers.

Session 1 - Introduction

Enforcement Goals

- **General DWI deterrence**
- **DWI detection phases, clues, and techniques**
- **DWI case requirements**



DWI Detection and Standardized Field Sobriety Testing 1-8

Enforcement goals are to identify:

- Enforcement's role in general DWI deterrence
- DWI detection phases, clues, and techniques
- Requirements for organizing and presenting testimonial and documentary evidence in DWI cases

Session 1 - Introduction

Impaired Drivers Kill or Injure a Person Every Minute!



65 deaths and injuries each hour!

DWI Detection and Standardized Field Sobriety Testing 1-9

65 deaths and injuries each hour!

State and Local Data


- **Approximately _____ people now live in _____**
- **About _____ of these people will die in vehicle crashes**
- **About _____ will die in DWI crashes**

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- Approximately _____ people now live in _____
 - About _____ of these people will die in vehicle crashes
 - About _____ will die in DWI crashes
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Session 1 - Introduction

Job Performance Objectives

- **Recognize evidence**
- **Administer SFSTs**
- **Describe evidence**
- **Video/audio evidence**




DWI Detection and Standardized Field Sobriety Testing 1-11

At the conclusion of this training, participants will demonstrate the ability to:

- Recognize and interpret evidence of DWI violations
- Administer and interpret SFSTs
- Describe DWI evidence clearly and convincingly in written reports and verbal testimony
- Ensure video and/or audio evidence, if available, is consistent with other evidence

Session 1 - Introduction

Job Performance Enabling Objectives

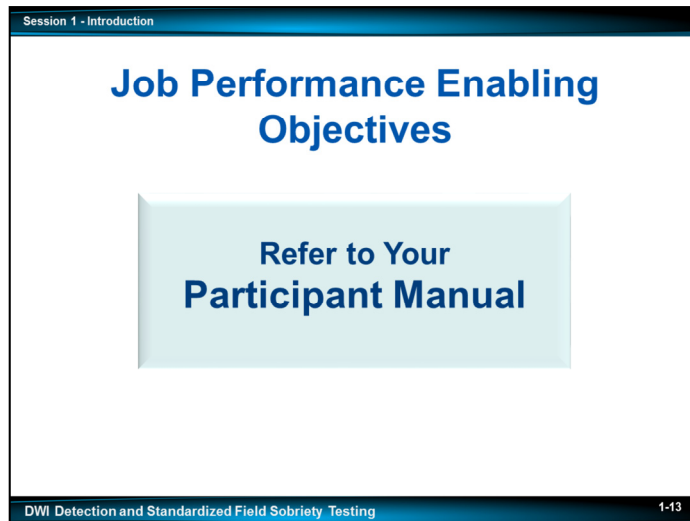


DWI Detection and Standardized Field Sobriety Testing 1-12

Job Performance Enabling Objectives

Understand the tasks and decisions of DWI detection

- Recognize the magnitude and scope of DWI-related crashes, deaths, injuries, property loss, and other social aspects of the DWI problem
- Understand the deterrent effects of DWI enforcement
- Understand the DWI enforcement legal environment
- Know and recognize typical vehicle maneuvers and human indicators symptomatic of DWI that are associated with initial observation of vehicles in operation
- Know and recognize typical reinforcing maneuvers and indicators that come to light during the stopping sequence
- Know and recognize typical sensory and other clues of alcohol and/or other drug impairment that may be seen during face to face contact with DWI subjects
- Know and recognize typical behavioral clues of alcohol and/or other drug impairment that may be seen during the subject's exit from the vehicle




- Understand the role and relevance of psychophysical testing in pre-arrest screening of DWI subjects
- Understand the role and relevance of preliminary breath testing in pre-arrest screening of DWI subjects
- Know and carry out appropriate administrative procedures for the Horizontal Gaze Nystagmus (HGN) test
- Know and carry out appropriate administrative procedures for validated divided attention psychophysical tests
- Know and recognize typical clues of alcohol and/or other drug impairment that may be seen during administration of the SFSTs
- Understand the factors that may affect the accuracy of preliminary breath testing (PBT) devices
- Understand the elements of DWI prosecution and their relevance to DWI arrest reporting
- Choose appropriate descriptive terms to convey relevant observations of DWI evidence
- Write clear, descriptive narrative DWI arrest reports

Session 1 - Introduction

Participant Manual

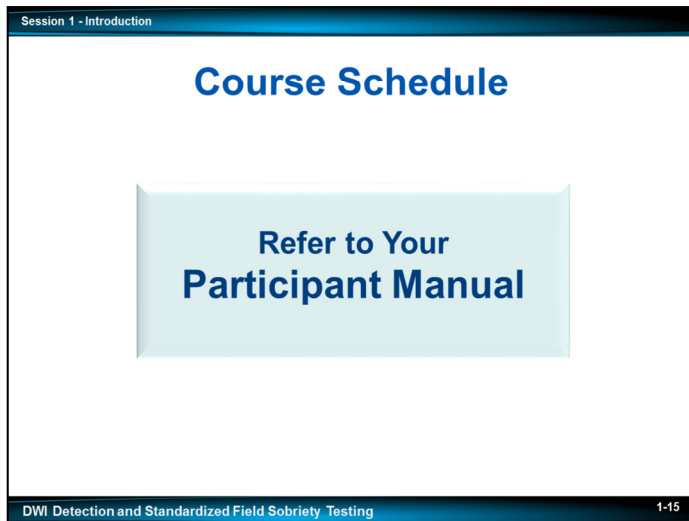
- **Basic course reference**
- **Class notes for every session**
- **Manual organization**
- **Preview sessions in advance**
- **Review prior to exam**



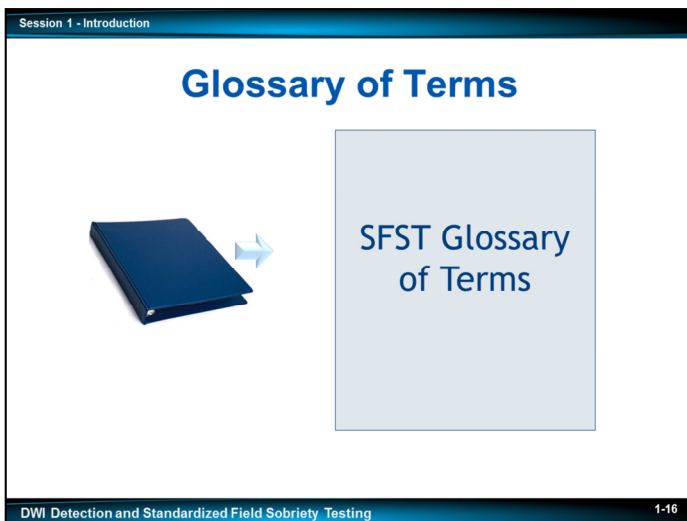
DWI Detection and Standardized Field Sobriety Testing 1-14

The Participant Manual is the basic reference document for this course. The manual contains thumbnails of each instructor presentation that includes key messages for each frame. The manual also contains a glossary of terms used in this course.

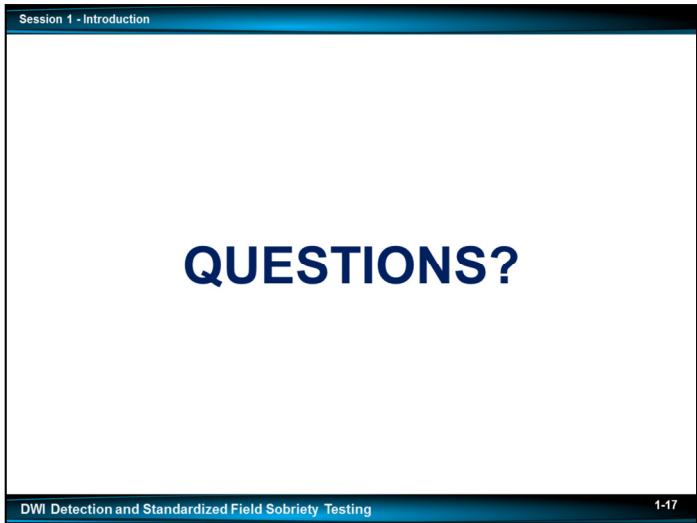
- Read each session prior to class
- Use the manual to review the material prior to taking the final exam



The course schedule is located in the Participant Manual.



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



C. Pre-Test

DWI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING (SFST)
GLOSSARY OF TERMS

ADDICTION

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

ALVEOLAR BREATH

Breath from the deepest part of the lung.

BLOOD ALCOHOL CONCENTRATION (BAC)

The percentage of alcohol in a person's blood.

BREATH ALCOHOL CONCENTRATION (BrAC)

The percentage of alcohol in a person's breath, as measured by a breath testing device.

CLUE

Something that leads to the solution of a problem.

CUE

A reminder or prompting as a signal to do something. A suggestion or a hint.

DIVIDED ATTENTION

Concentrating on more than one thing at a time.

DIVIDED ATTENTION TEST

A test which requires the subject to concentrate on both mental and physical tasks at the same time. The two psychophysical tests Walk and Turn (WAT) and One Leg Stand (OLS) require the suspect to their divide attention.

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.

DWI/DUI

The acronym "DWI" means driving while impaired and is synonymous with the acronym "DUI", driving under the influence or other acronyms used to denote impaired driving. These terms refer to any and all offenses involving the operation of vehicles by persons under the influence of alcohol and/or other drugs.

DWI DETECTION PROCESS

The entire process of identifying and gathering evidence to determine whether or not a suspect should be arrested for a DWI violation. The DWI detection process has three phases:

- Phase One – Vehicle in Motion
- Phase Two – Personal Contact
- Phase Three – Pre -arrest Screening

EVIDENCE

Any means by which some alleged fact that has been submitted to investigation may either be established or disproved. Evidence of a DWI violation may be of various types:

- a. Physical (or real) evidence: something tangible, visible, or audible
- b. Well established facts (judicial notice)
- c. Demonstrative evidence: demonstrations performed in the courtroom
- d. Written matter or documentation
- e. Testimony

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.)

FIELD SOBRIETY TEST

Any one of several roadside tests that can be used to determine whether a subject is impaired.

GAIT ATAXIA

An unsteady, staggering gait (walk) in which walking is uncoordinated and appears to be “not ordered.”

GENERAL INDICATOR

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

HORIZONTAL GAZE NYSTAGMUS (HGN)

Involuntary jerking of the eyes occurring as the eyes gaze to the side. The first test administered in the SFSTs.

IMPAIRMENT

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

IMPLIED CONSENT LAW

Suspected DWI drivers are deemed to have given their consent to submit to chemical testing. If the driver fails to provide a chemical test, they can be subject to license sanctions.

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

An Administration within the United States Department of Transportation that exercises primary responsibility for coordinating federal efforts to ensure the safe design and operation of motor vehicles.

NYSTAGMUS

An involuntary jerking of the eyes.

ONE LEG STAND (OLS)

A divided attention field sobriety test. One of the tests administered in the SFSTs.

PER SE

Used to describe a law which makes it illegal to drive while having a certain percentage of alcohol in the blood or breath.

PERSONAL CONTACT

The second phase in the DWI detection process. In this phase the officer observes and interviews the driver face to face; determines whether to ask the driver to step from the vehicle; and observes the driver's exit and walk from the vehicle.

PRE-ARREST SCREENING

The third phase in the DWI detection process. In this phase the officer administers field sobriety tests to determine whether there is probable cause to arrest the driver for DWI. Depending on agency policy, the officer may administer or could arrange to have a preliminary breath test conducted.

PRELIMINARY BREATH TEST (PBT)

A pre-arrest breath test administered during investigation of a possible DWI violator to obtain an indication of the person's blood alcohol concentration.

PROBABLE CAUSE

It is more than mere suspicion; facts and circumstances within the officer's knowledge, and of which he or she has reasonably trustworthy information, are sufficient to warrant a person of reasonable caution to believe that an offense has been or is being committed.

PSYCHOPHYSICAL

"Mind/Body." Used to describe field sobriety tests that measure a person's ability to perform both mental and physical tasks.

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.

REASONABLE SUSPICION

Less than probable cause but more than mere suspicion; exists when an officer, in light of his or her training and experience, reasonably believes and can articulate that criminal activity is taking, has taken or is about to take place.

RESTING NYSTAGMUS

Jerking of the eyes as they look straight ahead.

STANDARDIZED FIELD SOBRIETY TESTS

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 alcohol 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

TRAFFIC SAFETY RESOURCE PROSECUTOR (TSRP)

Usually a current or former prosecutor who provides training, education and technical support to traffic crimes prosecutors and law enforcement agencies throughout their State. (For the contact information of your TSRP, contact your Highway Safety Office).

VALID

Conforming to accepted principles. Producing accurate and reliable results.

VALIDATED

A documented act of demonstrating that a procedure, process, and/or activity will consistently lead to accurate and reliable results.

VEHICLE IN MOTION

The first phase in the DWI detection process. In this phase the officer observes the vehicle in operation, determines whether to stop the vehicle, and observes the stopping sequence.

VERTICAL GAZE NYSTAGMUS

An involuntary jerking of the eyes (up and down) which occurs when the eyes gaze upward at maximum elevation. The jerking should be distinct and sustained.

WALK AND TURN (WAT)

A divided attention field sobriety test. One of the tests administered in SFSTs.

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DWI Detection
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Session 2 – Detection and
General Deterrence



February 2018

Session 2

Detection and General Deterrence



Learning Objectives

- Describe frequency of DWI violations and crashes
- Define general deterrence
- Describe relationship between detection and general deterrence



Learning Objectives

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

- Describe the frequency of DWI violations and crashes
- Define general deterrence
- Describe the relationship between detection and general deterrence

Learning Objectives (continued)

- Describe brief history of alcohol
- Identify common types of alcohol
- Describe physiological processes of absorption, distribution, and elimination of alcohol in the body



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- Describe a brief history of alcohol
 - Identify common types of alcohol
 - Describe the physiological processes of absorption, distribution, and elimination of alcohol in the body

CONTENT SEGMENTS

- A. The DWI Problem
- B. Concept of General Deterrence
- C. Relating Detection to Deterrence Potential
- D. Evidence of Effective Detection and Effective Deterrence
- E. Physiology of Alcohol

LEARNING ACTIVITIES

- Instructor-Led Presentation
- Video Presentation
- Reading Assignments

The DWI Problem

- Prior to 1994, nearly half of the drivers who died in crashes had been drinking
- In 2015 – 10,265 alcohol related fatalities represented 29% of all traffic fatalities



A. The DWI Problem (Local, State and National)

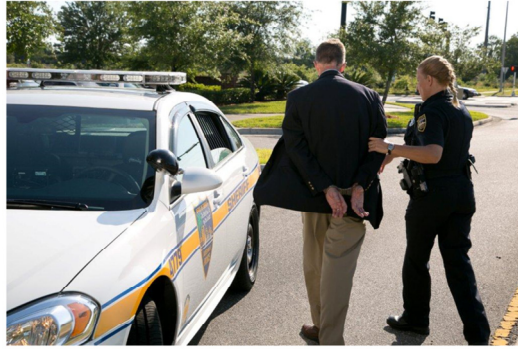
How Widespread Is DWI?

While not all of those who drive after drinking have a Blood Alcohol Concentration (BAC) of 0.08 or higher (the presumptive or illegal per se limit for DWI in all States) some drivers do have BACs in excess of these limits.

Prior to 1994, nearly half of the drivers who died in crashes had been drinking.

Each year, tens of thousands of people die in traffic crashes. Throughout the Nation, alcohol is the major contributor to traffic fatalities. In 2015, there were 10,265 alcohol-related fatalities representing 29% of all traffic fatalities.

The Local DWI Problem



DWI Detection and Standardized Field Sobriety Testing

Impaired drivers are more likely than other drivers to take excessive risks such as speeding or turning abruptly. Impaired drivers also are more likely than other drivers to have slowed reaction times. They may not be able to react quickly enough to slow down before crashing and are less likely to wear seatbelts. On the average, two percent of drivers on the road at any given time are DWI. DWI violations and crashes are not simply the work of a relatively few "problem drinkers" or "problem drug users." Many people commit DWI, at least occasionally.

Drivers Under the Influence

28 million people admitted driving under the influence in past 12 months




Estimates indicate Nationwide about 28 million people the age of 12 and over, self reported they drove under the influence in the past 12 months.

It is also estimated each day in the United States people drive while intoxicated almost 300,000 times but fewer than 3,000 are arrested.

Session 2 – Detection and General Deterrence

National Statistics

What number of drivers commit this violation?



Weekend Nights – 10% or More

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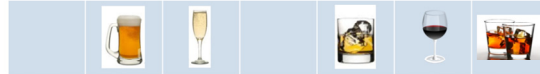
A frequently quoted, and often misinterpreted, statistic places the average incidence of DWI at 1 driver in 50. Averaged across all hours of the day and all days of the week, two percent of the drivers on the road are DWI. The 1 in 50 figure is offered as evidence that a relatively small segment of America's drivers, the so called "problem" group, account for the majority of traffic deaths. There's nothing wrong with that figure as a statistical average, but police officers know at certain times and places many more than two percent of drivers are impaired. The National Highway Traffic Safety Administration (NHTSA) research suggests during the late night, weekend hours as many as 10% of drivers on the roads may be DWI. On certain holiday weekends, and other critical times, the figure may go even higher.

How Many? How Often?

The issue of how many DWIs are on the road at any given time is an important factor in measuring the magnitude of the problem. However, from an overall traffic safety perspective, the more important issue may be the number of drivers who ever commit DWI. Just how widespread is this violation?

Average DWI Violator

- Drives intoxicated 80 times before arrest
- Once every four or five nights
- Some every day



Although it may be true, on the average, two percent of drivers are DWI at any given time, it certainly is not the same two percent every time. Not everyone who commits DWI is out on the road impaired every Friday and Saturday night. Some of them, at least, must skip an occasional weekend. Thus, the 10% who show up, weekend after weekend, in the Friday and Saturday statistics must come from a larger pool of violators, each of whom "contributes" to the statistics on some nights, but not necessarily on all nights.

There are some who drive impaired virtually everyday; others commit the violation less often. It is likely at least one quarter of all American motorists drive while impaired at least once in their lives. That figure falls approximately midway between the 55% of drivers who at least occasionally drive after drinking and the 10% of weekend, nighttime drivers who have BACs above the legal limit.

DWI Problem

- Far more than 2% of drivers contribute
- Crime committed by a substantial segment of Americans
- Can be fought through societal approach



These estimates include everyone who drives impaired everyday, as well as everyone who commits the violation just once and never offends again; and it includes everyone in between. In short, it includes everyone who ever runs the risk of being involved in a crash while impaired.

Society's Problem and the Solution

The fact is far more than two percent of American drivers actively contribute to the DWI problem. DWI is a crime committed by a substantial segment of Americans.

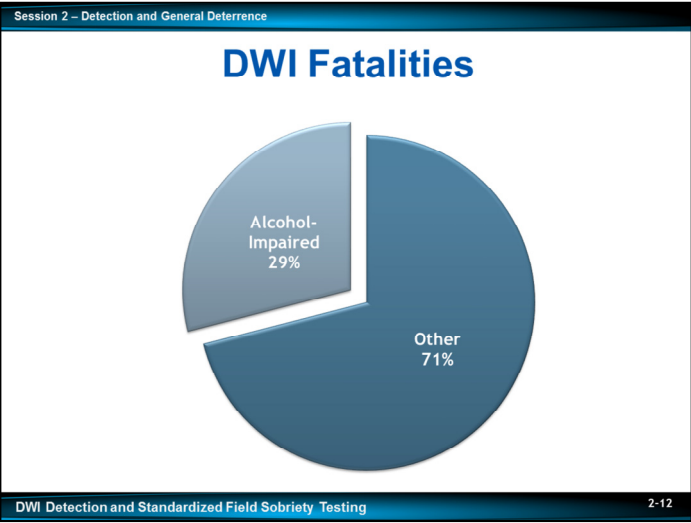
It has been and remains a popular crime; one many people from all walks and areas of life commit. DWI is a crime that can be fought successfully only through a societal approach of comprehensive community-based programs.

Alcohol-Related Crash Fatalities

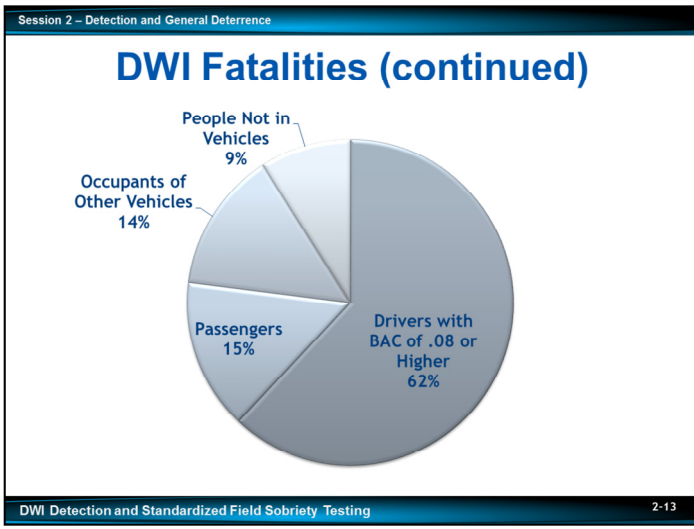
- 26% on weekends were alcohol-impaired
- 3 times higher at night
- 1.02 million DWI arrests in 2016
- Average one fatality every 50 minutes
- Cost society approximately \$44 billion



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- 26% of all fatal crashes on weekends alcohol-impaired
 - Alcohol-impaired drivers involved in fatal crashes were 3 times higher at night
 - 1.02 million drivers were arrested for DWI in 2016
 - These alcohol-related fatalities represent an average of one alcohol-related fatality every 50 minutes
 - Based on the most current cost data available, these alcohol-related fatalities cost society approximately \$44 billion in lost productivity, medical expenses, property damages, and other related expenditures (<https://www.nhtsa.gov/risky-driving/drunk-driving>, July 12, 2017)
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In 2015, 10,265 lives were lost in alcohol-impaired crashes representing 29% of the total motor vehicle fatalities in the U.S.



- In 2016, 10,497 lives were lost in alcohol-impaired crashes representing 28% of the total motor vehicle fatalities in the U.S.
- Drivers with a BAC of .08 or higher accounted for 62% of the fatalities
- 15% were passengers riding with a driver with a BAC of .08 or higher
- 14% of these fatalities were occupants of other vehicles
- 9% were persons not in vehicles



- In 2016, 10,111 lives were lost in speed-related crashes
- 40% of all drivers with a BAC of .08 or higher involved in fatal crashes were speeding
- Between midnight and 3:00 a.m., 66% of speeding drivers involved in fatal crashes on weekdays had a BAC of .08 or higher
- On weekends, it was even higher – 69% of speeding driving involved in fatal crashes had a BAC of .08 or higher

Session 2 – Detection and General Deterrence

Alcohol Facts



- **80% of all traffic fatalities**
- **Four times higher for male drivers than for females**

DWI Detection and Standardized Field Sobriety Testing 2-16

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- In 2016, 7,052 alcohol-impaired drivers (67%) involved in fatal crashes had a BAC of .15 or higher
 - Males account for 80% of all alcohol-impaired traffic fatalities
 - This means the fatal alcohol-impaired crash involvement rate was four times higher for male drivers than for females

General Deterrence



The fear of arrest

B. Concept of General Deterrence

The fear of arrest is the leading deterrent.

One approach to reducing the number of drinking drivers is general deterrence of DWI. General deterrence of DWI is based in the driving public's fear of being arrested. If enough violators come to believe there is a good chance they will get caught, at least some of them will stop committing DWI at least some of the time. However, unless there is a real risk of arrest, there will not be much fear of arrest.

Law enforcement officers must arrest enough violators enough of the time to convince the general public they will get caught, sooner or later, if they continue to drive while impaired.


How many DWI violators must be arrested in order to convince the public there is a real risk of arrest for DWI?

Several programs have demonstrated significant deterrence can be achieved by arresting 1 DWI violator for every 100 DWI violations committed. Currently, however, for every DWI violator arrested, there are between 500 and 2,000 DWI violations committed.

Session 2 – Detection and General Deterrence

General Deterrence

There is no reason to fear arrest

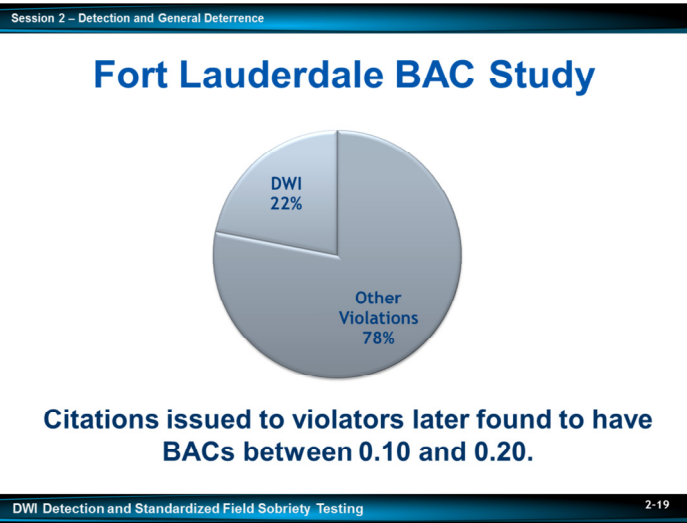


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When the chances of being arrested are 1 in 100, the average DWI violator really has little to fear.

There are three noteworthy reasons:

- DWI violators vastly outnumber police officers
 - It is not possible to arrest every drinking driver each time they commit DWI
- Some officers are not highly skilled at DWI detection
 - They fail to recognize and arrest many DWI violators
- Some officers are not motivated to detect and arrest DWI violators



Significant Findings: In a 1975 study conducted in Fort Lauderdale, Florida, only 22% of traffic violators who were stopped with BACs between 0.10 and 0.20 were arrested for DWI. The remainder were cited for other violations, even though they were legally impaired. In this study, breath tests were administered to the violators by researchers after the police officers had completed their investigations. The officers failed to detect 78% of the DWI violators they investigated.

Fort Lauderdale BAC Study

For every DWI violator arrested...



Implication: For every DWI violator actually arrested, three others are contacted by police officers, face to face, but are released without arrest.

Significant improvement in arrest rate could be achieved if officers were more skilled at DWI detection.

The Ultimate Goal: Changing Behavior

- **Avoid committing DWI**
- **Control drinking prior to driving**
- **Select alternative transportation**
- **Avoid riding with impaired drivers**
- **Recognize impaired driving is unacceptable**

The Solutions

The Ultimate Goal: Changing Behavior

What must the comprehensive community-based DWI programs seek to accomplish? Ultimately, nothing less than fundamental behavioral change on a widespread basis. The goal is to encourage more Americans to:

- Avoid committing DWI either by avoiding or controlling drinking prior to driving or by selecting alternative transportation
- Intervene actively to prevent others from committing DWI (for example, putting into practice the theme "friends don't let friends drive drunk")
- Avoid riding with drivers who are impaired

The final test of the value of DWI countermeasures on the National, State, and local levels is whether they succeed in getting significantly more people to modify their behavior. The programs also pursue other more immediate objectives that support or reinforce the ultimate goal. However, the ultimate goal is to change driving while impaired to an unacceptable form of behavior at all levels.

Session 2 – Detection and General Deterrence

Two Approaches

- **Prevention**
- **Deterrence**



DWI Detection and Standardized Field Sobriety Testing 2-22

Pursuing the Goal: Two Approaches

How can we bring about these changes in behavior? How can we discourage impaired driving, prevent others from drinking and driving, and avoid becoming passive "statistics" by refusing to ride with drinking drivers?

Basically, there are two general approaches that must be taken to achieve this goal.

One: prevention -- gives promise of the ultimate, lasting solution to the DWI problem; but it will require a substantial amount of time to mature fully.

Two: deterrence -- only offers a partial or limited solution, but it is available right now.

Prevention



- **Promote positive attitudes**
- **DWI is wrong**
- **No one has the right to endanger others**
- **DWI cannot be tolerated or condoned**

Prevention: the Ultimate Solution


DWI countermeasures that strive for the ultimate achievement of drinking and driving behavioral changes have been grouped under the label "prevention." There are many kinds of DWI preventive activities. Some are carried out by and in our schools, some through the mass media, some through concerned civic groups, and so forth. The various preventive efforts focus on different specific behaviors and address different target groups.

However, they seek to change drinking and driving behavior by promoting more positive attitudes and by fostering a set of values that reflects individual responsibilities toward drinking and driving.

Preventive countermeasures seek society's acceptance of the fact that DWI is wrong. Some people believe drinking and driving is strictly an individual's personal business; it is up to each person to decide whether or not to accept the risk of driving after drinking. Preventive activities try to dispel that outmoded and irresponsible belief. Instead, they promote the idea no one has the right to endanger others by drinking and driving, or to risk becoming a burden (economically and otherwise) to others as a result of injuries suffered while drinking and driving. Realistically, everyone has an obligation not only to control their own drinking and driving, but also to speak up when others are about to commit the violation. Only when all of society views DWI as a negative behavior that cannot be tolerated or condoned, will the public's behavior begin to change. That is the long-term solution.

Session 2 – Detection and General Deterrence

Deterrence



- **Driving public's fear of being arrested**
- **Enough violators must be arrested to convince public they will get caught**

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General deterrence of DWI is based on the driving public's fear of being arrested. If enough violators come to believe there is a good chance they will get caught, some of them (at least) will stop committing DWI at least some of the time.

Unless there is a real risk of being arrested, there will not be much fear of arrest. Law enforcement must arrest enough violators to convince the public they will get caught if they continue to drive while impaired.

Deterrence

- Deterrence is negative reinforcement
- Strives to change DWI behavior



C. Relating Detection to Deterrence Potential

Deterrence: the Interim Solution

DWI countermeasures that seek a shortcut to the ultimate goal of behavioral change usually are labeled "deterrence." Deterrence can be described as negative reinforcement. Some deterrence countermeasures focus primarily on changing individual drinking and driving behavior while others seek to influence people to intervene into others' drinking and driving decisions.

The key feature of deterrence is it strives to change DWI behavior without dealing directly with the prevailing attitudes about the rightness or wrongness of DWI. Deterrence uses a mechanism quite distinct from attitudinal change: fear of apprehension and application of sanctions.

The Fear of Being Caught and Punished

Long term costs and inconvenience



The Fear of Being Caught and Punished

Large scale DWI deterrence programs try to control the DWI behavior of the driving public by appealing to the public's presumed fear of being caught. Most actual or potential DWI violators view the prospect of being arrested with extreme distaste. For some, the arrest, with its attendant handcuffing, booking, publicity, and other stigmatizing and traumatizing features, is the thing most to be feared. For others, it is the prospective punishment (jail, stiff fine, etc.) that causes most of the concern. Still others fear most the long-term costs and inconvenience of a DWI arrest: the license suspension and increased premiums for automobile insurance. For many violators the fear probably is a combination of all of these. Regardless, if enough violators are sufficiently fearful of a DWI arrest, some of them will avoid committing the violation at least some of the time. Fear by itself will not change their attitudes; if they do not see anything inherently wrong with drinking and driving in the first place, the prospect of arrest and punishment will not help them come to this realization. However, fear sometimes can be enough to keep them from putting their anti-social attitudes into practice.

This type of DWI deterrence, based on the fear of being caught, is commonly called general deterrence. It applies to the driving public generally and presumably affects the behavior of those who have never been caught. There is an element of fear of the unknown at work here.

Specific Deterrence

- **Caught and arrested**
- **Public must perceive appreciable risk of being caught and convicted**
- **Enforcement creates and sustains fear of being caught**



Another type of DWI deterrence, called specific deterrence, applies to those who have been caught and arrested. The typical specific deterrent involves some type of punishment, perhaps a fine, involuntary community service, a jail term, or action against the driver's license. The punishment is imposed in the hope it will convince the specific violator there is indeed something to fear as a result of being caught and to emphasize if there is a next time, the punishment will be even more severe. It is the fear of the known that comes into play in this case.

The concept of DWI deterrence through fear of apprehension or punishment seems sound. But will it work in actual practice? The crux of the problem is this: If the motoring public is to fear arrest and punishment for DWI, they must perceive there is an appreciable risk of being caught and convicted if they commit the crime. If actual and potential DWI violators come to believe the chance of being arrested is minimal, they will quickly lose whatever fear of arrest they may have felt.

Enforcement is the mechanism for creating and sustaining a fear of being caught for DWI. No specific deterrence program can amount to much unless police officers arrest large numbers of violators; no punishment or rehabilitation program can affect behavior on a large scale unless it is applied to many people. General deterrence depends on enforcement -- the fear of being caught is a direct function of the number of people who are caught.

Session 2 - Detection and General Deterrence

Specific Deterrence

Supportive roles: Legislators, Prosecutors, Judiciary, and Media



DWI Detection and Standardized Field Sobriety Testing 2-28

Obviously, the police alone cannot do the job. Legislators must supply laws the police can enforce. Prosecutors must vigorously prosecute DWI violators and the judiciary must adjudicate fairly and deliver the punishments prescribed by law. The media must publicize the enforcement effort and communicate the fact the risk is not worth the probable outcome. Each of these elements plays a supportive role in DWI deterrence.

Session 2 – Detection and General Deterrence

How Much Deterrence is Enough?

For every DWI violator arrested, there are approximately 100 undetected DWI violations.

1:100

DWI Detection and Standardized Field Sobriety Testing 2-29

How much deterrence is enough?

Estimates from around the country vary. For every DWI violator arrested, there are approximately 100 undetected DWI violations.

According to the CDC (2014), there were 111 million incidents of DWI per year. According to the FBI UCR, 1.08 million DWI arrests were made in 2015, which means law enforcement arrested approximately one out of every 100 DWI episodes.

How Great is the Risk?

- Does the average DWI violator fear arrest?
- Should they be afraid?
- Intense publicity may enhance the perceived risk



How Great is the Risk?

The question now is, are violators afraid of being caught? More importantly, should they be afraid? Is there really an appreciable risk of being arrested if one commits DWI?


The answer to all of these questions unfortunately is: probably not. In most jurisdictions, the number of DWI arrests appears to fall short of what would be required to sustain a public perception there is a significant risk of being caught.

Sometimes, it is possible to enhance the perceived risk, at least for a while, through intensive publicity. However, media "hype" without intensified enforcement has never been enough to maintain the fear of arrest for very long.

Session 2 – Detection and General Deterrence

Changing the Odds

- Arrest enough violators to convince many of them it can happen to them
- As arrest rate increases, odds are it will happen to them eventually



DWI Detection and Standardized Field Sobriety Testing 2-31

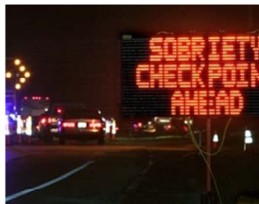
Changing the Odds

If an arrest/violation ratio of 1 in 100 is not enough to make deterrence work, is it then reasonable to think we can ever make deterrence work?

After all, if we doubled DWI arrests to 1 in 50, we would still be missing 49 violators for every one we managed to catch. If we increased arrests tenfold, to 1 in 10, 9 would escape for every one arrested. How much deterrence would that produce?

Surprisingly, it would probably produce quite a bit. We don't have to arrest every DWI offender every time in order to convince them they have something to fear. We only have to arrest enough of them, enough of the time. As the arrest rate increases, the odds are it will happen to them eventually. The law of averages (or cumulative probability) will catch up with them and sooner than we might at first expect.

Can it be Done? Will it Work?



Realistic increase in DWI enforcement activity will induce a significant degree of general deterrence and a corresponding change in DWI behavior.

D. Evidence of Effective Detection and Effective Deterrence

Can it Be Done and Will it Work?

Is there any evidence a practical and realistic increase in DWI enforcement activity will induce a significant degree of general deterrence and a corresponding change in DWI behavior? Yes there is.

Session 2 – Detection and General Deterrence

Stockton, California

- **Before:**
 - **Arrest/violation ratio – 1 in 2000 or less**
 - **Weekend drivers BAC of 0.10 or higher – 9%**
- **During: Intensive DWI enforcement weekend nights**
- **Officers intensively trained, enforcement publicized, justice community coordinated**

DWI Detection and Standardized Field Sobriety Testing 2-33

Several enforcement programs have succeeded in achieving significant DWI deterrence. Consider, for example, the three-year intensive weekend DWI enforcement program in Stockton, California.

As early as 1975, a study showed the city's total number of DWI arrests (700) were considerably less than one percent of the areas licensed number of drivers (130,000). The implication here was Stockton police were only maintaining the arrest/violation ration of 1:2,000, or less. In addition, roadside surveys on Friday and Saturday nights disclosed nine percent of the drivers were operating with BAC's of 0.10 or higher.

Then things changed. Beginning in 1976, and continuing at planned intervals through the first half of 1979, Stockton police conducted intensive DWI enforcement on weekend nights. The officers involved were extensively trained. The enforcement effort was heavily publicized and additional equipment (PBTs and cassette recorders) was made available. The police effort was closely coordinated with the District Attorney's office, the County Probation office, and other allied criminal justice and safety organizations.

Improve DWI Detection

Keys to success:

- **Officers skilled at DWI detection**
- **Willing to arrest all violators detected**
- **Policies and application supported by agency**

Improved DWI detection can be achieved in virtually every jurisdiction in the country.

The keys to success are police officers who are:

- Skilled at DWI detection
- Willing to arrest every DWI violator who is detected
- Supported by their agencies in all aspects of this program from policy through practical application

Since the historical Stockton study, numerous States have conducted similar studies to determine the degree of effect DWI arrests would have on alcohol-related fatalities in general and total fatalities in particular. Most of these studies were conducted between 1978 and 1986.

The results of these studies graphically illustrated in each State when the number of arrests for DWI increased the percentage of alcohol-related fatalities decreased. Further, the results of a study conducted in Florida from 1981-1983 showed when DWI arrests per licensed driver increased total fatalities decreased (12 month moving average).

Detection: Key to Deterrence

- Deterrence can vastly exceed level of enforcement officers achieve
- Weekend DWI arrests can increase by as much as 500%, as in the Stockton study

Detection: The Key to Deterrence

It is important to understand how increased DWI enforcement can affect deterrence. Deterrence can vastly exceed the level of enforcement officers achieve on any given night. Weekend DWI arrests can increase by as much as 500%, as in the Stockton study.

Example of General Deterrence

When arrest/violation ratio is 1 in 100:

- **Many violators WILL be caught**
- **General perception level of being caught increases**
- **Behavior changes**

The law of averages quickly starts to catch up with DWI drivers. Unless violators change their behavior, many of them will be caught or at least will have known someone who has been arrested. Coupled with the heavy publicity given to the enforcement effort, those experiences were enough to raise the perception level of apprehension among DWI operators that sooner or later they would be caught. As a result, many of them changed their behavior. This is the best example of general deterrence.

In addition, during the same time DWI arrests went up over 500% in Stockton, citations for other traffic violations increased by a comparatively modest 99%. The implication is Stockton's officers were stopping and contacting only twice as many possible violators as they had before but they were coming up with more than five times as many arrests.

Increased DWI Detection Skills

- **Community benefits**
- **Officers recognize cues and clues**
- **Gained confidence in field sobriety tests**
- **Fewer violators stopped avoided arrest**



What have the results of these studies shown? Basically, they have shown a community will benefit from their officers' increased skills at DWI detection. Principally, because of their special training, the officers were better able to recognize "cues" of impairment when they observed vehicles in motion and they were more familiar with the "clues" or human indicators of impairment exhibited by violators during personal contact. The officers also had more confidence in the field sobriety tests they used to investigate their suspects. The most important factor was far fewer of the violators being stopped now avoided detection and arrest.

The difficulty in detecting DWI among operators personally contacted by untrained officers has been well documented. Analysis of roadside survey and arrest data suggest for every DWI violator arrested, three others actually have face-to-face contact with police officers but are allowed to go without arrest. Direct support of that inference was found in the Fort Lauderdale BAC study where researchers demonstrated police officers arrested only 22% of the DWI operators they contacted whose BAC levels were subsequently shown to be between 0.10 and 0.20.

The ability to detect DWI violators is the key to general deterrence and possibly the greatest impediment to it.



The ability to detect DWI violators is the key to general deterrence and possibly the greatest impediment to it. If we accept the three to one ratio of failed detections as being reasonably accurate, the implications are rather alarming. Consider the impact on a DWI violator's subsequent behavior when, after being stopped by the police, the operator is allowed to continue driving. Very likely, these DWI violators and their friends will become even more convinced of their ability to handle drinking and driving. Further, they will come to believe they will never be arrested because police officers can't determine when they are "over the limit." Instead of creating general DWI deterrence, this attitude breeds specific reinforcement. This helps to develop a feeling among DWI violators they have nothing more to fear from police than an occasional ticket for a minor traffic offense.

On the positive side, the ratio of undetected to detected violations suggests much can be accomplished with existing resources if we use those resources as efficiently as possible. By just being able to improve detection skills of law enforcement officers, we could experience an increase in the arrest/violation ratio without any increase in contacts.

This same, or better, degree of effectiveness can happen here.



E. Physiology of Alcohol

A brief overview of alcohol:



Alcohol is the most abused drug in the United States.

"Alcohol" is the name given to a family of closely-related and naturally-occurring chemicals. Each of the chemicals called an "alcohol" contains a molecule chemists refer to as a "hydroxy radical." This radical contains one oxygen atom and one hydrogen atom bonded together. The simplest alcohol has only one carbon atom, three hydrogen atoms, and one hydroxy radical. The next alcohol has two carbon atoms, five hydrogen atoms, and one hydroxy radical. The third alcohol has three carbon atoms, seven hydrogen atoms, and one hydroxy radical. That is how the alcohols differ from one another.

Alcohols are molecularly very similar and produce similar effects. They produce intoxicating effects when ingested into the human body. Only one of them is meant for human consumption. However, when ingested in substantial quantities it can cause death.

Session 2 – Detection and General Deterrence

Some Types of Alcohol

- **Methyl Alcohol (Methanol)** 
- **Ethyl Alcohol (Ethanol)** 
- **Isopropyl Alcohol (Isopropanol)** 

DWI Detection and Standardized Field Sobriety Testing 2-41

Three of the more commonly known alcohols are Methyl, Ethyl, and Isopropyl.

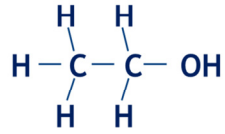
- Methyl alcohol also known as Methanol or wood alcohol
- Ethyl alcohol also known as Ethanol or beverage alcohol
- Isopropyl Alcohol (Isopropanol) also known as rubbing alcohol

Ethyl Alcohol (Ethanol) Intended for Human Consumption

Chemical Symbols

ETOH

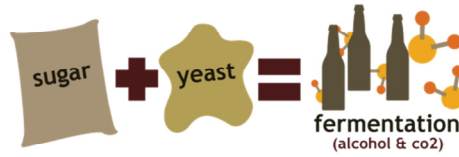
C₂H₅OH



The ingestible alcohol is known as ethyl alcohol, or ethanol. Its chemical abbreviation is ETOH. The "ET" stands for "ethyl" and the "OH" represents the single oxygen atom bonded to one of the hydrogen atoms ("hydroxy radical"). Ethanol is the variety of alcohol that has two carbon atoms. Two of ethanol's best known analogs are methyl alcohol (or methanol), commonly called "wood alcohol", and isopropyl alcohol (or isopropanol), also known as "rubbing alcohol".

Fermentation

Yeast combines with sugars from fruit or grains in a chemical reaction resulting in ETOH.



Ethanol is what interests us because it is the kind of alcohol that features prominently in impaired driving. Ethanol is beverage alcohol, the active ingredient in beer, wine, whiskey, liquors, etc. Ethanol production starts with fermentation. That is a kind of decomposition in which the sugars in fruit, grains, and other organic materials combine with yeast to produce the chemical we call ethanol. This can occur naturally, as yeast spores in the air come into contact with decomposing fruit and grains. However, most of the ethanol in the world didn't ferment naturally, but was produced under human supervision.

When an alcoholic beverage is produced by fermentation, the maximum ethanol content that can be reached is about 14%. At that concentration, the yeast dies, so the fermentation stops. Obtaining a higher ethanol content requires a process called distillation. This involves heating the beverage until the ethanol "boils off," then collecting the ethanol vapor. It is possible to do this because ethanol boils at a lower temperature than does water.

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Distillation

Fermented beverage is boiled at a controlled temperature to extract and concentrate the ethanol fumes.



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Distilled spirits is the name we give to high ethanol concentration beverages produced by distillation. These include rum, whiskey, gin, vodka, etc. The ethanol concentration of distilled spirits usually is expressed in terms of proof, which is a number corresponding to twice the ethanol percentage. For example, an 80-proof beverage has an ethanol concentration of 40%.

Common Drink Sizes (0.60 ounces of pure ethanol)

- **Bottle of beer – 12 ounces of fluid @ 5% alcohol**
- **Glass of wine – 5 ounces of fluid @ 12% alcohol**
- **Shot of whiskey (80 proof) – 1 and 1/2 ounces @ 40% alcohol**



Over the millennia, during which people have used and abused ethanol, some common-sized servings of the different beverages have evolved.

- Beer is normally dispensed in 12-ounce servings
 - Since beer has an ethanol concentration of about four percent, the typical bottle or can of beer contains a little less than one half ounce of pure ethanol
- A standard glass of wine has about four ounces of liquid
 - Wine is about 12% alcohol so the glass of wine also has a bit less than one half ounce of ethanol in it
- Whiskey and other distilled spirits are dispensed by the "shot glass," usually containing about one and one half ounces of fluid
 - At a typical concentration of 40% ethanol (80 proof), the standard shot of whiskey has approximately one half ounce of ethanol

Therefore, as far as their alcoholic contents are concerned, a can of beer, a glass of wine and a shot of whiskey are all the same.

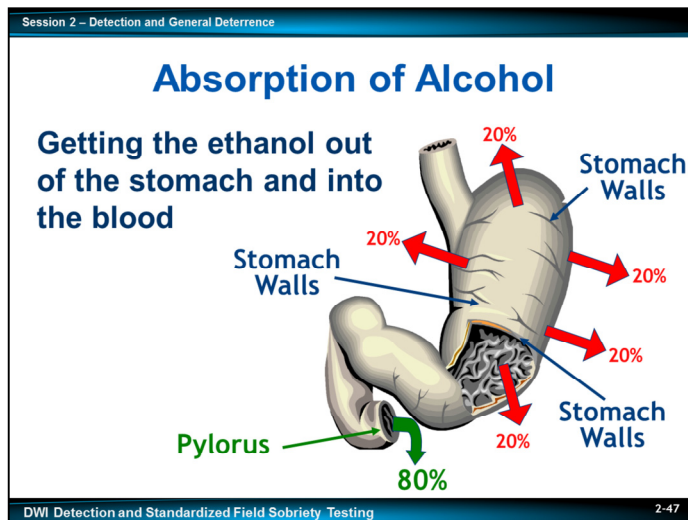
Alcohol is a CNS Depressant



Ethanol is a Central Nervous System Depressant. It doesn't affect a person until it gets into their Central Nervous System, i.e., the brain, brain stem and spinal cord. Ethanol gets to the brain by getting into the blood. In order to get into the blood, it has to get into the body.

There are actually a number of different ways in which ethanol can get into the body. It can be inhaled: Ethanol fumes, when taken into the lungs, will pass into the bloodstream and a positive BAC will develop. However, prolonged breathing of fairly concentrated fumes would be required to produce a significantly high BAC.

Ethanol could also be injected, directly into a vein; it would then flow with the blood back to the heart, where it would be pumped first to the lungs and then to the brain. And, it could be inserted as an enema and pass quickly from the large intestine into the blood. But none of these methods are of any practical significance because alcohol is almost always introduced into the body orally, i.e., by drinking.

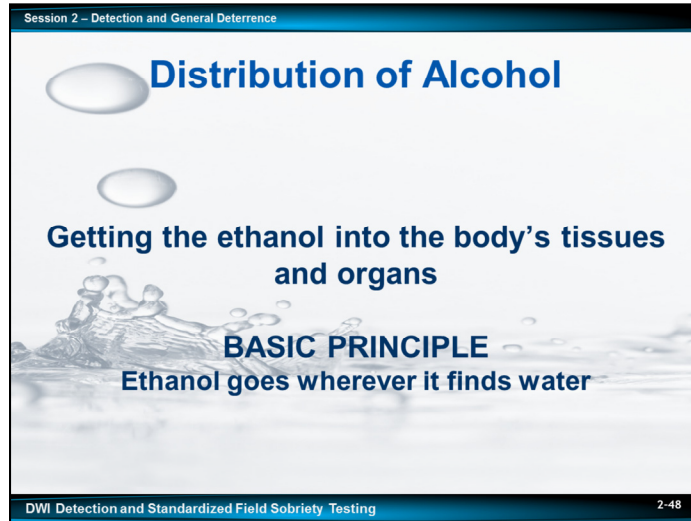


Once the ethanol gets into the stomach it has to move into the blood. The process by which this happens is known as absorption. One very important fact pertaining to alcohol absorption is it doesn't have to be digested in order to move from the stomach to the blood.

Another very important fact is alcohol can pass directly through the walls of the stomach. These two facts, taken together, mean under the right circumstances absorption of alcohol can be accomplished fairly quickly. The ideal circumstance for rapid absorption is to drink on an empty stomach.

When the alcohol enters the empty stomach, about 20% of it will make its way directly through the stomach walls. The remaining 80% will pass through the stomach and enter the small intestine, from which it is readily absorbed into the blood. Because the body doesn't need to digest the alcohol before admitting it into the bloodstream, the small intestine will be open to the alcohol as soon as it hits the stomach.

But what if there is food in the stomach? Suppose the person has had something to eat shortly before drinking or eats food while drinking; will that affect the absorption of alcohol? Yes it will. Food has to be at least partially digested in the stomach before it can pass to the small intestine. When the brain senses food is in the stomach, it commands a muscle at the base of the stomach to constrict and cut off the passage to the small intestine. The muscle is called the pylorus, or pyloric valve. As long as it remains constricted, little or nothing will move out of the stomach and into the small intestine. If alcohol is in the stomach along with the food, the alcohol will also remain trapped behind the pylorus. Some of the alcohol trapped in the stomach will begin to break down chemically before it ever gets into the blood. In time, as the digestive process continues, the pylorus will begin to relax and some of the alcohol and food will pass through. But the overall effect will be to slow the absorption significantly. Because the alcohol only slowly gets into the blood, and because the body will continue to process and eliminate the alcohol that does manage to get in there, the drinker's BAC will not climb as high as it would have if he or she had drunk on an empty stomach.



Once the alcohol moves from the stomach into the blood, it will be distributed throughout the body by the blood. Alcohol has an affinity for water. The blood will carry the alcohol to the various tissues and organs of the body and will deposit the alcohol in them in proportion to their water contents.

Brain tissue has a fairly high water content so the brain receives a substantial share of the distributed alcohol. Muscle tissue also has a reasonably high water content but fat tissue contains very little water. Thus, very little alcohol will be deposited in the drinker's body fat. This is one factor that differentiates alcohol from certain other drugs, notably PCP and THC, which are very soluble in fat.

Distribution of Alcohol

- Which parts of the body have lots of water? Which parts do not?
- The average male is 68% water
- The average female is 55% water



The affinity of alcohol for water, and its lack of affinity for fat, helps explain an important difference in the way alcohol affects women and men. Pound for pound, the typical female's body contains a good deal less water than does the typical man's. This is because women have additional adipose (fatty) tissue designed in part to protect a child in the womb. A Swedish pioneer in alcohol research, E.M.P. Widmark, determined the typical male body is about 68% water, the typical female only about 55%. Thus, when a woman drinks, she has less fluid -- pound for pound -- in which to distribute the alcohol.

Session 2 – Detection and General Deterrence

Elimination of Alcohol

- **Direct excretion**
 - **Breath**
 - **Urine**
 - **Sweat**
 - **Tears**
 - **Etc**
- **Metabolism**

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As soon as the alcohol enters the blood stream, the body starts trying to get rid of it. Some of the alcohol will be directly expelled from the body chemically unchanged. For example, some alcohol will leave the body in the breath, urine, sweat, tears, etc. However, only a small portion (about 2-10%) of the ingested alcohol will be directly eliminated.

Most of the alcohol a person drinks is eliminated by metabolism. Metabolism is a process of chemical change. In this case, alcohol reacts with oxygen in the body and changes through a series of intermediate steps into carbon dioxide and water, both of which are directly expelled from the body.

Metabolism in the Liver

- Burns ethanol
- Aided by alcohol dehydrogenase enzyme
- Ultimate products of chemical reaction are carbon dioxide and water
- Average person’s BAC drops by about 0.015 per hour

Most of the metabolism of alcohol in the body takes place in the liver. An enzyme known as alcohol dehydrogenase acts to speed up the reaction of alcohol with oxygen. The speed of the reaction varies somewhat from person to person and even from time to time for any given person. On the average, however, a person's blood alcohol concentration -- after reaching peak value -- will drop by about 0.015 per hour. For example, if the person reaches a maximum BAC of 0.15, it will take about ten hours for the person to eliminate all of the alcohol.

For the average-sized male, a BAC of 0.015 is equivalent to about two thirds of the alcohol content of a standard drink (i.e., about two thirds of a can of beer, or glass of wine, or shot of whiskey). For the average-sized female, that same BAC would be reached on just one half of a standard drink. So the typical male will eliminate about two thirds of a drink per hour while the typical female will burn up about one half of a drink in that hour.

Metabolism

How can we speed up the metabolism of alcohol?

- We can't – The liver takes its time burning up the alcohol

We can control the rate at which alcohol enters our bloodstream. For example, we can gulp down our drinks or slowly sip them. We can drink on an empty stomach or we can take the precaution of eating before drinking. We can choose to drink a lot or a little. But once the alcohol gets into the blood, there is nothing we can do to affect how quickly it leaves. Coffee won't accelerate the rate at which our livers burn alcohol. Neither will exercise, or deep breathing, or a cold shower. We simply have to wait for the process of metabolism to move along at its own speed.

Dose Response Relationships

- Time
- Sex
- Weight
- Drinking on empty stomach

Dose Response Relationships

People sometimes ask, "how 'high' is 'drunk'?" What is the "legal limit" for "drunk driving"? How much can a person drink before becoming "impaired"? Depends... Time? Sex? Weight? Drinking on an empty stomach? A couple of beers can do it.

There is no simple answer to these or similar questions except to say any amount of alcohol will affect a person's ability to drive to some degree. It is true the laws of nearly all States establish a BAC limit at which it is explicitly unlawful to operate a vehicle. In those cases, that "limit" is 0.08 BAC. But every State also makes it unlawful to drive when "under the influence" of alcohol and the law admits the possibility a particular person may be under the influence at much lower BACs.

How Much Alcohol to Reach a BAC of 0.08

- 175 lb. Male
- Drinking on an Empty Stomach



How much alcohol does someone have to drink to reach these kinds of BACs?

Obviously, as we've already seen, it depends on how much time the person spends drinking, on whether the person is a man or a woman, on how large the person is, on whether the drinking takes place on an empty stomach, and on certain other factors. But let's take as an example a 175 pound man. If he drinks two beers, or two shots of whiskey, in quick succession on an empty stomach, his BAC will climb to slightly above 0.04. Two more beers will boost him above 0.08. One more will push him over 0.10. In one respect, then, it doesn't take very much alcohol to impair someone: "a couple of beers" can do it.

Blood Alcohol Concentration

- **BAC is the number of grams of alcohol found in 100 milliliters of the person’s blood**
 - **Example – If a person has a BAC of .08, then there is eight one-hundredths of a gram of alcohol in every 100 milliliters of the person’s blood**

But in another respect, when we contrast alcohol with virtually any other drug, we find impairment by alcohol requires a vastly larger dose than does impairment by the others. Consider exactly what a BAC of 0.08 means. BAC is expressed in terms of the "number of grams of ethanol in every 100 milliliters of blood". Therefore, 0.08 means there is 0.08g of ethanol in every 100 milliliters (mL) of blood. You will find BAC results are reported in a variety of units. Two common variations are milligrams/milliliters and percent. There are 1000 milligrams (mg) in one gram; therefore, 0.08g equals 80mg and a BAC of 0.08 would be reported as 80mg of ethanol/100mL of blood. Percent means parts per one hundred. In this example 0.08g/100mL of blood is equivalent to 0.08% BAC.

Note: The term BAC is used in the manual. However, it should be understood to refer to either Blood Alcohol Concentration (BAC) or Breath Alcohol Concentration (BrAC) depending on the legal requirements of the jurisdiction.

QUESTIONS?

Test Your Knowledge

1. In typical enforcement jurisdictions one DWI violation in _____ results in arrest
2. In the Fort Lauderdale study, police officers arrested _____ % of the drivers they contacted whose BACs were .10 to .20.
3. Name three different chemicals that are alcohols.

Test Your Knowledge

1. In typical enforcement jurisdictions one DWI violation in _____ results in arrest.
2. In the Fort Lauderdale study, police officers arrested _____ % of the drivers they contacted whose BACs were .10 to .20.
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Test Your Knowledge

4. Which of these is beverage alcohol, intended for human consumption?
5. What is the chemical symbol for beverage alcohol?
6. What is the name of the chemical process by which beverage alcohol is produced naturally?

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Test Your Knowledge

- 7. What is the name of the process used to produce high concentration beverage alcohol?
- 8. Blood alcohol concentration is the number of _____ of alcohol in every 100 milliliters of blood.
 - a. Grams
 - b. Milligrams
 - c. Nanograms

7. What is the name of the process used to produce high concentration beverage alcohol?

8. Multiple choice: Blood alcohol concentration is the number of alcohol in every 100 milliliters of blood.

- A. Grams
- B. Milligrams
- C. Nanograms

Test Your Knowledge

- 9. True or false: Pound for pound, the average woman contains more water than does the average man
- 10. What do we mean by the “proof” of an alcoholic beverage?
- 11. Every chemical that is an “alcohol” contains what three elements?

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Test Your Knowledge

- 12. True or false: Most of the alcohol a person drinks is absorbed into the blood via the small intestine
- 13. What is the name of the muscle that controls the passage from the stomach to the lower gastrointestinal track?
- 14. True or false: Alcohol can pass directly through the stomach walls and enter the bloodstream.

12. True or false: Most of the alcohol a person drinks is absorbed into the blood via the small intestine.

13. What is the name of the muscle that controls the passage from the stomach to the lower gastrointestinal tract?

14. True or false: Alcohol can pass directly through the stomach walls and enter the bloodstream.

Test Your Knowledge

- 15. Suppose a man and a woman who both weigh 160 pounds arrived at a party and started to drink at the same time. And suppose, two hours later, they both have a BAC of 0.10. Chances are...**
- a. He had more to drink than she did**
 - b. They drank just about the same amount of alcohol**
 - c. He had less to drink than she did.**

-
15. Multiple choice: Suppose a man and a woman who both weigh 160 pounds arrived at a party and started to drink at the same time. And suppose, two hours later, they both have a BAC of 0.10. Chances are
- A. He had more to drink than she did.
 - B. They drank just about the same amount of alcohol.
 - C. He had less to drink than she did.

Test Your Knowledge

- 16. In which organ of the body does most of the metabolism of the alcohol take place?
- 17. What is the name of the enzyme that aids the metabolism of alcohol?

16. In which organ of the body does most of the metabolism of the alcohol take place?

17. What is the name of the enzyme that aids the metabolism of alcohol?

Test Your Knowledge

- 18. Once a person reaches his or her peak BAC, it will drop at a rate of about _____ per hour.
 - a. 0.025
 - b. 0.015
 - c. 0.010
- 19. True or false: It takes about 30 minutes for the average 175 pound man to “burn off” the alcohol in one 12 ounce can of beer.

18. Multiple choice: Once a person reaches their peak BAC, it will drop at a rate of about per hour.

- A. a. 0.025
- B. b. 0.015
- C. c. 0.010

19. True or False: It takes about thirty minutes for the average 175 pound man to "burn off" the alcohol in one 12 ounce can of beer.

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 3 – The Legal Environment




February 2018




Session 3 – The Legal Environment

1 Hour 10 Minutes

Session 3

The Legal Environment



DWI Detection and Standardized Field Sobriety Testing 3-2

An understanding of impaired driving laws that apply in your jurisdiction is critical to successful DWI enforcement.

All States (and many local jurisdictions) have their own impaired driving laws. While the specific language of these laws may vary significantly, most include the following provisions:

- DWI Law
- Per Se Law
- Implied Consent
- Preliminary Breath Testing (if applicable)

Learning Objectives

Be familiar with:

- Elements of DWI offenses
- Provisions of implied consent
- Relevance of chemical test evidence
- Precedents established through case law



Upon successfully completing this session, the participant will be familiar with:

- Elements of DWI offenses
- Provisions of implied consent
- The relevance of chemical test evidence
- Precedents established through case law

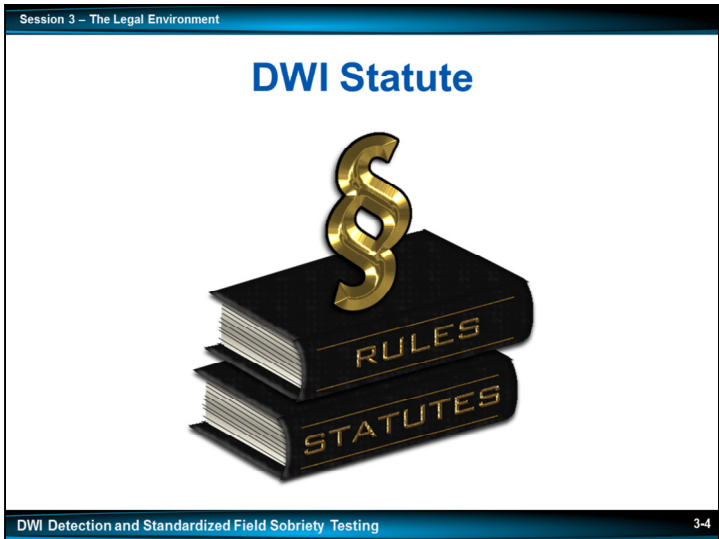
In this session, impaired driving laws are discussed in detail. The illustrations provided are drawn from the Uniform Vehicle Code. You are responsible for learning whether and how each law applies in your jurisdiction.

CONTENT SEGMENTS

- A. DWI Statute: Driving While Under the Influence
- B. Per Se Statute: Driving With a Prohibited Blood Alcohol Concentration
- C. Implied Consent
- D. Preliminary Breath Testing
- E. Case Law Review

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Reading Assignments



A. DWI Statute: Driving While Under the Influence

A State's DWI statute may be subtitled Driving While Under the Influence or something similar. Typically the statute describes the who, what, where and how of the offense in language.

Legal Definitions

Driving



Legal Definitions

Driving
Actual Physical Control



Legal Definitions

Driving
Actual Physical Control
Vehicle/Motor Vehicle



Legal Definitions

Driving
Actual Physical Control
Vehicle
Location



Legal Definitions

Driving
 Actual Physical Control
 Vehicle
 Location
Impaired/Under the Influence



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

Probable Cause for DWI Arrest

Opinion based on totality of circumstances there is probable cause to believe defendant committed crime of DWI

* All elements of crime need to be present

DWI Violation Arrest

In order to arrest someone for DWI, a law enforcement officer must have probable cause to believe all elements of the offense are present. That is, the officer must believe:

The person in question was operating or in actual physical control of a vehicle (truck, van, automobile, motorcycle, even bicycle, according to specific provisions in various States) while under the influence of alcohol, another drug, or both.

Conviction

**Criminal offense – establish facts
“beyond a reasonable doubt”**



Conviction

In order to convict a person of DWI, it is necessary to establish all elements were present.

- Operation
- Control
- Vehicle
- Impairment

If DWI is a criminal offense, the facts must be established "beyond a reasonable doubt." If DWI is a violation, the standard of proof may be less. In either case, it is the officer's responsibility to collect and thoroughly document all evidence for use at trial.

In some States, an operator may be charged with a non-criminal alcohol-related violation and the standard of proof may be less.

Per Se Statute

Refer to local State information

B. Per Se Statute: Driving with a Prohibited Blood Alcohol Concentration (BAC)

All States include in their DWI statutes a provision making it illegal to drive with a statutorily prohibited BAC. This provision, often called a Per Se law, creates another mechanism by which a suspect can be prosecuted for a DWI offense.

Following is a typical Per Se provision.

It is unlawful for any person to:

- Operate or be in physical control
- Of any vehicle
- Within this State
- While having a BAC at or above State’s level

These elements may vary from State to State.

DWI and DWI Per Se

- **DWI – driving while under influence**
 - **Chemical test is additional evidence**
- **DWI Per Se – driving while having more than a statutorily prohibited BAC**
 - **Chemical test is presumptive evidence**

The DWI and DWI Per Se can work simultaneously to prosecute a suspect for DWI:

- The DWI law makes it an offense to drive while under the influence of alcohol and/or any drug
- The DWI Per Se law makes it an offense to drive while having more than a statutorily prohibited BAC

The Per Se law is an additional method of prosecuting DWI. For the DWI, the chemical test result is additional evidence. For the DWI Per Se, the chemical test result is presumptive evidence.

The principal purpose of the Per Se law is to aid in prosecution of DWI offenders. It is not necessary for the prosecutor to show the driver was "under the influence." It is sufficient for the State to show the driver's BAC was at or above the State's level.

Important to remember, an officer must still have probable cause to believe the driver is impaired before making an arrest. Implied consent usually requires the driver be arrested before the request of a chemical test. The law also requires the arrest be made for "acts alleged to have been committed while operating a vehicle while under the influence." Therefore, the officer usually must establish probable cause the offense has been committed and make a valid arrest before the chemical test can be requested.

Per Se Summary

- **Continue to rely on your detection training and experience**
- **Assume chemical tests will not be available**
- **Thorough documentation is critical**

Per Se Summary

Police officers dealing with impaired drivers must continue to rely primarily on their own training and experience in detection to determine whether an arrest should be made. It is impossible to obtain a legally admissible chemical test result until after the arrest has been made. Sometimes drivers will refuse the chemical test after they have been arrested. The case will depend primarily upon the officer's observations and ability to articulate their testimony. When making a DWI arrest, always assume the chemical test evidence will not be available. It is critical you organize, document, and present your observations and testimony in a clear and convincing manner.

Implied Consent Law

Refer to local State information



C. Implied Consent

Implied consent law states suspected DWI drivers are deemed to have given their consent to submit to chemical testing. If the driver fails to provide a chemical test, they can be subject to license sanctions.

Elements of Implied Consent

- Operates or controls motor vehicle
- Operator deemed to have given consent to chemical testing
- Arrested for DWI
- Drivers who refuse are subject to license sanctions

The law provides penalties for refusal to submit to the testing. These penalties may include the suspension or revocation of the individual’s driver’s license. The purpose of implied consent is to encourage those arrested for DWI to submit to a chemical test so valuable evidence may be obtained.

Legal Presumptions

BAC _____ or more

- Presumed under the influence

Less than _____

- Presumed not under the influence

At least _____ but below _____

- No presumption

Legal presumptions define impairment and emphasize the significance of the scientific chemical test evidence.

For example, if the chemical test shows the person's BAC is .08 or more it shall be presumed the person is under the influence.

In this State, if the test shows the BAC is _____ or less, it shall be presumed the person is not under the influence.

If the test shows the BAC is more than _____ but less than _____, there is no presumption as to whether the person is or is not under the influence. The weight of the chemical test evidence is presumptive of alcohol influence, not conclusive.

The fact finder (court or jury) may accept the legal presumption and conclude the driver was or was not impaired on the basis of the chemical test alone. However, other evidence such as testimony about the defendant's driving, odor of alcohol, appearance, behavior, movements, speech, etc. may be sufficient to overcome the presumptive weight of the chemical test.

Example Number 1

- **Driver arrested for DWI**
- **BAC of 0.13**
- **Chemical test evidence introduced at trial**
 - **Arresting officer’s testimony was confusing and unclear**
 - **State unable to prove all elements beyond a reasonable doubt**

It is possible for a person whose BAC at the time of arrest is above the per se or presumptive level legal limit to be acquitted of DWI. It is also possible for a person whose BAC at the time is below the per se or presumptive level to be convicted of DWI. Consider the following examples:

Example 1

A driver is arrested for DWI. A chemical test administered to the driver shows a BAC of 0.13. At the subsequent trial, the chemical test evidence is introduced. However, the arresting officer’s testimony about the defendant’s driving, appearance, and behavior was confusing and unclear. Therefore, the State was unable to prove all of the elements of the crime beyond a reasonable doubt.

Example Number 2

- **Driver arrested for DWI**
- **BAC of 0.05**
- **Chemical test evidence introduced at trial**
 - Arresting officer testimony is clear and descriptive
 - Court finds defendant guilty of DWI

Example 2

A driver is arrested for DWI. A chemical test administered to the driver shows a BAC of 0.05. At the subsequent trial, the chemical test evidence is introduced. In addition, the arresting officer testifies about the defendant’s driving, odor of alcohol, appearance, slurred speech, and inability to perform divided attention field sobriety tests. The testimony is clear and descriptive. The court finds the defendant guilty of DWI.

The difference in outcomes in the two examples cited is directly attributable to how well the arresting officer articulates the evidence other than the chemical test. Remember the chemical test provides presumptive evidence of alcohol influence; it does not provide conclusive evidence. While the "legal limit" in a given jurisdiction may be 0.08 BAC, many people will demonstrate impaired driving long before that "legal limit" is reached.

Preliminary Breath Testing (PBT)

Refer to local State information



D. Preliminary Breath Testing (PBT)

Description

Many States have enacted PBT laws. These laws permit a law enforcement officer to request a driver suspected of DWI to submit to a roadside breath test prior to arrest. PBT laws vary significantly from one State to another.

Application

PBT results may be used to assist in determining whether an arrest should be made. The results may not be admissible as substantive evidence against the defendant in court. Discuss State laws regarding admissibility of PBT results. However, PBT laws may provide statutory or administrative penalties if the driver refuses to submit to the test. These penalties may include license suspension, fines, or other sanctions.

Case Law Reviews

- **Landmark court decisions relevant to admissibility of SFSTs**
- **Challenges may be based on:**
 - **Scientific validity and reliability**
 - **Relationship of HGN to specific BAC level**
 - **Officer training, experience, and application**

E. Case Law Reviews

The following cases are landmark court decisions relevant to the admissibility of Standardized Field Sobriety Tests (SFSTs) and Horizontal Gaze Nystagmus (HGN). Challenges to the admissibility have been based on (1) scientific validity and reliability; (2) relationship of HGN to specific BAC level; and, (3) officer training, experience, and application.

SFST Case Law

Refer to local State information

HGN Case Law

Refer to local State information

Search and Seizure Case Law

Refer to local State information

Other Relevant Case Law

Refer to local State information

Case Law Summary



TO SUMMARIZE:

The prevailing trend in court is to accept HGN as evidence of impairment, provided the proper scientific foundation is laid. However, most courts consistently reject any attempt to derive a quantitative estimate of BAC from HGN. Additionally, officers should recognize the relevance of administering the SFSTs in accordance with the NHTSA/IACP guidelines.

Test Your Knowledge

1. If DWI is a criminal offense, the standard of proof is _____.
2. The purpose of implied consent is _____.
3. For the Per se offense, chemical test result is _____ evidence.
4. The Per Se law makes it unlawful to _____.

Test Your Knowledge

1. If DWI is a criminal offense, the standard of proof is _____

2. The purpose of implied consent is _____

3. For the Per se offense, chemical test result is _____ evidence.

4. The Per Se law makes it unlawful to _____

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DWI Detection
and
Standardized
Field Sobriety
Testing

Session 4 – Overview of Detection,
Note Taking, and Testimony



February 2018

Session 4

Overview of Detection, Note Taking, and Testimony



Learning Objectives

- Describe the three phases of detection and the tasks and key decision of each phase
- Discuss uses of a standard note taking guide
- Discuss guidelines for effective testimony



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

- Describe the three phases of detection
- Describe the tasks and key decision of each phase
- Discuss the uses of a standard note taking guide
- Discuss guidelines for effective testimony

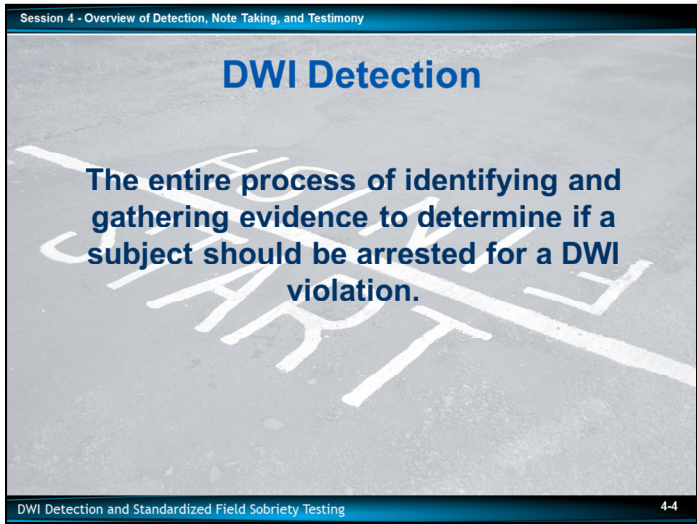
Detection is both the most important and difficult task in the DWI enforcement effort. If officers fail to detect DWI offenders, the DWI countermeasures program will ultimately fail. If officers do not detect and arrest DWI offenders, then prosecutors cannot prosecute them, the courts and driver licensing officials cannot impose sanctions on them, and treatment and rehabilitation programs will go unused.

CONTENT SEGMENTS

- A. Three Phases of Detection
- B. DWI Investigation Field Notes
- C. Courtroom Testimony

LEARNING ACTIVITIES

- Instructor-led Presentation
- Reading Assignments



The term DWI detection has been used in many different ways. Consequently it does not mean the same thing to all law enforcement officers. For the purposes of this training, DWI detection is defined as: The entire process of identifying and gathering evidence to determine if a subject should be arrested for a DWI violation.

Detection begins when the officer develops the first suspicion of a DWI violation.

Detection ends when the officer decides whether or not there is sufficient probable cause to arrest the driver for DWI. Your attention may be called to a particular vehicle or individual for a variety of reasons. The precipitating event may be a loud noise, an obvious equipment or moving violation, unusual but not necessarily illegal behavior, or almost anything else. Initial detection may carry with it an immediate suspicion the driver is impaired, or a slight suspicion, or even no suspicion at all. In any case, it sets in motion a process wherein you focus on a particular vehicle or individual and have the opportunity to observe that vehicle or individual and to gather additional evidence.

The detection process ends when you decide either to arrest or not to arrest the individual for DWI. That decision is based on all of the evidence that has come to light since your attention was first drawn to the vehicle or individual. Effective DWI enforcers do not leap to the arrest/no arrest decision. Rather, they proceed carefully through a series of intermediate steps, each of which helps to identify the collective evidence.

DWI Detection Phases

- Phase One – Vehicle in Motion
- Phase Two – Personal Contact
- Phase Three – Pre-Arrest Screening



A. Three Phases of Detection

The typical DWI contact involves three separate and distinct phases:

- Phase One: Vehicle in motion
- Phase Two: Personal contact
- Phase Three: Pre-arrest screening

In Phase One, you usually observe the driver operating the vehicle.

In Phase Two, after you have stopped the vehicle, there usually is an opportunity to observe and speak with the driver face to face.

In Phase Three, you usually have an opportunity to administer Standardized Field Sobriety Tests (SFSTs) to the driver to determine impairment.

In addition to SFSTs, some jurisdictions may allow you to administer other field sobriety tests and/or a preliminary breath test (PBT) to verify alcohol is the cause of the impairment. PBTs can be used to assist in making an arrest decision and should rarely be the only factor in deciding to arrest. PBTs should be used after administering SFSTs.

The DWI detection process does not always include all three phases. Sometimes there are DWI detection contacts in which Phase One is absent. These are cases in which you have no opportunity to observe the vehicle in motion. This may occur at the crash scene, at a roadblock or checkpoint, or when you have responded to a request for motorist assistance. Sometimes there are DWI contacts in which Phase Three is absent. There are cases in which you would not administer formal tests to the driver. This may occur when the driver is grossly impaired, badly injured, or refuses to submit to tests.

Decisions/Possible Outcomes

Decisions

- Phase One - Stop?
- Phase Two - Exit?
- Phase Three - Arrest?



Possible Outcomes

- Yes - Do it now
- Wait - Look for more evidence
- No - Don't do it

In each of the three phases, there will be decisions and possible outcomes.

Major Tasks and Decisions

Each detection phase usually involves two major tasks and one major decision.

Decisions

- **Phase One: Vehicle in Motion – Should I stop the vehicle?**
- **Phase Two: Personal Contact – Should the driver exit?**
- **Phase Three: Pre-arrest Screening – Is there probable cause to arrest the suspect for DWI?**

In Phase One: Your first task is to observe the vehicle in operation. Based on this observation, you must decide whether there is sufficient cause to command the driver to stop. Your second task is to observe the stopping sequence. You may want to take a picture of the vehicle or scene especially if the vehicle was involved in a crash.

In Phase Two: Your first task is to observe and interview the driver face to face. Based on this observation, you must decide whether there is sufficient cause to instruct the driver to step from the vehicle for further investigation. Your second task is to observe the driver's exit and walk from the vehicle. You may want to take a photo of the defendant.

In Phase Three: Your first task is to administer structured, formal psychophysical tests. Based on these tests, you must decide whether there is sufficient probable cause to arrest the driver for DWI. Your second task is then to arrange for (or administer) a PBT.

Possible Outcomes – Yes



- Phase One: Yes, there are reasonable grounds to stop the vehicle
- Phase Two: Yes, there is enough reason to suspect impairment to justify getting the driver out of the vehicle for further investigation
- Phase Three: Yes, there is probable cause to arrest driver for DWI right now

Each of the major decisions can have any one of three different outcomes:

- Yes - Do it Now
- Wait - Look for Additional Evidence
- No - Don't Do It

Consider the following examples.

Yes - Do It Now

Phase One: Yes, there are reasonable grounds to stop the vehicle.

Phase Two: Yes, there is enough reason to suspect impairment to justify getting the driver out of the vehicle for further investigation.

Phase Three: Yes, there is probable cause to arrest the driver for DWI right now.

Possible Outcomes - Wait



- Phase One: Don't stop the vehicle yet
- Phase Two: Don't get the driver out of the car yet
- Phase Three: Don't arrest the driver yet

Wait - Look for Additional Evidence

Phase One: Don't stop the vehicle yet; keep following and observing it a bit longer.

Phase Two: Don't get the driver out of the car yet; keep talking to and observing the driver a bit longer. (This option may be limited if the officer's personal safety is at risk.)

Phase Three: Don't arrest the driver yet; administer another field sobriety test before deciding.

Possible Outcomes - No



- **Phase One: No, there are no grounds for stopping that vehicle**
- **Phase Two: No, there isn't enough evidence of DWI to justify administering field sobriety tests**
- **Phase Three: No, there is not sufficient probable cause to believe this driver has committed DWI**

Don't Do It:

Phase One: No, there are no grounds for stopping that vehicle.

Phase Two: No, there isn't enough evidence of DWI to justify administering field sobriety tests.

Phase Three: No, there is not sufficient probable cause to believe this driver has committed DWI.



Officer Responsibility

In each phase of detection, you must determine whether there is sufficient evidence to establish the "reasonable suspicion" necessary to proceed to the next step in the detection process. It is always your duty to carry out whatever tasks are appropriate and to make sure ALL relevant evidence of DWI is gathered.

DWI Detection – Phase One

- What is the vehicle doing?
- Do I have grounds to stop the vehicle?
- How does the driver respond to my signal to stop?
- How does the driver handle the vehicle during the stopping sequence?



DWI Detection and Standardized Field Sobriety Testing

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DWI Detection – Phase One

Answers to questions like these can aid you in DWI detection.

Phase One:

- What is the vehicle doing?
- Do I have grounds to stop the vehicle?
- How does the driver respond to my signal to stop?
- How does the driver handle the vehicle during the stopping sequence?

DWI Detection – Phase Two

- **Vehicle approach: What do I see?**
- **Talking with driver: What do I hear, see, smell?**
- **How does the driver respond to questions?**
- **Should I instruct the driver to exit vehicle?**
- **How does the driver exit?**
- **When the driver walks toward the side of the road, what do I see?**




Phase Two:

- When I approach the vehicle, what do I see?
- When I talk with the driver, what do I hear, see, and smell?
- How does the driver respond to my questions?
- Should I instruct the driver to exit the vehicle?
- How does the driver exit?
- When the driver walks toward the side of the road, what do I see?

Session 4 - Overview of Detection, Note Taking, and Testimony

Successful DWI Detection



- Know what to observe
- Ask the right kinds of questions
- Use the right kinds of tests
- Interpret, document, and articulate all observations thoroughly
- Be motivated and apply your knowledge and skills

DWI Detection and Standardized Field Sobriety Testing 4-15

The most successful DWI detectors are those officers who:

- Know what to observe
- Ask the right kinds of questions
- Use the right kinds of tests
- Interpret, document, and articulate all observations thoroughly
- Be motivated and apply your knowledge and skills

Note Taking and Testimony

- Graphically describe your observations
- Convey evidence clearly and convincingly
- Importance of field notes



Note Taking and Testimony

A basic skill needed for DWI enforcement is the ability to graphically describe your observations. Just as detection is the process of collecting evidence, description largely is the process of conveying or articulating evidence.

Successful description demands the ability to convey evidence clearly and convincingly. Your challenge is to communicate evidence to people who weren't there to see, hear, and smell the evidence themselves. Your tools are the words that make up your written report and verbal testimony. You must communicate with the supervisor, the prosecutor, the judge, the jury, and even with the defense attorney. You are trying to "paint a word picture" for those people to develop a sharp mental image that allows them to "see" what you saw, "hear" what you heard, and "smell" what you smelled.

Officers who select the most appropriate terminology for both written reports and courtroom testimony will be better able to communicate clearly and convincingly, making DWI prosecution more successful.

Use Clear Convincing Language



Use Clear and Convincing Language

Field notes are only as good as the information they contain. Reports must be clearly written and events accurately described if the reports are to have evidentiary value. One persistent problem with DWI incident reports is the use of vague language to describe conditions, events, and statements. When vague language is used, reports provide an inaccurate picture of what happened. Clear and complete field notes help in preparation for your testimony.

Session 4 - Overview of Detection, Note Taking, and Testimony	
Vague	Clear
<ul style="list-style-type: none"> • Made an illegal left turn on Jefferson • Drove erratically • Driver appeared drunk, shaking 	<ul style="list-style-type: none"> • From Main, turned left (north bound) on Jefferson, which is one way south bound • Weaving from side to side. Crossed center line twice and drove on shoulder three times • Driver's eyes bloodshot; gaze fixed; Strong odor of alcoholic beverage on driver's breath
DWI Detection and Standardized Field Sobriety Testing	
4-18	

Consider the following examples.

Vague Language

- Made an illegal left turn on Jefferson
- Drove erratically
- Driver appeared drunk, shaking

Clear Language

- From Main, turned left (north bound) on Jefferson, which is one way south bound
- Weaving from side to side. Crossed center line twice and drove on shoulder three times
- Driver's eyes bloodshot; gaze fixed; Strong odor of alcoholic beverage on driver's breath

Session 4 - Overview of Detection, Note Taking, and Testimony

Vague	Clear
<ul style="list-style-type: none">• Vehicle stopped in unusual fashion• Vehicle crossed the center line	<ul style="list-style-type: none">• Vehicle struck, climbed curb; stopped on sidewalk• Vehicle drifted completely into the opposing traffic lane

DWI Detection and Standardized Field Sobriety Testing 4-19

Consider the following examples.

Vague Language

- Vehicle stopped in unusual fashion
- Vehicle crossed the center line

Clear Language

- Vehicle struck, climbed curb; stopped on sidewalk
- Vehicle drifted completely into the opposing traffic lane

Officer Must Be Able To

- Recognize and interpret DWI evidence
- Describe the evidence clearly and convincingly



B. DWI Investigation Field Notes

One of the most critical tasks in the DWI enforcement process is the recognition and documentation of facts and clues that establish legal grounds to stop, investigate, and subsequently arrest persons suspected of DWI. The evidence gathered during the detection process must establish the elements of the violation and must be completely documented to support successful prosecution of the defendant. This evidence is largely sensory (sight, smell, hearing) in nature, and therefore, is extremely short-lived.

You must be able to recognize and act on the facts and circumstances with which you are confronted. But you also must completely document your observations and describe them clearly and convincingly to secure a conviction. You may be inundated with evidence of DWI, i.e., sights, sounds, smells. You recognize this evidence, sometimes subconsciously, and on this evidence base your decisions to stop, to investigate, and ultimately to arrest.

Since evidence of a DWI violation is short-lived, you need a system and tools for recording field notes at scenes of DWI investigations.

Session 4 - Overview of Detection, Note Taking, and Testimony

Observations - Short-Lived Evidence

FIELD NOTE-TAKING GUIDE

I. NAME _____ **SEX** _____ **RACE** _____
ADDRESS _____ **CITY/STATE** _____ **OR LIC. NO.** _____
D/O B. _____ **DOC. SEC.** _____
VEHICLE MAKE _____ **YEAR** _____ **LIC.** _____ **STATE** _____
DISPOSITION _____ **NO. PASSENGERS** _____
INCIDENT LOCATION _____
DATE _____ **TIME** _____ **UNARM** YES NO

II. VEHICLE INFORMATION

INITIAL OBSERVATIONS _____
OBSERVATION OF STOP _____

III. PERSONAL CONTACT

OBSERVATION OF DRIVER _____
STATEMENTS _____
PRE-EXIT SOBRIETY TESTS _____
OBSERVATION OF THE EXIT _____
ODDSS _____

GENERAL OBSERVATIONS

SPEED _____
ATTITUDE _____
CLOTHING _____
PHYSICAL DEFECTS/DRUGS OR MEDICATIONS USED _____

IV. PRE-ARREST SCREENING

	HORIZONTAL GAZE NYSTAGMUS		LEFT	RIGHT
Equal Pupils <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> LACK OF SMOOTH PURSUIT			
Equal Tracking <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> DISTINCT AND SUSTAINED NYSTAGMUS AT MAXIMUM			
Vertical Nystagmus <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> ONSET OF NYSTAGMUS PRIOR TO 45 DEGREES			
Other (i.e., Resping Nystagmus) _____				

DWI Detection and Standardized Field Sobriety Testing 4-21

One way to improve the effectiveness of your handwritten field notes is to use a structured note taking guide. The guide makes it easy to record brief "notes" on each step of the detection process and ensures vital evidence is documented.

The field notes provide the information necessary to complete required DWI report forms and assist you in preparing a written account of the incident. The field notes will also be useful if you are required to provide oral testimony since they can be used to refresh your memory.

A model note taking guide is provided for your use. A brief description follows. Details are provided in subsequent units.

Note-Taking Guide

Remember you must document those actions which gave you reasonable suspicion or probable cause to justify further investigation of a suspected DWI incident.

Session 4 - Overview of Detection, Note Taking, and Testimony

Field Note-Taking Guide

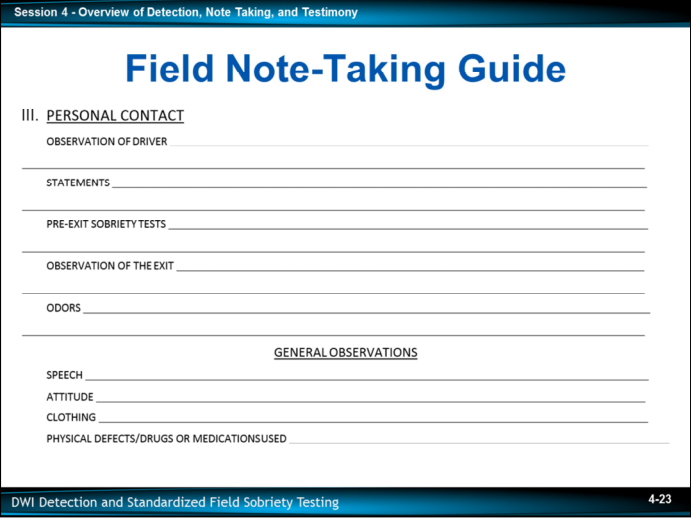
I. NAME _____ SEX _____ RACE _____
 ADDRESS _____ CITY/STATE _____ OP. LIC. NO. _____
 D.O.B. _____ / _____ / _____ SOC. SEC. # _____
 VEHICLE MAKE _____ YEAR _____ LIC. _____ STATE _____
 DISPOSITION _____ NO. PASSENGERS _____
 INCIDENT LOCATION _____
 DATE _____ / _____ / _____ TIME _____ CRASH YES NO

II. VEHICLE IN MOTION
 INITIAL OBSERVATIONS _____

 OBSERVATION OF STOP _____

DWI Detection and Standardized Field Sobriety Testing 4-22

- Section I provides space to record basic information describing the subject, vehicle, location, and date and time the incident occurred.
- Section II provides space to record brief descriptions of the vehicle in motion (Detection Phase One), including initial observation of the vehicle in operation and observation of the stopping sequence.



- Section III provides space to record brief descriptions of the personal contact with the subject (Detection Phase Two) including observations of the driver.

General Observations provides space to record the subject's manner of speech, attitude, clothing, etc. Any physical evidence collected should also be noted in this section.

Field Note-Taking Guide

IV. PRE-ARREST SCREENING



- Equal Pupils Yes No
- Equal Tracking Yes No
- Vertical Nystagmus Yes No
- Other (i.e., Resting Nystagmus) _____

HORIZONTAL GAZE NYSTAGMUS

- LACK OF SMOOTH PURSUIT
- DISTINCT AND SUSTAINED NYSTAGMUS AT MAXIMUM
- ONSET OF NYSTAGMUS PRIOR TO 45 DEGREES

	LEFT	RIGHT

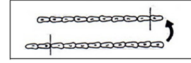
WALK AND TURN

INSTRUCTION STAGE

- CANNOT KEEP BALANCE
- STARTS TOO SOON

WALKING STAGE

- STOPS WALKING
- MISSES HEEL-TO-TOE
- STEPS OFF LINE
- USES ARMS FOR BALANCE



FIRST NINE STEPS

SECOND NINE STEPS

FIRST NINE STEPS	SECOND NINE STEPS

ACTUAL STEPS TAKEN

IMPROPER TURN (Describe) _____

CANNOT DO TEST (EXPLAIN) _____

OTHER: _____


Session 4 - Overview of Detection, Note Taking, and Testimony

Field Note-Taking Guide

ONE LEG STAND

L	R

Sways while balancing
Uses arms to balance
Hopping
Puts foot down



Type of Footwear:

OTHER: _____

OTHER FIELD SOBRIETY TESTS

NAME OF TEST _____
DESCRIBE PERFORMANCE _____

NAME OF TEST _____
DESCRIBE PERFORMANCE _____

NAME OF TEST _____
DESCRIBE PERFORMANCE _____

PBT (1) (optional) Time: _____ Results: _____ PBT (2) (optional) Time: _____ Results: _____

DWI Detection and Standardized Field Sobriety Testing 4-25

- Section IV provides space to record the results of all field sobriety tests administered and the results of the preliminary breath test (PBT) if such a test was given.
- Section V provides space to record the officer's general observations, such as the subject's manner of speech, attitude, clothing, etc. Any physical evidence collected should also be noted in this section.

Since this is a note-taking guide and space is limited, you will have to develop your own "shorthand" system. Your notes should be detailed and descriptive of the facts, circumstances, or events being described. These notes may be used to refresh your memory and to write the narrative report documenting your observations to testify in court.


NOTE: Field notes may be subpoenaed as evidence in court. It is important any "shorthand" system you use be describable, usable, complete, and consistent.

Session 4 - Overview of Detection, Note Taking, and Testimony

Preparing Testimony

At time of incident:

- **Recognize evidence**
- **Compile notes**
- **Prepare report**



DWI Detection and Standardized Field Sobriety Testing 4-26

C. Courtroom Testimony

Testimonial evidence in DWI cases establishes the defendant was, in fact, the driver and was under the influence. Your testimony should be clear, detailed, and concise. Preparation for trial is done both at the scene and prior to trial.

To be effective, testimonial evidence must be clear and convincing. The first requirement for effective testimony is preparation. Testimony preparation begins at the time of the DWI incident. From the very beginning of the DWI contact, it is your responsibility to:


- Recognize significant evidence
- Compile complete, accurate field notes
- Prepare a complete, accurate, detailed report

Session 4 - Overview of Detection, Note Taking, and Testimony

Preparing Testimony

Prior to trial:

- **Review paperwork**
- **Review other evidence**
- **Mentally organize elements, evidence, and testimony**
- **Identify potential issues**
- **Discuss with prosecutor**

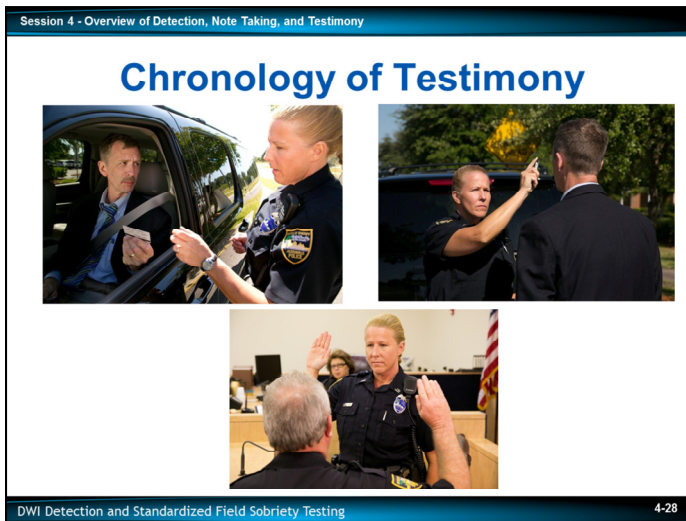


DWI Detection and Standardized Field Sobriety Testing 4-27

Testimony preparation continues prior to trial. Just before the trial, you should:

- Review field notes, incident report, narrative, and other paperwork
- Review other evidence, i.e., video, photographs, etc.
- Mentally organize elements of offense and the evidence available to prove each element
- Mentally organize testimony to convey observations clearly and convincingly
- Identify weak spots and/or potential issues with the case and decide how to address those issues
- Discuss the case with the prosecutor

The foundation for preparation and successful testimony is the relationship between the law enforcement officer(s) involved with the arrest and the prosecuting attorney(s) associated with the case. Effective communication and a clear understanding of each groups' objectives and expectations is essential for successful prosecution.



Chronology of Testimony

In court, your testimony should be organized chronologically and should cover each phase of the DWI incident:

Phase One: Vehicle in Motion – initial observation of vehicle, the driver, or both including what first attracted your attention to the vehicle/driver and details about the driving before you initiated the traffic stop.

Reinforcing cues, maneuvers, or actions observed after signaling the driver to stop but before driver's vehicle came to a complete stop.

Phase Two: Personal Contact – face to face observations including personal appearance, statements, and other evidence obtained during your initial contact with driver.

Phase Three: Pre-arrest Screening – sobriety tests administered to the driver and the results of any preliminary breath tests (if applicable).

Chronology of Testimony

Arrest and post arrest observations:

- Arrest procedures and admonitions
- Defendant's actions and statements
- Post arrest observations
- Request for chemical test(s)
- Administration and results of chemical test(s)
- Interview

Arrest and Post Arrest Observations

- The arrest itself including procedures used to inform driver of arrest, admonish subject of rights, and so on
- Defendant's actions, statements, and/or admissions subsequent to the arrest
- Observation of defendant subsequent to the arrest including not just what the defendant said but actions and reactions
- The request for the chemical test including the procedures used, admonition of rights and requirements, and so on
- The conduct, actions, reactions, and results of the chemical test if you were also the testing officer
- The interview of the defendant, including any new observations, statements, and/or admissions.



Test Your Knowledge

1. DWI detection is defined as _____
2. The three phases in a typical DWI contact are:
 - Phase One _____
 - Phase Two _____
 - Phase Three _____
3. In Phase One, the officer usually has an opportunity to _____

Test Your Knowledge

1. DWI detection is defined as _____

2. The three phases in a typical DWI contact are:
 - A. Phase One _____
 - B. Phase Two _____
 - C. Phase Three _____
3. In Phase One, the officer usually has an opportunity to _____

Test Your Knowledge

4. Phase Three may not occur if _____
5. In Phase Two, the officer must decide _____
6. Each major decision can have any one of _____ different outcomes.
 - These are _____.

4. Phase Three may not occur if _____

5. In Phase Two, the officer must decide _____

6. Each major decision can have any one of **3** different outcomes. These are: _____

Test Your Knowledge

- 7. At each phase of detection, the officer must determine _____
- 8. Evidence of DWI is largely _____ in nature
- 9. Law enforcement officers need a system and tools for recording field notes at scenes of DWI investigations because DWI evidence is _____.

7. At each phase of detection, the officer must determine _____

8. Evidence of DWI is largely _____ in nature.

9. Law enforcement officers need a system and tools for recording field notes at scenes of DWI investigations because DWI evidence is _____

Test Your Knowledge

10. Testimony preparations begins _____
11. List two things the officer should do to prepare testimony just before the trial.
12. In court, the officer's testimony should be organized _____.

10. Testimony preparations begins _____

11. List two things the officer should do to prepare testimony just before the trial.

12. In court, the officer's testimony should be organized _____

FIELD NOTE-TAKING GUIDE

I. NAME _____ SEX _____ RACE _____
 ADDRESS _____ CITY/STATE _____ OP.LIC.NO. _____
 D.O.B. _____ / _____ / _____ SOC. SEC. # _____
 VEHICLE MAKE _____ YEAR _____ LIC. _____ STATE _____
 DISPOSITION _____ NO. PASSENGERS _____
 INCIDENT LOCATION _____
 DATE _____ / _____ / _____ TIME _____ CRASH YES NO

II. VEHICLE IN MOTION

INITIAL OBSERVATIONS _____

OBSERVATION OF STOP _____

III. PERSONAL CONTACT

OBSERVATION OF DRIVER _____

STATEMENTS _____

PRE-EXIT SOBRIETY TESTS _____

OBSERVATION OF THE EXIT _____

ODORS _____

GENERAL OBSERVATIONS

SPEECH _____

ATTITUDE _____

CLOTHING _____

PHYSICAL DEFECTS/DRUGS OR MEDICATIONS USED _____

IV. PRE-ARREST SCREENING

HORIZONTAL GAZE NYSTAGMUS

Equal Pupils Yes No LACK OF SMOOTH PURSUIT
 Equal Tracking Yes No DISTINCT AND SUSTAINED NYSTAGMUS AT MAX DEV
 Vertical Nystagmus Yes No ONSET OF NYSTAGMUS PRIOR TO 45 DEGREES
 Other (i.e., Resting Nystagmus) _____

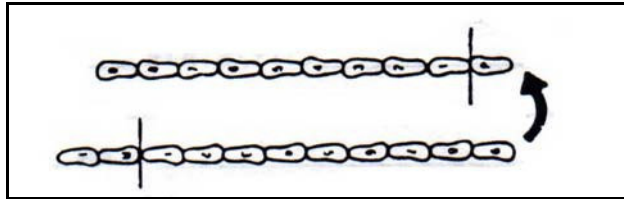
LEFT	RIGHT

WALK AND TURN

INSTRUCTION STAGE

CANNOT KEEP BALANCE

STARTS TOO SOON



WALKING STAGE

FIRST NINE STEPS

SECOND NINE STEPS

STOPS WALKING

MISSES HEEL-TO-TOE

STEPS OFF LINE

USES ARMS FOR BALANCE

ACTUAL STEPS TAKEN

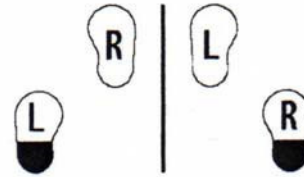
IMPROPER TURN (Describe) _____

CANNOT DO TEST (EXPLAIN) _____

OTHER: _____

ONE LEG STAND

L	R	
<input type="checkbox"/>	<input type="checkbox"/>	Sways while balancing
<input type="checkbox"/>	<input type="checkbox"/>	Uses arms to balance
<input type="checkbox"/>	<input type="checkbox"/>	Hopping
<input type="checkbox"/>	<input type="checkbox"/>	Puts foot down



Type of Footwear

OTHER: _____

OTHER FIELD SOBRIETY TESTS

NAME OF TEST _____

DESCRIBE PERFORMANCE _____

NAME OF TEST _____

DESCRIBE PERFORMANCE _____

NAME OF TEST _____

DESCRIBE PERFORMANCE _____

PBT (1) (optional) Time: _____ Results: _____	PBT (2) (optional) Time: _____ Results: _____
---	---

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 5 – Phase One:
Vehicle in Motion



February 2018

Session 5

Phase One: Vehicle in Motion



Learning Objectives

- Identify typical cues of Detection Phase One
- Describe observed cues clearly and convincingly
- Understand significance of the impaired motorcycle riders problem
- Obtain skills necessary to detect, arrest, and prosecute alcohol- and drug-impaired motorcyclists



At the conclusion of this session, participants will be able to:

- Identify typical cues of Detection Phase One
- Describe the observed cues clearly and convincingly
- Understand the significance of the problem of impaired motorcycle riders
- Obtain the skills necessary to detect, arrest, and prosecute alcohol- and drug-impaired motorcyclists

CONTENT SEGMENTS

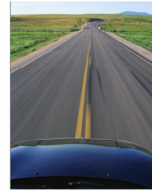
- A. Overview: Tasks and Decision
- B. Initial Observations: Visual Cues of Impaired Operation (Automobiles)
- C. Initial Observations: Visual Cues of Impaired Operation (Motorcycles)
- D. Recognition and Description of Initial Cues
- E. Typical Reinforcing Cues of the Stopping Sequence
- F. Recognition and Description of Initial and Reinforcing Cues

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Video Presentation
- Instructor-Led Demonstrations
- Participant Presentations

Phase One: Vehicle in Motion

Initial Observation
of the Vehicle
in Operation



A. Overview: Tasks and Decision

Your first task in Phase One: Vehicle in Motion is to observe the vehicle in operation and to note any initial cues of a possible DWI violation. At this point you must decide whether there is reasonable suspicion to stop the vehicle; either to conduct further investigation to determine if the driver may be impaired or for another traffic violation. You are not committed to arresting the driver for DWI based on this initial observation, but rather should concentrate on gathering all relevant evidence that may suggest impairment. Your second task during phase one is to observe the manner in which the driver responds to your signal to stop and to note any additional evidence of a DWI violation.

The first task, observing the vehicle in motion, begins when you first notice the vehicle, driver, or both. Your attention may be drawn to the vehicle by such things as:

- A moving traffic violation
- An equipment violation
- An expired registration or inspection sticker
- Unusual driving actions such as weaving within a lane or moving at a slower than normal speed
- Evidence of drinking or drugs in vehicle

If this initial observation discloses vehicle maneuvers or human behaviors that may be associated with impairment, you may develop an initial suspicion of DWI.

Based upon this initial observation of the vehicle in motion, you must decide whether there is reasonable suspicion to stop the vehicle. At this point you have three choices:

- Stop the vehicle
- Continue to observe the vehicle
- Disregard the vehicle

Session 5 – Phase One: Vehicle in Motion

Phase One: Vehicle in Motion

```
graph TD; A[Initial Observation of the Vehicle in Operation] --> B{Should I Stop the Vehicle?}; B --> C[Observation of the Stop];
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DWI Detection and Standardized Field Sobriety Testing 5-5

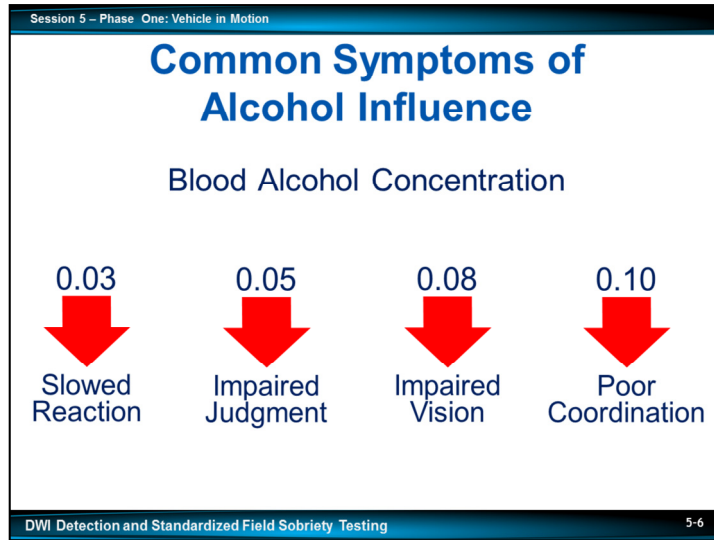
Alternatives to stopping the vehicle include:

- Delaying the stop/no stop decision in order to continue observing the vehicle
- Disregarding the vehicle

Whenever there is a valid reason to stop a vehicle, the officer should be alert to the possibility the driver may be impaired by alcohol and/or other drugs.

Once the stop command has been communicated to the suspect driver, the officer must closely observe the driver's actions and vehicle maneuvers during the stopping sequence.

Sometimes significant evidence of alcohol influence comes to light during the stopping sequence. In some cases, the stopping sequence might produce the first suspicion of DWI. Drivers impaired by alcohol and/or other drugs may respond in unexpected and dangerous ways to the stop command.



B. Initial Observations: Visual Cues of Impaired Operation (Automobiles)

Drivers who are impaired frequently exhibit certain effects or symptoms of impairment. These include:

- Slowed reactions
- Impaired judgment as evidenced by a willingness to take risks
- Impaired vision
- Poor coordination

The next page presents common symptoms of alcohol influence.

This unit focuses on alcohol impairment because research currently provides more information about the effects of alcohol on driving than it does about the effects of other drugs on driving. Remember whether the driver is impaired by alcohol and/or drugs, the law enforcement detection process is the same and the offense is still DWI.



The common effects of alcohol on the driver's mental and physical faculties lead to predictable driving violations and vehicle operating characteristics. The National Highway Traffic Safety Administration (NHTSA) sponsored research to identify the most common and reliable initial indicators of DWI. This research identified 24 cues, each with an associated high probability the driver exhibiting the cue is *impaired*. These cues and their associated probabilities are described in the NHTSA publication, The Visual Detection of DWI Motorists. They also are discussed in Vehicle in Motion, a video sponsored by NHTSA to assist law enforcement officers to recognize DWI detection cues.

NHTSA sponsored research to identify the most common and reliable initial indicators of DWI. Research identified 100 cues, each providing a high probability indication the driver is *under the influence*.

The list was reduced to 24 cues during three field studies involving hundreds of officers and more than 12,000 enforcement stops.

Most Common and Reliable Initial Indicators of DWI

- **Problems in maintaining proper lane position**
- **Speed and braking problems**
- **Vigilance problems**
- **Judgment problems**



The driving behaviors are presented in four categories:

- Problems in maintaining proper lane position
- Speed and braking problems
- Vigilance problems
- Judgment problems

Problems Maintaining Proper Lane Position

- Weaving
- Weaving across lane line
- Drifting
- Straddling a lane line
- Swerving
- Almost striking object or vehicle
- Turning with a wide radius



There is a brochure published by NHTSA that contains these cues. The title is “The Visual Detection of DWI Motorists” DOT HS 808 677. See Attachment at the end of this session.

The first category is Problems in maintaining proper lane position. [p=.50-.75]

- Weaving
- Weaving across lane lines (lane departure)
- Drifting
- Straddling a lane line
- Swerving
- Almost striking object or vehicle
- Turning with a wide radius

Speed and Braking Problems

- Stopping problems
- Unnecessary acceleration or deceleration
- Varying speed
- 10 mph or more under the speed limit



Speed and braking problems. [p=.45-.70]

- Stopping problems (too far, too short, or too jerky)
- Unnecessary acceleration or deceleration
- Varying speed
- 10 mph or more under the speed limit

Vigilance Problems

- Driving without headlights at night
- Failure to signal
- Driving wrong way
- Slow response to traffic/officer's signals
- Stopping in lane for no apparent reason



The third problem is vigilance problems. [P=.55-.65] This category includes, but is not limited to:

- Driving without headlights at night
- Failure to signal or signal inconsistent with action
- Driving in opposing lanes or wrong way on one way
- Slow response to traffic signals
- Slow or failure to respond to officer's signals
- Stopping in lane for no apparent reason

Judgment Problems



- **Following too closely**
- **Improper lane change/turn**
- **Driving on other than designated roadway**
- **Stopping inappropriately in response to officer**
- **Inappropriate or unusual behavior**
- **Appearing to be impaired**

Judgment problems. [P=.35-.90]

- Following too closely (tailgating)
- Improper or unsafe lane change
- Illegal or improper turn
- Driving on other than designated roadway
- Stopping inappropriately in response to officer
- Inappropriate or unusual behavior (throwing objects, arguing, etc.)
- Appearing to be impaired

Post Stop Clues

- Difficulty with motor vehicle controls
- Fumbling with driver license or registration
- Difficulty exiting vehicle
- Repeating questions or comments
- Swaying, unsteady, or balance problems

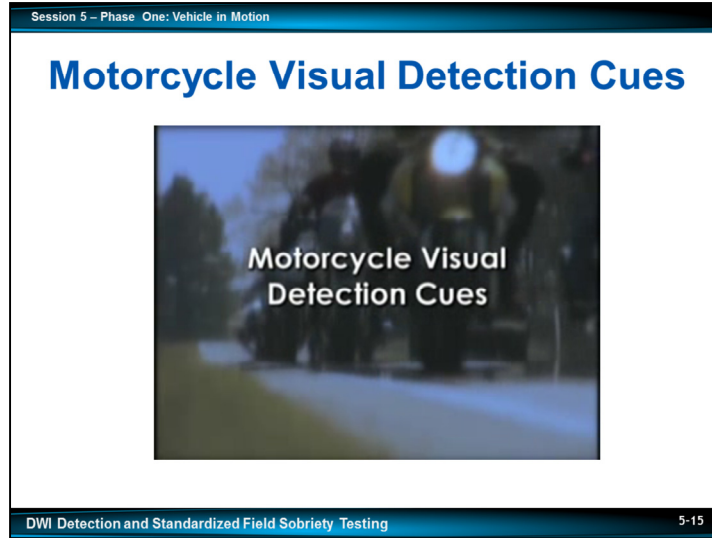
The research also identified 10 post stop clues. [P > .85]

- Difficulty with motor vehicle controls
- Fumbling with driver license or registration
- Difficulty exiting the vehicle
- Repeating questions or comments
- Swaying, unsteady, or balance problems

Post Stop Clues (continued)

- Leaning on the vehicle or other object
- Slurred speech
- Slow to respond to officer/officer must repeat
- Provides incorrect information, changes answers
- Odor of alcoholic beverage from the driver

- Leaning on the vehicle or other object
- Slurred speech
- Slow to respond to officer/officer must repeat
- Provides incorrect information, changes answers
- Odor of alcoholic beverage from the driver



C. Initial Observations: Visual Cues of Impaired Operation (Motorcycles)

Show video. Allow 14 minutes.

NHTSA estimated in 2014, 30 percent of all motorcycle riders killed were impaired by alcohol (BAC .08 or greater).

NHTSA sponsored research to develop a set of behavioral cues to be used by law enforcement personnel to detect motorcyclists who are operating their vehicles while impaired. These cues can be used both day and night. These cues have been labeled as:

- Excellent Predictors
- Good Predictors

Motorcycle DUI Detection Guide

Excellent Cues (50% or Greater Probability)



- Drifting during turn or curve
- Trouble with dismount/balance at a stop
- Turning problems
- Inattentive to surroundings
- Inappropriate or unusual behavior
- Weaving

Research has identified driving impairment cues for motorcyclists. See Attachment at the end of this session.

Excellent cues (50% or greater probability).

- Drifting during turn or curve
- Trouble with dismount
- Trouble with balance at a stop
- Turning problems (e.g., unsteady, sudden corrections, late braking, improper lean angle)
- Inattentive to surroundings
- Inappropriate or unusual behavior (e.g., carrying or dropping object, urinating at roadside, disorderly conduct, etc.)
- Weaving

Motorcycle DUI Detection Guide

Good cues (30 to 50% probability)

- Erratic movements while going straight
- Operating without lights at night
- Recklessness
- Following too closely
- Running stop light or sign
- Evasion
- Traveling wrong way



Good Cues (30 to 50% probability)

- Erratic movements while going straight
- Operating without lights at night
- Recklessness
- Following too closely
- Running stop light or sign
- Evasion
- Traveling wrong way

Elements of the Driving Task

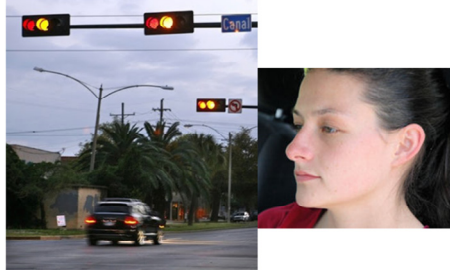


Relationship of Visual Cues to Impaired Divided Attention Capability

Driving is a complex task, composed of many parts:

- Steering
- Controlling accelerator
- Signaling
- Controlling brake pedal
- Operating clutch (if applicable)
- Operating gearshift (if applicable)
- Observing other traffic
- Observing signal lights, stop signs, other traffic control devices
- Making decisions (whether to stop, turn, speed up, slow down, etc.)
- Many other things

Safe Driving Demands



Safe driving demands the ability to divide attention among numerous simultaneous tasks.

In order to drive safely, a driver must be able to divide attention among all of these various activities.

Under the influence of alcohol or many drugs, a person's ability to divide attention becomes impaired.

The impaired driver tends to concentrate on certain parts of driving and to disregard other parts.

- Alcohol has impaired ability to divide attention
- Driver is concentrating on steering and controlling the accelerator and brake
- Does not respond to the particular color of the traffic light

Some of the most significant evidence from all three phases of DWI detection can be related directly to the effects of alcohol and/or other drugs on divided attention ability.

Vehicle In Motion Initial Cues

What do you see?

- Moving violation
- Equipment violation
- Other violation
- Unusual operation
- Anything else



D. Recognition and Description of Initial Cues

What do you see?

- Moving violation
- Equipment violation
- Other violation
- Unusual operation
- Anything else

Phase One: Task One Initial Observation of Vehicle Operation

Requires the ability to:

- Recognize evidence of alcohol and/or other drug influence
- Describe that evidence clearly and convincingly

Phase One: Task One Initial Observation of Vehicle Operation

The task of making initial observations of vehicle operation is the first step in the job of DWI detection.

Proper performance of that task demands two distinct but related abilities:

- Ability to recognize evidence of alcohol and/or other drug influence
- Ability to describe that evidence clearly and convincingly

It is not enough a police officer observe and recognize symptoms of impaired driving. The officer must be able to articulate what was observed so a judge or jury will have a clear mental image of exactly what took place.

Improving the ability to recognize and clearly describe observational evidence requires practice. It isn't practical to have impaired drivers actually drive through the classroom. The next best thing is to use video to portray typical DWI detection contacts.

Leaving the Shopping Center



The Charcoal SUV



Vehicle in Motion: Stopping Sequence

What do you see?

- Tries to flee
- No/slow response
- Abrupt weave
- Sudden stop
- Strikes curb
- New violations
- Anything else



E. Typical Reinforcing Cues of the Stopping Sequence

After the command to stop is given, the alcohol-impaired driver may exhibit additional important evidence of DWI.

Some of these cues are exhibited because the stop command places additional demands on the driver's ability to divide attention.

The signal to stop creates a new situation to which the driver must devote some attention, i.e., emergency flashing lights, siren, etc., that demand and divert the subject's attention.

Signal to stop requires the driver to turn the steering wheel, operate the brake pedal, activate the signal light, etc.

As soon as an officer gives the stop command, the subject's driving task becomes more complex.

If subject is under the influence, the subject may not be able to handle this more complex driving very well.

Phase One: Task Two Observation of the Stop

Requires the ability to:

- Recognize evidence of alcohol and/or other drug influence
- Describe that evidence clearly and convincingly

Phase One: Task Two Observation of the Stop

It is the officer's responsibility to capture and convey the additional evidence of impairment that may be exhibited during the stopping sequence.

- Requires ability to recognize evidence of alcohol and/or other drug influence
- Requires ability to describe that evidence clearly and convincingly

F. Recognition and Description of Initial and Reinforcing Cues

Procedures for practicing cue recognition and description.

The Sliding Sports Car



The Impatient Driver



Half in the Bag



QUESTIONS?

Test Your Knowledge

1. The Phase One tasks are _____
2. Two common symptoms of impairment are:
 - A. _____
 - B. _____

Test Your Knowledge

1. The Phase One tasks are _____

2. Two common symptoms of impairment are: _____

Test Your Knowledge

- 3. Alcohol impairs the ability to _____ among tasks
- 4. Three clues reinforcing the suspicion of DWI which may be observed during the stopping sequence are:
 - A. _____
 - B. _____
 - C. _____

- 3. Alcohol impairs the ability to _____ among tasks.
- 4. Three clues reinforcing the suspicion of DWI which may be observed during the stopping sequence are: _____

The Visual Detection of DWI Motorists



The Visual Detection of DWI Motorists



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**



DOT HS 808 677

INTRODUCTION

More than a million people have died in traffic crashes in the United States since 1966, the year of the National Traffic and Motor Vehicle Safety Act, which led to the creation of the National Highway Traffic Safety Administration (NHTSA).

During the late 1960's and early 1970's more than 50,000 people lost their lives each year on our nation's streets, roads and highways. Traffic safety has improved considerably since that time: the annual death toll has declined substantially, even though the numbers of drivers, vehicles, and miles driven all have increased. When miles traveled are considered, the likelihood of being killed in traffic during the 1960's was three to four times what it is today.

The proportion of all crashes in which alcohol is involved also has declined. The declines in crash risk and the numbers of alcohol-involved crashes are attributable to several factors, including the effectiveness of public information and education programs, traffic safety legislation, a general aging of the population, and law enforcement efforts.

NHTSA research contributed to the improved condition, in part, by providing law enforcement officers with useful and scientifically valid information concerning the behaviors that are most predictive of impairment. Continued enforcement of Driving While Intoxicated (DWI) laws will be a key to saving lives in the future. For this reason, NHTSA sponsored research leading to the development of a new DWI detection guide and training materials, including a new training video. Many things have changed since 1979, but like the original training materials, the new detection guide describes a set of behaviors that can be used by officers to detect motorists who are likely to be driving while impaired.

Building upon the previous NHTSA study, researchers interviewed officers from across the United States and developed a list of more than 100 driving cues that have been found to predict blood alcohol concentrations (BAC) of 0.08 percent or greater. The list was reduced to 24 cues during 3 field studies involving hundreds of officers and more than 12,000 enforcement stops. The driving behaviors identified by the officers are presented in the following four categories:

- 1) Problems in maintaining proper lane position**
- 2) Speed and braking problems**
- 3) Vigilance problems**
- 4) Judgment problems**

The cues presented in these categories predict that a driver is DWI at least 35 percent of the time. For example, if you observe a driver to be weaving or weaving across lane lines, the probability of DWI is more than .50 or 50 percent. However, if you observe either of the weaving cues and any other cue listed in this booklet, the probability of DWI jumps to at least .65 or 65 percent. Observing any two cues other than weaving indicates a probability of DWI of at least 50 percent. Some cues, such as swerving, accelerating for no reason, and driving on other than the designated roadway, have single-cue probabilities greater than 70 percent. Generally, the probability of DWI increases substantially when a driver exhibits more than one of the cues.

This booklet contains:

- **The DWI Detection Guide**
- **A summary of the research that led to the guide**
- **Explanations of the 24 driving cues**
- **A description of post-stop cues that are predictive of DWI**

The research suggests that these training materials will be helpful to officers in:

- **Detecting impaired motorists**
- **Articulating observed behaviors on arrest reports**
- **Supporting officers' expert testimony**

DWI DETECTION GUIDE

Weaving plus any other cue: $p =$ at least .65

Any two cues: $p =$ at least .50

Problems Maintaining Proper Lane Position $p = .50-.75$

- Weaving
- Weaving across lane lines
- Straddling a lane line
- Swerving
- Turning with a wide radius
- Drifting
- Almost striking a vehicle or other object

Speed and Braking Problems $p = .45-.70$

- Stopping problems (too far, too short, or too jerky)
- Accelerating or decelerating for no apparent reason
- Varying speed
- Slow speed (10+ mph under limit)

Vigilance Problems $p = .55-.65$

- Driving in opposing lanes or wrong way on one-way
- Slow response to traffic signals
- Slow or failure to respond to officer's signals
- Stopping in lane for no apparent reason
- Driving without headlights at night
- Failure to signal or signal inconsistent with action

Judgment Problems $p = .35-.90$

- Following too closely
- Improper or unsafe lane change
- Illegal or improper turn (too fast, jerky, sharp, etc.)
- Driving on other than the designated roadway
- Stopping inappropriately in response to officer
- Inappropriate or unusual behavior (throwing, arguing, etc.)
- Appearing to be impaired

Post Stop Cues $p \geq .85$

- Difficulty with motor vehicle controls
- Difficulty exiting the vehicle
- Fumbling with driver's license or registration
- Repeating questions or comments
- Swaying, unsteady, or balance problems
- Leaning on the vehicle or other object
- Slurred speech
- Slow to respond to officer or officer must repeat
- Providing incorrect information, changes answers
- Odor of alcoholic beverage from the driver

$p \geq .50$ when combined with any other cue:

- Driving without headlights at night
- Failure to signal or signal inconsistent with action

The probability of detecting DWI by random traffic enforcement stops at night has been found to be about 3 percent (.03).

PROBLEMS IN MAINTAINING PROPER LANE POSITION

Maintaining proper lane position can be a difficult task for an impaired driver. For example, we have all, at one time, seen vehicles **weaving**. Weaving is when the vehicle alternately moves toward one side of the lane and then the other. The pattern of lateral movement can be fairly regular, as one steering correction is closely followed by another. In extreme cases, the vehicle's wheels even **cross the lane lines** before a correction is made. You might even observe a vehicle **straddling a center or lane line**. That is, the vehicle is moving straight ahead with either the right or left tires on the wrong side of the lane line or markers.



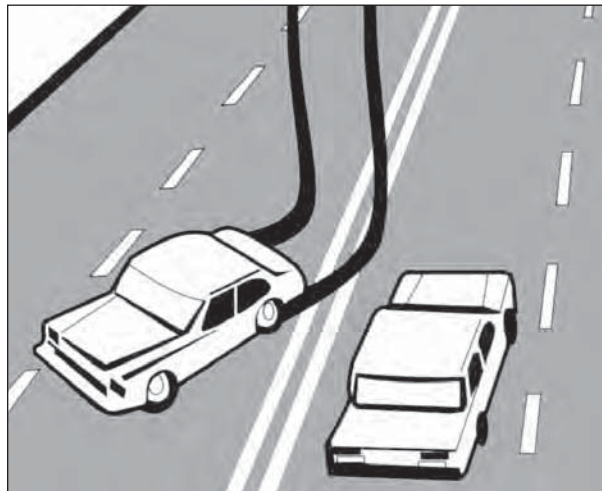
Weaving

Drifting is when a vehicle is moving in a generally straight line, but at a slight angle to the lane. The driver might correct his or her course as the vehicle approaches a lane line or other boundary or fail to correct until after a boundary has been crossed. In extreme cases, the driver fails to correct in time to avoid a collision.



Drifting

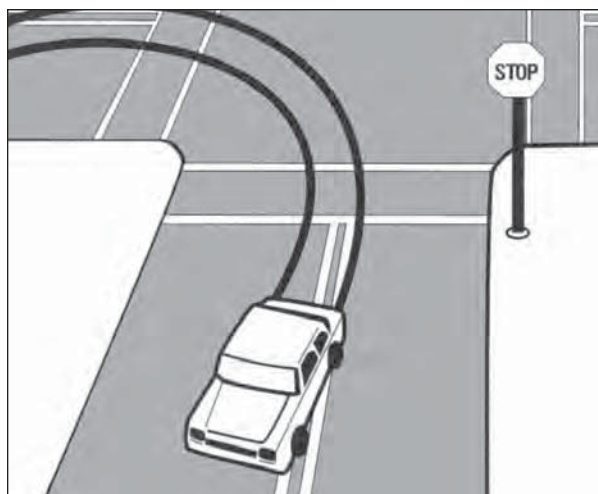
Course corrections can be gradual or abrupt. For example, you might observe a vehicle to **swerve**, making an abrupt turn away from a generally straight course, when a driver realizes that he or she has drifted out of proper lane position or to avoid a previously unnoticed hazard.



Swerving

A related DWI cue is **almost striking a vehicle or other object**. You might observe a vehicle, either at slow speeds or moving with traffic, to pass unusually close to a sign, barrier, building, or other object. This cue also includes almost striking another vehicle, either moving or parked, and causing another vehicle to maneuver to avoid a collision.

Turning with a wide radius or drifting during a curve is the final cue in this category of driver behaviors. A vehicle appears to drift to the outside of the lane or into another lane through the curve or while turning a corner. Watch for this cue, and stop the driver when you see it. Many alcohol-involved crashes are caused by an expanding turn radius or drifting out of lane position during a curve.

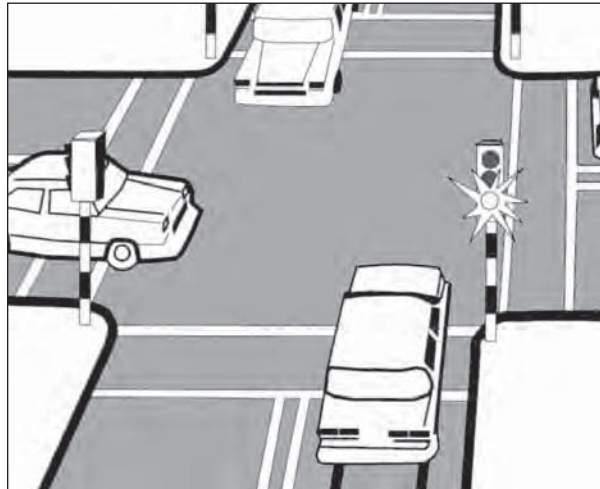


Turning With a Wide Radius

SPEED AND BRAKING PROBLEMS

The research showed that braking properly can be a difficult task for an impaired driver. For example, there is a good chance the driver is DWI if you observe any type of **stopping problem**. Stopping problems include:

- **Stopping too far from a curb or at an inappropriate angle**
- **Stopping too short or beyond a limit line**
- **Jerky or abrupt stops**



Stopping Beyond a Limit Line

Impaired drivers also can experience difficulty maintaining an appropriate speed. There is a good chance the driver is DWI if you observe a vehicle to:

- **Accelerate or decelerate rapidly for no apparent reason**
- **Vary its speed, alternating between speeding up and slowing down**
- **Be driven at a speed that is 10 miles per hour (mph) or more under the limit**

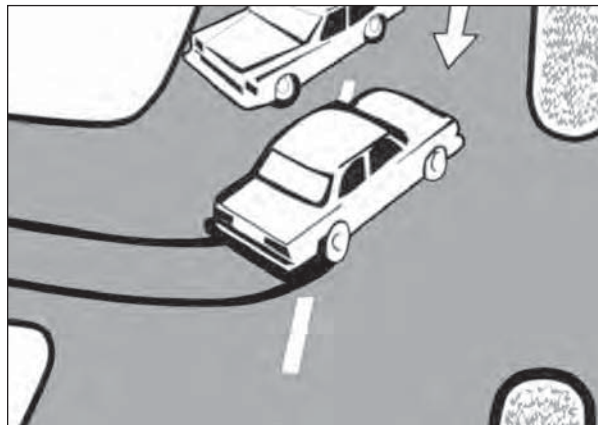
VIGILANCE PROBLEMS

Vigilance concerns a person's ability to pay attention to a task or notice changes in surroundings. A driver whose vigilance has been impaired by alcohol might forget to turn on his or her headlights when required. Similarly, impaired drivers often forget to signal a turn or lane change, or their signal is inconsistent with their maneuver, for example, signaling left but turning right.



Signaling Inconsistent With Driving Actions

Alcohol-impaired vigilance also results in motorists driving into opposing or crossing traffic and turning in front of oncoming vehicles with insufficient headway.



Driving Into Opposing or Crossing Traffic

Driving is a complex task that requires accurate information about surrounding traffic conditions. Failing to yield the right of way and driving the wrong way on a one way street are dangerous examples of vigilance problems.

A driver whose vigilance has been impaired by alcohol also might respond more slowly than normal to a change in a traffic signal. For example, the vehicle might remain stopped for an unusually long period of time after the signal has turned green. Similarly, an impaired driver might be unusually slow to respond to an officer's lights, siren, or hand signals.

The most extreme DWI cue in the category of vigilance problems is to find a vehicle stopped in a lane for no apparent reason. Sometimes when you observe this behavior the driver will be just lost or confused, but more than half of the time the driver will be DWI—maybe even asleep at the wheel.

JUDGMENT PROBLEMS

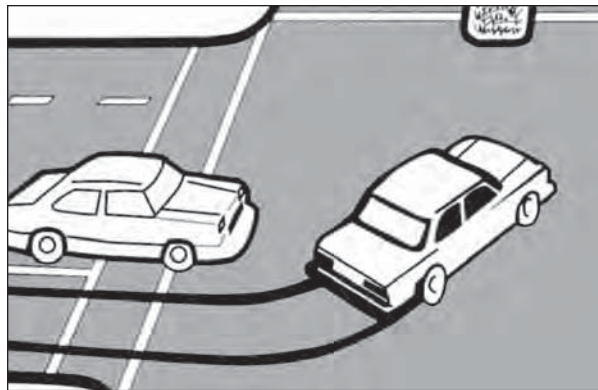
Operating a motor vehicle requires continuous decision making by the driver. Unfortunately, judgment abilities can be affected by even small amounts of alcohol. For example, alcohol-impaired judgment can cause a driver to follow another vehicle too closely, providing an unsafe stopping distance.

Alcohol-impaired judgment also can result in a driver taking risks or endangering others. If you observe a vehicle to make improper or unsafe lane changes, either frequently or abruptly or with apparent disregard for other vehicles, there is a good chance the driver's judgment has been impaired by alcohol.

Similarly, impaired judgment can cause a driver to turn improperly. For example, misjudgments about speed and the roadway can cause a driver

to take a turn too fast or to make sudden corrections during the maneuver. These corrections can appear to the observer as jerky or sharp vehicle movements during the turn.

Alcohol-impaired judgment can affect the full range of driver behaviors. For example, the research found that impaired drivers are less inhibited about making illegal turns than unimpaired drivers.

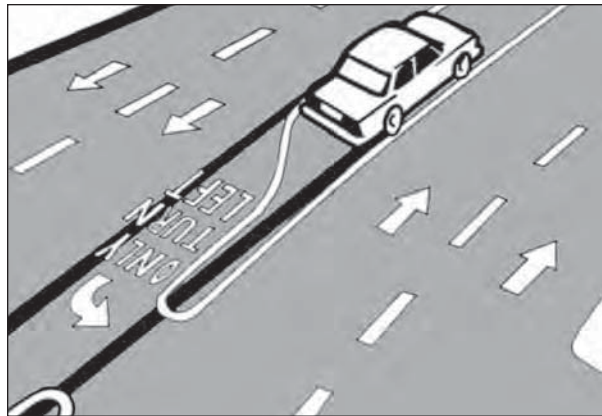


Turning Illegally

Driving on other than the designated roadway is another cue exhibited by alcohol-impaired drivers. Examples include driving at the edge of the roadway, on the shoulder, off the roadway entirely, and straight through turn-only lanes.

In some cases, impaired drivers stop inappropriately in response to an officer, either abruptly as if they had been startled or in an illegal or dangerous manner.

In fact, the research has shown that there is a good chance a driver is DWI if you observe the person exhibit *any inappropriate or unusual behavior*. Unusual behavior includes throwing something from the vehicle, drinking in the vehicle, urinating at the roadside, arguing with another motorist, or otherwise being disorderly. If you observe inappropriate or unusual behavior, there is a good probability that the driver is DWI.



Driving on Other Than the Designated Roadway

The final cue is actually one or more of a set of indicators related to the personal behavior or appearance of a driver. These indicators include, gripping the steering wheel tightly, driving with one's face close to the windshield, slouching in the seat, and staring straight ahead with eyes fixed. Some officers routinely scrutinize the faces of drivers in oncoming traffic, looking for the indicators of impairment. If you observe a driver who **appears to be impaired**, the research showed that there is an excellent probability that you are correct in your judgment.



Appearing To Be Impaired

SUMMARY

To summarize, the DWI cues related to **problems in maintaining proper lane position** include:

- **Weaving**
- **Weaving across lane lines**
- **Straddling a lane line**
- **Drifting**
- **Swerving**
- **Almost striking a vehicle or other object**
- **Turning with a wide radius or drifting during a curve**

The DWI cues related to **speed and braking problems** include:

- **Stopping problems (too far, too short, too jerky)**
- **Accelerating for no reason**
- **Varying speed**
- **Slow speed**

The DWI cues related to **vigilance problems** include:

- **Driving without headlights at night**
- **Failure to signal a turn or lane change or signaling inconsistently with actions**
- **Driving in opposing lanes or the wrong way on a one-way street**
- **Slow response to traffic signals**
- **Slow or failure to respond to officer's signals**
- **Stopping in the lane for no apparent reason**

The DWI cues related to **judgment problems** include:

- **Following too closely**
- **Improper or unsafe lane change**
- **Illegal or improper turn (too fast, jerky, sharp, etc.)**
- **Driving on other than the designated roadway**
- **Stopping inappropriately in response to an officer**
- **Inappropriate or unusual behavior**
- **Appearing to be impaired**

POST-STOP CUES

In addition to the driving cues, the following post-stop cues have been found to be excellent predictors of DWI.

- **Difficulty with motor vehicle controls**
- **Difficulty exiting the vehicle**
- **Fumbling with driver's license or registration**
- **Repeating questions or comments**
- **Swaying, unsteady, or balance problems**
- **Leaning on the vehicle or other object**
- **Slurred speech**
- **Slow to respond to officer or officer must repeat questions**
- **Providing incorrect information or changes answers**
- **Odor of alcoholic beverage from the driver**

DOT HS 808 677
March 2010

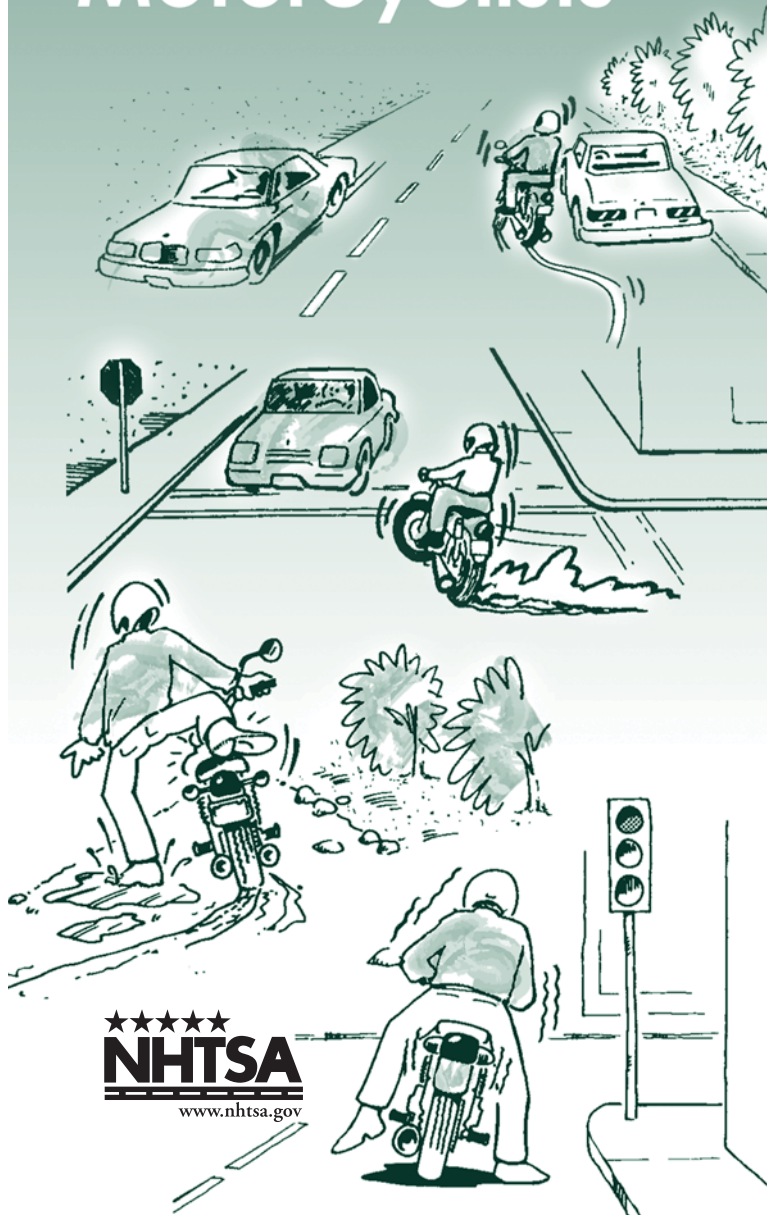


U.S. Department of Transportation
**National Highway Traffic Safety
Administration**



National Highway Traffic Safety Administration

The Detection of DWI Motorcyclists



★★★★★
NHTSA
www.nhtsa.gov

Motorcycle DWI Detection Guide

NHTSA has found that the following cues predicted impaired motorcycle operation.

Excellent Cues (50% or greater probability)

- Drifting during turn or curve
- Trouble with dismount
- Trouble with balance at a stop
- Turning problems (e.g., unsteady, sudden corrections, late braking, improper lean angle)
- Inattentive to surroundings
- Inappropriate or unusual behavior (e.g., carrying or dropping object, urinating at roadside, disorderly conduct, etc.)
- Weaving

Good Cues (30 to 50% probability)

- Erratic movements while going straight
- Operating without lights at night
- Recklessness
- Following too closely
- Running stop light or sign
- Evasion
- Wrong way

The Detection of DWI Motorcyclists

Introduction

The National Highway Traffic Safety Administration (NHTSA) estimated that in 2011, about 29 percent of motorcycle operators involved in fatal crashes had a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher.

Clearly, enforcing impaired driving laws is a key to reducing the number of alcohol-related motorcyclist fatalities. *But which cues should be used to detect impaired motorcyclists?*

NHTSA sponsored research to develop a set of behavioral cues to be used by law enforcement personnel to detect motorcyclists who are operating their vehicles while intoxicated. The researchers began by interviewing experienced patrol officers from across the country to determine what behavioral cues have been used to detect impaired motorcyclists. A few, primarily motorcycle officers, suggested cues that reflected considerable understanding of the mental and physical requirements of riding a motorcycle. Others believed the cues to be identical to those used to detect impaired drivers. But some officers, even those with many years of experience, reported they believe there are no cues that can be used to distinguish DWI from unimpaired motorcycle operation.

In addition to interviewing law enforcement personnel, the research team developed a database of 1,000 motorcycle DWI arrest reports. The research team focused on officers' narratives and motorcyclists' behaviors that motivated the stops, and correlated those behaviors with BAC. Analysis of the interviews and arrest report data resulted in an inventory of about 100 cues that have been observed by officers in relation to impaired operation of motorcycles.

The researchers, working closely with law enforcement personnel, conducted two major field studies involving more than 50 sites throughout the United

States. Officers recorded information about every enforcement stop they made of a motorcyclist. Those field studies permitted the researchers to identify the most effective cues and to calculate the probabilities those cues were predictive of DWI. This brochure highlights the results of that research.

Fourteen cues were identified that best discriminate between DWI and unimpaired motorcycle operation. These cues have been labeled as “Excellent Cues” and “Good Cues,” based on the study’s results. The *excellent* cues predicted impaired motorcycle operation at least 50 percent of the time. The *good* cues predicted impaired motorcycle operation 30 to 49 percent of the time. The special coordination and balance requirements of riding a two-wheeled vehicle provided most of the behaviors in the “Excellent” category of cues.

Important Information

Law enforcement officers across the United States have used the cues described in this brochure to help detect impaired motorcycle operators. The cues can be used at any hour of the day and night, and they apply to all two-wheeled motor vehicles.

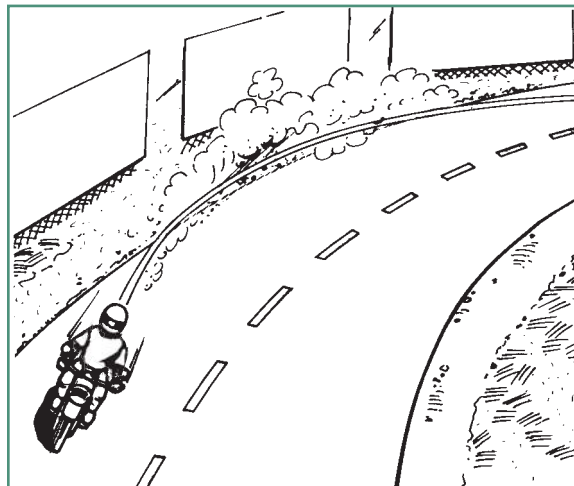
The cues described and illustrated in this brochure (and on a training video) are the behaviors that are most likely to discriminate between impaired and normal operation of a motorcycle. Cases that involve speeding, however, require additional clarification. Motorcyclists stopped for excessive speed are likely to be driving while intoxicated only about 10 percent of the time (i.e., 10 times out of 100 stops for speeding). But because motorcyclists tend to travel in excess of posted speed limits, speeding is associated with a large portion of all motorcycle DWI arrests. In other words, while only a small proportion of speeding motorcyclists are likely to be considered DWI, the large number of motorcyclists who are speeding results in a large number of DWIs, despite the relatively small probability.

This research will be helpful to officers in:

- Detecting impaired motorcyclists
- Articulating observed behaviors on arrest reports
- Supporting officer's expert testimony

Drifting During Turn or Curve

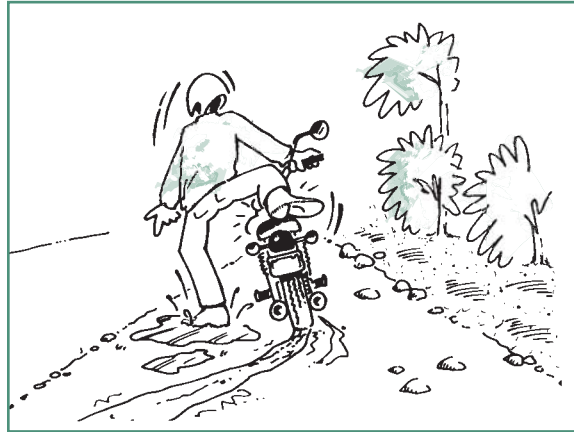
Earlier studies have shown that the most common cause of single-vehicle, fatal motorcycle crashes is the failure to negotiate curves, with the motorcycle continuing in a straight line until it strikes a stationary object. This type of crash is usually caused by alcohol-impaired balance and coordination. In less extreme cases, the motorcycle's turn radius expands during the maneuver. The motorcycle appears to drift outside of the lane or into another lane, through the curve, or while turning a corner. If you see a motorcycle drifting during a turn or curve, do the rider a favor and pull him or her over – our study showed there is a better than average possibility that the motorcyclist is a DWI offender.



Trouble With Dismount

Parking and dismounting a motorcycle can be a useful field sobriety test. The motorcyclist must turn off the engine and locate and deploy the kickstand. The operator must then balance his or her weight on one foot while swinging the other foot over the seat to dismount. But first, the

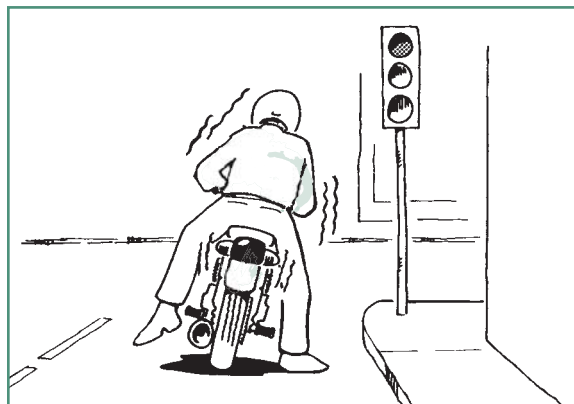
operator must decide upon a safe place to stop the bike. Problems with any step in this sequence can be evidence of alcohol impairment.



Not every motorcyclist you observe experiencing some difficulty with a dismount is riding under the influence, but study results indicated that more than 50 percent of them were DWI offenders. In other words, having a problem dismounting is a reliable cue to DWI.

Trouble With Balance at Stop

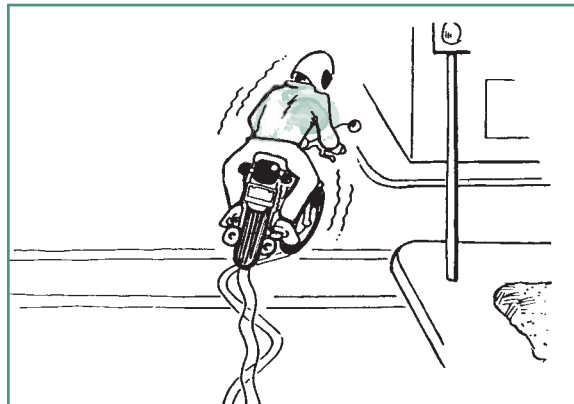
One typical practice for motorcycle riders at a stop is for the motorcyclist to place one foot on the ground to keep the bike upright, while leaving the other foot



covering the brake pedal. Some riders favor placing both feet on the ground for stability. Riders whose balance has been impaired by alcohol often have difficulty with these tasks. They might be observed as having shifted their weight from side-to-side, that is, from one foot to another, to maintain balance at a stop. From a block away, an officer might notice a single taillight moving from side to side in a gentle rocking motion. If you observe a motorcyclist having trouble with balance at a stop, there is a better than average chance that the operator is a DWI offender.

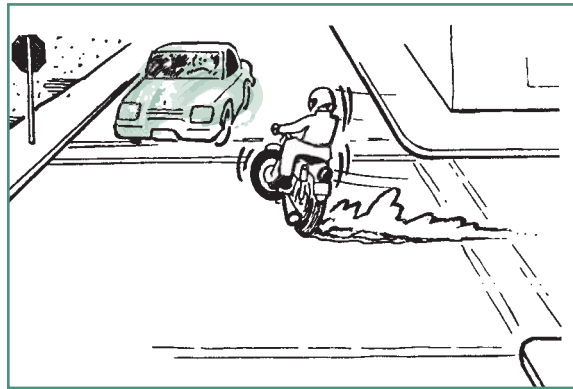
Turning Problems

The research also identified four turning problems that indicate rider impairment:

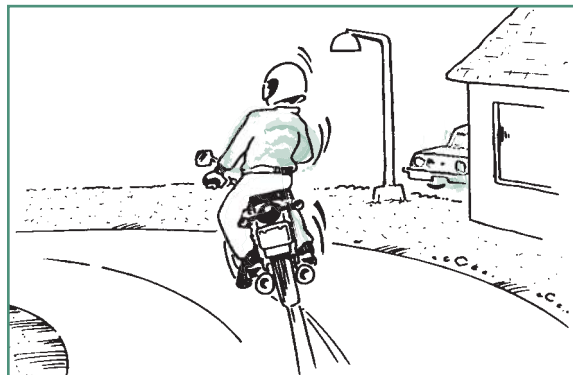


- **Unsteady During Turn or Curve.** The gyroscopic effects of a motorcycle's wheels tend to keep a motorcycle "on track" as long as speed is maintained. As a motorcycle's speed decreases, the demands placed on the operator's balancing capabilities increases. As a result, an officer might observe a motorcycle's front wheels or handlebars wobbling as an impaired rider attempts to maintain balance at slow speeds or during a turn.

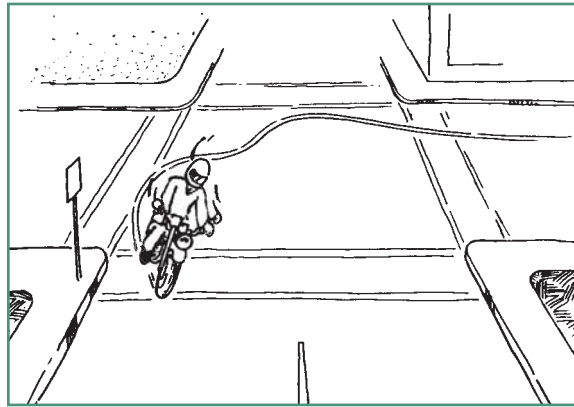
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- **Late Braking During Turn.** The next turning problem is “late braking during a turn or on a curve.” A motorcyclist normally brakes prior to entering a turn or curve, so the motorcycle can accelerate through the maneuver for maximum control. An impaired motorcyclist might misjudge the speed or distance to the corner or curve, requiring an application of the brakes during the maneuver.



- **Improper Lean Angle During Turn.** A third turning problem occurs when a motorcyclist normally negotiates a turn or curve by leaning into the turn. When a rider’s balance or speed decision-making is impaired, the rider frequently attempts to sit upright through the maneuver. As a result, a trained observer can detect an “improper lean angle.”

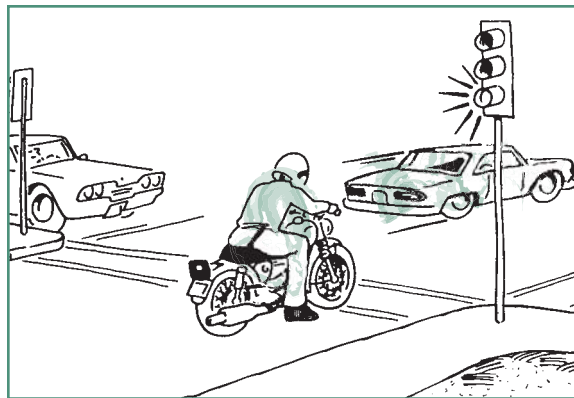


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- **Erratic Movements During Turn.** The fourth turning problem is “erratic movements.” These are defined as an inconsistent action or a sudden correction of a motorcycle maneuver during a turn or curve that can also indicate impaired driving. If you observe a motorcyclist who is unsteady during a turn or curve, brakes late, assumes an improper lean angle, or makes erratic movements during a turn or curve, there is a better-than-average chance that the motorcyclist is driving while impaired.



Inattentive to Surroundings

Vigilance concerns people’s ability to pay attention to a task or notice changes in their surroundings. A motorcyclist whose vigilance has been impaired by



alcohol consumption might fail to notice that the traffic light has changed from red to green.

A vigilance problem also is evident when motorcyclists are inattentive to their surroundings or are seemingly unconcerned with detection by law enforcement. For example, there is cause for suspicion of DWI when a motorcyclist fails to periodically scan the area around the bike when in traffic, a wise defensive riding measure to guard against potential encroachment by other vehicles. There is further evidence of impairment if a motorcyclist fails to respond to an officer's emergency lights or hand signals.

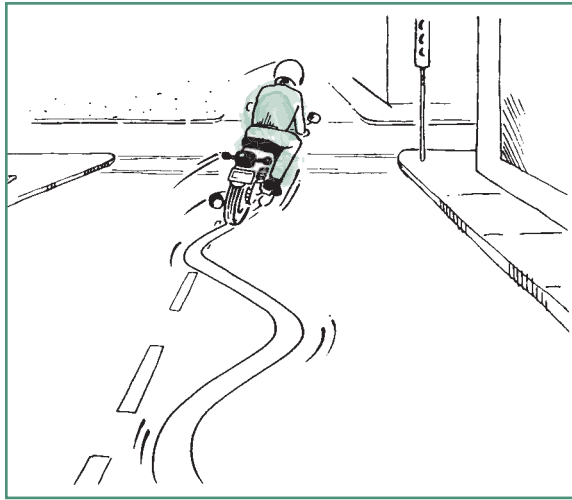
If you observe a motorcyclist to be inattentive to the surroundings, there is a better than average chance that the motorcyclist is a DWI violator.

Inappropriate or Unusual Behavior

There is a category of cues referred to as "inappropriate or unusual behavior." This category of cues includes behaviors such as operating a motorcycle while holding an object in one hand or under an arm, carrying an open container of alcohol, dropping something from a moving motorcycle, urinating at the roadside, arguing with another motorist, or otherwise being disorderly. If you observe inappropriate or unusual behavior by a motorcyclist, there is a better than average chance that the motorcyclist is a DWI offender.

Weaving

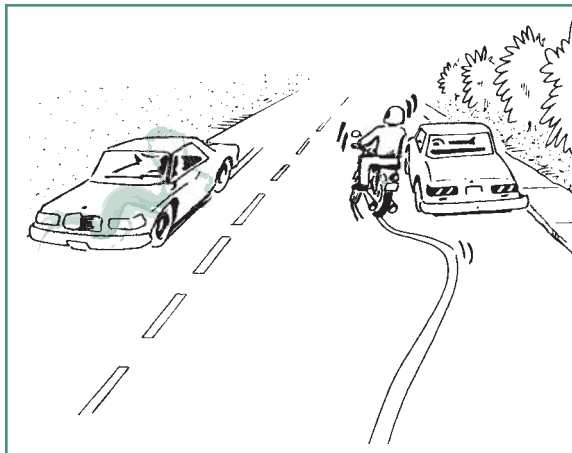
You are probably familiar with weaving as a predictor of DWI. If you see an automobile weaving there is a better than average chance the driver has exceeded the legal alcohol limits, but if you observe a motorcycle to be weaving, the probability of DWI is



even greater – weaving is an excellent cue. Weaving involves excessive movement within a lane or across lane lines, but does not include movements necessary to avoid road hazards.

Erratic Movements While Going Straight

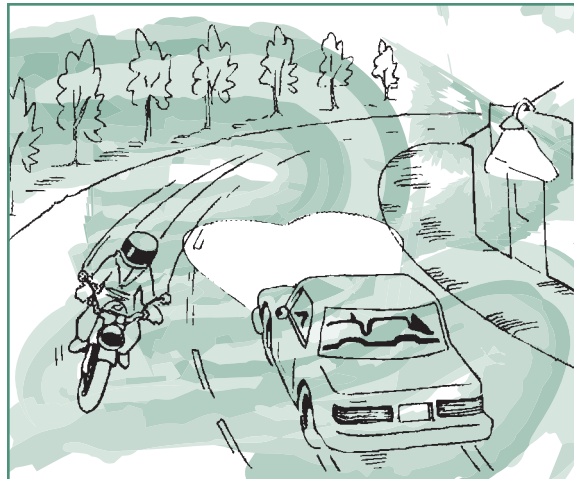
If you observe a motorcyclist making erratic movements or sudden corrections while attempting to ride in a straight line, study results indicated there is



a good probability that the rider is a DWI violator. In fact, during the study erratic movements while going straight were observed 30 to 49 percent of the time in relation to impaired driving.

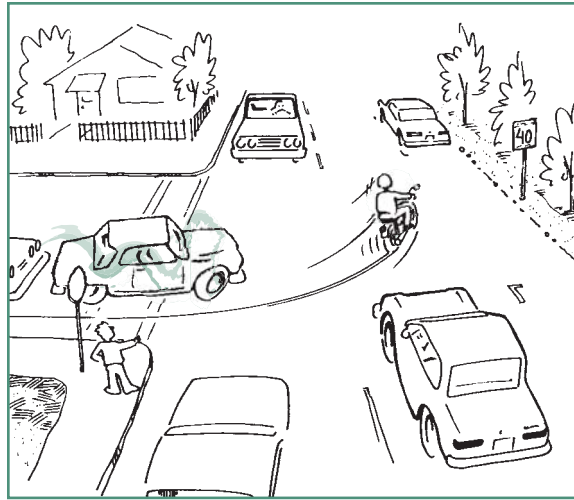
Operating without Lights at Night

Operating a motorcycle without lights at night is dangerous and can be another indicator of operator impairment. Study results showed that if you detect a motorcyclist riding at night without lights, there is a good chance that the operator is a DWI offender.



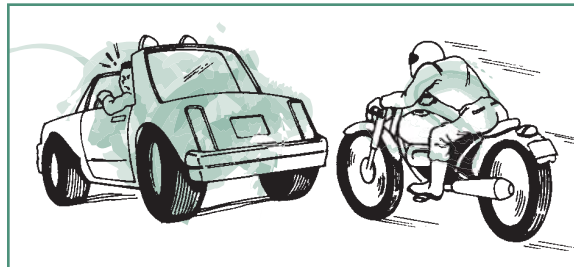
Recklessness

Motorcyclists tend to ride faster than automobiles so speeding is not necessarily a good predictor of DWI for motorcyclists. On the other hand, recklessness or riding too fast for the conditions was found to be a good indicator of operator impairment.



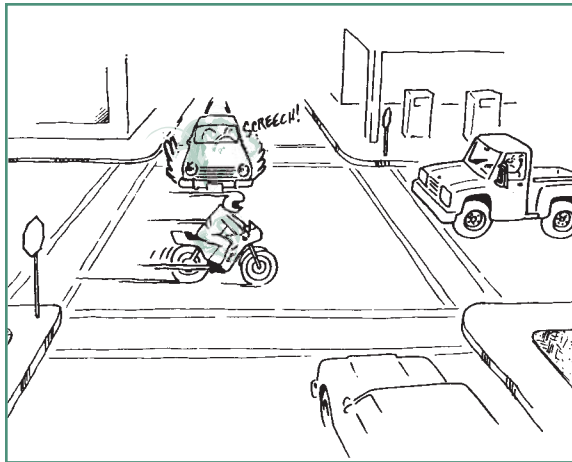
Following Too Closely

Following too closely, which is an unsafe following distance, is another indication of impaired operator judgment. During the study, this cue was found to be a good predictor of DWI by motorcycle riders.



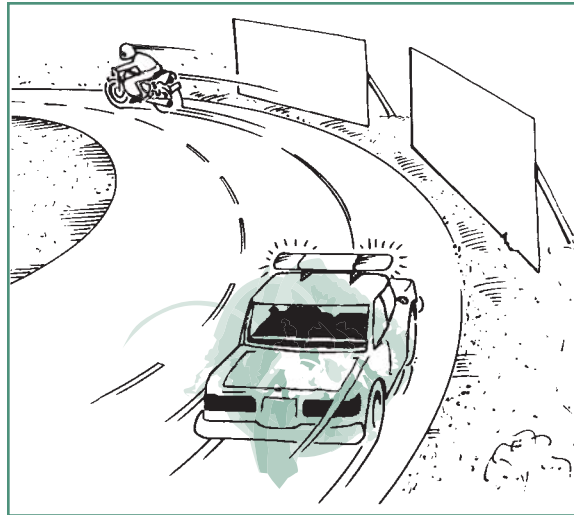
Running Stop Light or Sign

Failure to stop at a red light or stop sign can indicate either impaired vigilance capabilities (i.e., did not see the stop light or sign), or impaired judgment (i.e., decided not to stop). Whatever the form of impairment, if you observe a motorcyclist running a stop light or sign, there is a good chance that he or she is a DWI offender.



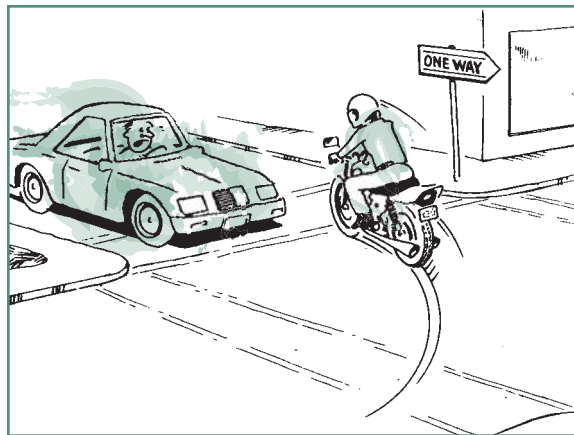
Evasion

Evasion, or fleeing an officer, is a recurring problem. If a motorcyclist attempts to evade an officer's enforcement stop, study results indicate there is a good chance he is a DWI violator as well.



Wrong Way

Obviously, riding into opposing traffic is dangerous. Study results showed that when you find a motorcycle going the wrong way in traffic, there is a good chance that the operator is under the influence. This includes going the wrong way on a one-way street, and crossing a center divider line to ride into opposing traffic.



Motorcycle DWI Detection Guide

NHTSA has found that the following cues predicted impaired motorcycle operation.

Excellent Cues (50% or greater probability)

- Drifting during turn or curve
- Trouble with dismount
- Trouble with balance at a stop
- Turning problems (e.g., unsteady, sudden corrections, late braking, improper lean angle)
- Inattentive to surroundings
- Inappropriate or unusual behavior (e.g., carrying or dropping object, urinating at roadside, disorderly conduct, etc.)
- Weaving

Good Cues (30 to 50% probability)

- Erratic movements while going straight
- Operating without lights at night
- Recklessness
- Following too closely
- Running stop light or sign
- Evasion
- Wrong way

This brochure and related training materials are based on NHTSA Technical Report DOT HS 807 839, The Detection of DWI Motorcyclists, which is available upon request from NHTSA's Safety Countermeasures Division (NTI-121), 1200 New Jersey Avenue SE., Washington, DC 20590.

DOT HS 807 856
revised March 2013



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**



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DWI Detection
and
Standardized
Field Sobriety
Testing

Session 6 – Phase Two:
Personal Contact



February 2018

Session 6

Phase Two: Personal Contact



Learning Objectives

- Identify typical clues of Detection Phase Two
- Describe observed clues clearly and convincingly



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

- Identify typical clues of Detection Phase Two
- Describe the observed clues clearly and convincingly

CONTENT SEGMENTS

- A. Overview: Tasks and Decision
- B. Typical Investigation Clues of the Driver Interview
- C. Recognition and Description of Investigation Clues
- D. Interview/Questioning Techniques
- E. Recognition and Description of Clues Associated with the Exit Sequence

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Video Presentation
- Instructor-Led Demonstrations
- Participant Presentations

Session 6-Phase Two: Personal Contact


Phase Two: Personal Contact

Interview and Observation of the Driver

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DWI Detection and Standardized Field Sobriety Testing 6-4

A. Overview: Tasks and Decisions

DWI Detection Phase Two: Personal Contact, like Phases One and Three, comprise two major evidence-gathering tasks and one major decision. Your first task is to approach, observe, and interview the driver while they are still in the vehicle to note any face-to-face evidence of impairment. During this face-to-face contact you may administer some simple pre-exit sobriety tests to gain additional information to evaluate whether or not the driver is impaired. After this evaluation, you must decide whether to request the driver to exit the vehicle for further field sobriety testing. In some jurisdictions, departmental policy may dictate all drivers stopped on suspicion of DWI be instructed to exit. It is important to note by instructing the driver to exit the vehicle, you are not committed to an arrest; this is simply another step in the DWI detection process. Once you have requested the driver to exit the vehicle, your second task is to observe the manner in which the driver exits and to note any additional evidence of impairment.

You may initiate Phase Two without Phase One. This may occur, for example, at a checkpoint or when you have responded to the scene of a crash.

Task One

The first task of Phase Two, interview and observation of the driver, begins as soon as the driver vehicle and the patrol vehicle have come to complete stops. It continues through your approach to the driver vehicle and involves all conversation between you and the driver prior to the driver's exit from the vehicle.

Session 6-Phase Two: Personal Contact

Phase Two: Personal Contact


**Interview and
Observation
of the Driver**

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**Observation of
the Exit**



Should Driver Exit?

DWI Detection and Standardized Field Sobriety Testing 6-5

You may have developed a strong suspicion the driver is impaired prior to the face-to-face observation and interview. You may have developed this suspicion by observing something unusual while the vehicle was in motion or during the stopping sequence. You may have developed no suspicion of DWI prior to the face-to-face contact. The vehicle operation and the stop may have been normal; you may have seen no actions suggesting DWI.

For example, you may have stopped the vehicle for an equipment/registration violation or where no unusual driving was evident. In some cases, Phase One will have been absent. For example, you may first encounter the driver and vehicle after a crash or when responding to a request for motorist assistance.

Regardless of the evidence that may have come to light during Detection Phase One, your initial face-to-face contact with the driver usually provides the first definite indications the driver is impaired.

Decision

Based upon your face-to-face interview and observation of the driver, and upon your previous observations of the vehicle in motion and the stopping sequence, you must decide whether there is sufficient reason to instruct the driver to step from the vehicle. For some law enforcement officers, this decision is automatic since their agency's policy dictates the driver always be told to exit the vehicle, regardless of the cause for the stop. Other agencies, however, treat this as a discretionary decision to be based on what the officer sees, hears, and smells during observation and interview with the driver while the driver is seated in the vehicle. If you decide to instruct the driver to exit, closely observe the driver's actions during the exit from the vehicle and note any evidence of impairment.

Session 6-Phase Two: Personal Contact

Personal Contact

What do you see?



DWI Detection and Standardized Field Sobriety Testing 6-6

B. Typical Investigation Clues of the Driver Interview

Face-to-face observation and interview of the driver allows you to use three senses to gather evidence of alcohol and/or other drug influence:

- The sense of sight
- The sense of hearing
- The sense of smell

Sight

There are a number of things you might see during the interview that would be describable clues or evidence of alcohol and/or other drug influence. Among them are:

Phase Two: Task One Face to Face Observation and Interview of Suspect

Requires the ability to:

- Recognize the sensory evidence of alcohol and/or other drug influence
- Describe that evidence clearly and convincingly

Proper face-to-face observation and interview of the driver demands two distinct but related abilities:

- The ability to recognize the sensory evidence of alcohol and/or other drug influence
- The ability to describe that evidence clearly and convincingly

Developing these abilities requires practice.

C. Recognition and Description of Investigation Clues


A basic purpose of the face-to-face observation and interview of the driver is to identify and gather evidence of alcohol and/or other drug influence. This is the purpose of each task in each phase of DWI detection.

During the face-to-face observation and interview stage, it is not necessary to gather sufficient evidence to arrest the driver immediately for DWI.

Session 6-Phase Two: Personal Contact

Interview/Questioning Techniques

- Two things simultaneously
- Interrupting or distracting questions
- Unusual questions



DWI Detection and Standardized Field Sobriety Testing 6-15

D. Interview/Questioning Techniques

There are a number of techniques you can use to assess impairment while the driver is still behind the wheel. Most of these techniques apply the concept of divided attention. They require the driver to concentrate on two or more things at the same time. They include both questioning techniques and psychophysical (mind/body) tasks.

These techniques are not as reliable as the Standardized Field Sobriety Tests but they can still be useful for obtaining evidence of impairment. **THESE TECHNIQUES DO NOT REPLACE THE SFSTs.**

Questioning Techniques

The questions you ask and the way in which you ask them can constitute simple divided attention tasks. Three techniques are particularly pertinent:

- Asking for two things simultaneously
- Asking interrupting or distracting questions
- Asking unusual questions

An example of the first technique, asking for two things simultaneously, is requesting the driver to produce both the driver's license and the vehicle registration. Possible evidence of impairment may be observed as the driver responds to this dual request.

License and Registration

- Forgets to produce both documents
- Produces wrong documents
- Fails to see license, registration
- Fumbles/drops item
- Unable to retrieve documents using fingertips

Possible evidence of impairment that might be observed during the production of the license and registration. Be alert for the driver who:

- Forgets to produce both documents
- Produces documents other than the ones requested
- Fails to see the license, registration, or both while searching for them
- Fumbles or drops wallet, purse, license, or registration
- Is unable to retrieve documents using fingertips

Session 6-Phase Two: Personal Contact

Questions that Divide Attention

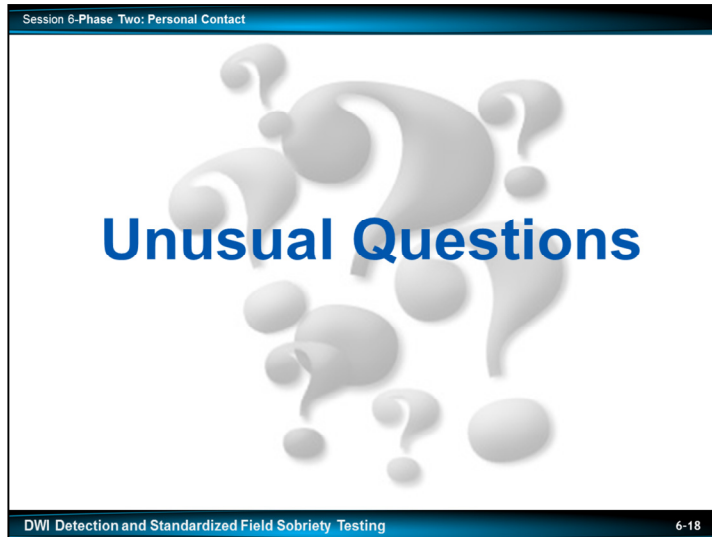
- **What day is it?**
- **Where are you coming from?**
- **Be alert for the driver who:**
 - **Ignores question**
 - **Forgets to resume search**
 - **Supplies grossly incorrect answer**

DWI Detection and Standardized Field Sobriety Testing 6-17

The second technique would be to ask questions that require the driver to divide attention between searching for the license or registration and answering a new question. While the driver is responding to the request for license, registration, or both, you ask unrelated questions; "What day is it?" or "Where are you coming from?"

Possible evidence of impairment may be disclosed by the actions of the driver after this question has been posed. Be alert for the driver who:

- Ignores the question and concentrates only on the license or registration search
- Forgets to resume the search after answering the question
- Supplies a grossly incorrect answer to the question



The third technique, asking unusual questions, is employed after you have obtained the driver's license and registration. Using this technique, you seek verifying information through unusual questions. For example, while holding the driver's license, you might ask the driver, "What is your middle name?" "Where are you going?" "Where are you coming from?" etc.

There are many such questions which the driver normally would be able to answer easily, but which might prove difficult if the driver is impaired simply because they are unusual questions. Unusual questions require the driver to process information; this can be especially difficult when the driver does not expect to have to process information. For example, a driver may respond to the question about the middle name by giving a first name. In this case the driver ignored the unusual question and responded instead to a usual -- but unasked -- question.

Medical Questions

- Physical conditions
- Physician's care
- Medical issues
- Medications



Officers should be alert for potential medical conditions that may mimic drug or alcohol impairment. Some questions may include:

- Do you have any physical disabilities
- Are you sick or injured
- Are you under the care of a doctor or dentist
- Are you diabetic or epileptic?
 - If diabetic, ask if they take insulin
- Are you on any medications

**Additional Techniques
Alphabet**



Additional Techniques

Alphabet

This technique requires the driver to recite a part of the alphabet. You instruct the driver to recite the alphabet beginning with a letter other than A and stopping at a letter other than Z. For example, you might say to a driver, "Recite the alphabet, beginning with the letter E as in Edward and stopping with the letter P as in Paul." This divides the driver's attention because the driver must concentrate to begin at an unusual starting point and recall where to stop.

Additional Techniques Count Down

**68 67 66 65 64 63
62 61 60 59 58 57
56 55 54 53...**

Count Down

This technique requires the driver to count out loud 15 or more numbers in reverse sequence. For example, you might request a driver to, "Count out loud backwards, starting with the number 68 and ending with the number 53." This, too, divides attention because the driver must continuously concentrate to count backwards while trying to recall where to stop.

This technique should never be given using starting and stopping points ending in 0 or 5 because these numbers are too easy to recall. For example, do not request the driver count backwards from 65 to 50. Instead, ask the driver to count backwards from 68 to 53.



Finger Count

In this technique, the driver is asked to touch the tip of the thumb to the tip of each finger on the same hand while simultaneously counting up one, two, three, four; then to reverse direction on the fingers while simultaneously counting down four, three, two, one.

In each instance, note whether and how well the driver is able to perform the divided attention task.

The Exit

What do you see?

- **Angry, unusual reaction**
- **Can't follow instructions**
- **Can't open door**
- **Leaves car in gear**
- **"Climbs" out of car**
- **Leans against car**
- **Keeps hand on car**



E. Recognition and Description of Clues Associated With the Exit Sequence

Your decision to instruct the driver to step from the vehicle usually is made after you have developed a suspicion the driver is impaired. Even if that suspicion may be very strong, the driver is usually not under arrest when you give the instruction.


How the driver steps and walks from the vehicle and actions or behavior during the exit sequence may provide important evidence of impairment. Be alert to the driver who:

- Shows angry or unusual reactions
- Cannot follow instructions
- Cannot open the door
- Leaves the vehicle in gear
- Climbs out of vehicle
- Leans against vehicle
- Keeps hands on vehicle for balance

Proper face-to-face observation and interview of a driver requires the ability to recognize the sensory evidence of alcohol and/or other drug influence and the ability to describe that evidence clearly and convincingly. Developing these abilities takes practice.

Session 6-Phase Two: Personal Contact

The Exit



The Busy Businessman
Exiting

DWI Detection and Standardized Field Sobriety Testing 6-24

Remember, you may instruct a driver to exit the vehicle as a means of ensuring your own safety. Safety considerations take precedence over all other considerations.

QUESTIONS?

Test Your Knowledge

1. The two major evidence gathering tasks of Phase Two are _____
2. The major decision of Phase Two is _____
3. Among the describable clues an officer might see during the Phase Two interview are:
 - A. _____
 - B. _____
 - C. _____

Test Your Knowledge

1. The two major evidence gathering tasks of Phase Two are _____

2. The major decision of Phase Two is _____

3. Among the describable clues an officer might see during the Phase Two interview are:

A. _____

B. _____

C. _____

Test Your Knowledge

- 4. Among the describable clues an officer might hear during the Phase Two interview are:
 - A.
 - B.
 - C.

- 5. Among the describable clues an officer might smell during the Phase Two interview are:
 - A.
 - B.

4. Among the describable clues an officer might hear during the interview are:

- A. _____
- B. _____
- C. _____

5. Among the describable clues an officer might smell during the interview are:

- A. _____
- B. _____

Test Your Knowledge

- 6. Three techniques an officer might use in asking questions that constitute simple divided attention tasks.
- 7. The Countdown Technique requires the subject to _____
- 8. Leaning against the vehicle is a clue to DWI which may be observed during _____

6. There are three techniques an officer might use in asking questions that constitute simple divided attention tasks. These techniques are:

7. The Count Down Technique requires the driver to _____

8. Leaning against the vehicle is a clue to DWI which may be observed during _____

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 7 – Phase Three:
Pre-Arrest Screening




February 2018

Session 7

Phase Three: Pre-Arrest Screening



Learning Objectives

- Describe role of psychophysical and preliminary breath tests
 - Define and describe concepts of divided attention and nystagmus
 - Discuss advantages and limitations of preliminary breath testing
 - Discuss arrest decision process
- 

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

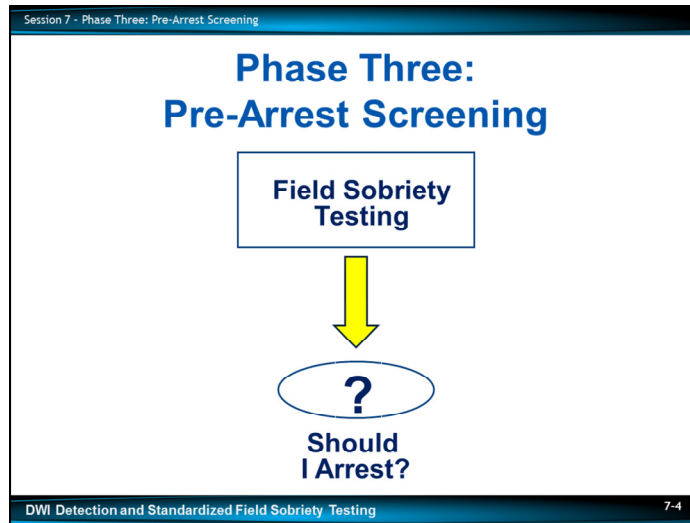
- Describe the role of psychophysical and preliminary breath tests
- Define and describe the concepts of divided attention and nystagmus
- Discuss the advantages and limitations of preliminary breath testing
- Discuss the arrest decision process

CONTENT SEGMENTS

- A. Overview: Tasks and Decision
- B. Gaze Nystagmus - Definition
- C. Horizontal Gaze Nystagmus – Definition, Concepts, Demonstration
- D. Vertical Gaze Nystagmus – Definition, Concepts, Demonstration
- E. Divided Attention Tests: Concepts, Examples, Demonstration
- F. Advantages and Limitations of Preliminary Breath Testing
- G. The Arrest Decision

LEARNING ACTIVITIES

- Instructor-Led Presentation
- Instructor-Led Demonstrations
- Video Presentation



A. Overview: Tasks and Decision

Like Phases One and Two, DWI Detection Phase Three: Pre-arrest Screening has two major evidence gathering tasks and one major decision.

Phase Three: Pre-Arrest Screening

Your first task in Phase Three is to administer three scientifically validated Standardized Field Sobriety Tests (SFSTs). Depending on State laws and/or agency policies, the next task would be to administer (or arrange for) a Preliminary Breath Test (PBT) to confirm the chemical basis of the subject's impairment. Based on these tests and on all other evidence from Phase One and Two, the officer should decide whether there is sufficient probable cause to arrest the subject for DWI. The entire detection process culminates in the arrest/no arrest decision.

Psychophysical Tests

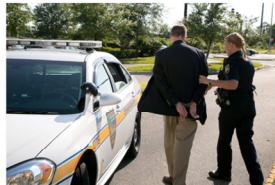
- Focus on balance, coordination, information processing, etc.
- Observed as soon as face-to-face contact and interview
- Additional indicators observed as subject exits
- SFSTs are most scientifically reliable

Psychophysical tests are methods of assessing a subject's mental and physical impairment. These tests focus on the abilities needed for safe driving: balance, coordination, information processing, and so on.

Indicators of psychophysical impairment may be observed as soon as you come into face-to-face contact with the subject and begin the interview. Additional indicators of impairment can be observed as the subject exits the vehicle to begin the field sobriety tests. The SFSTs are the most scientifically reliable indicators of psychophysical impairment.

The Arrest Decision

- DWI detection process concludes with arrest decision
- Based on all evidence obtained during all three detection phases



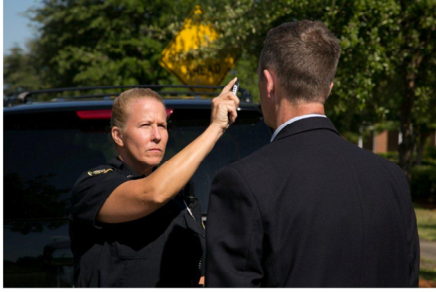
The Arrest Decision

The DWI detection process concludes with the arrest decision. This decision is based on all of the evidence you have obtained during all three detection phases: on observation of the vehicle in motion and during the stopping sequence; on face-to-face observation of the subject and the subject's exit from the vehicle; and, pre-arrest screening.

Session 7 - Phase Three: Pre-Arrest Screening

Nystagmus

Involuntary Jerking of the Eyes



DWI Detection and Standardized Field Sobriety Testing 7-7

B. Gaze Nystagmus – Definition

"Nystagmus" means an involuntary jerking of the eyes.

Alcohol and certain other drugs cause Horizontal Gaze Nystagmus (HGN).

Session 7 - Phase Three: Pre-Arrest Screening

HGN

- **Reliable**
- **Involuntary**
- **Noticeable**
- **As BAC increases, eyes begin to jerk sooner as they move to the side**
- **CNS Depressants, Inhalants, and Dissociative Anesthetics cause HGN**

DWI Detection and Standardized Field Sobriety Testing 7-8

C. Horizontal Gaze Nystagmus – Definition, Concepts, Demonstration

HGN is the most reliable field sobriety test. Especially when used in combination with the divided attention tests, it will help law enforcement officers correctly identify subjects who are impaired. Involuntary jerking of the eyes becomes readily noticeable when a person is impaired by alcohol and certain drug categories. As a person's blood alcohol concentration (BAC) increases, the eyes will begin to jerk sooner as they move to the side.

HGN refers to an involuntary jerking occurring as the eyes gaze toward the side. In addition to being involuntary, the person experiencing the nystagmus is usually unaware the jerking is happening. In administering the HGN test, the officer has the subject follow the motion of a small stimulus with the eyes only. The stimulus may be the tip of a pen or penlight, or an eraser on a pencil, whichever contrasts with the background.

In addition to alcohol, drugs such as Central Nervous System (CNS) Depressants, Inhalants, and Dissociative Anesthetics cause HGN.

Session 7 - Phase Three: Pre-Arrest Screening

Nystagmus Indications

- **Six maximum clues**
- **Maximum three clues per eye**
- **88% accurate detecting subjects ≥ 0.08 BAC**

DWI Detection and Standardized Field Sobriety Testing 7-9

-
- When the HGN test is administered, always begin with subject's left eye
 - Each eye is examined for three specific clues

 - As the eye moves from side to side, does it move smoothly or does it jerk noticeably?
 - As people become impaired by alcohol, their eyes exhibit a Lack of Smooth Pursuit as they move from side to side

 - When the eye moves as far to the side as possible and is kept at that position for four seconds, does it jerk distinctly?
 - Distinct and Sustained Nystagmus at Maximum Deviation is another clue of impairment

 - As the eye moves toward the side, does it start to jerk prior to a 45 degree angle?
 - Onset of Nystagmus Prior to 45 Degrees is another clue of impairment

 - As a person's BAC increases, it is more likely these clues will appear

 - The maximum total number of clues is six
 - The maximum number of clues that may appear in one eye is three

Based upon research using SFST-experienced personnel, HGN is 88% accurate at detecting subjects at or above 0.08 BAC.

HGN Video



HGN Demonstration



To test for HGN, the subject is instructed to stand with feet together, hands at sides, hold the head still, and follow the motion of a stimulus with the eyes only.

The object may be the tip of a pen or penlight or the eraser on a pencil, which contrasts with the background.

Each eye is checked, beginning with the subject's left. A subject's height might restrict ability to clearly see nystagmus. Subject may be placed in sitting position to accommodate a better view.

Two or more "passes" are made before each eye to look for each of the clues of nystagmus.

Session 7 - Phase Three: Pre-Arrest Screening

Vertical Gaze Nystagmus Demonstration



DWI Detection and Standardized Field Sobriety Testing 7-12

D. Vertical Gaze Nystagmus – Definition, Concepts, Demonstration


Vertical Gaze Nystagmus (VGN) is an involuntary jerking of the eyes occurring as the eyes are held at maximum elevation.

For VGN to be recorded, it must be distinct and sustained for a minimum of four seconds at maximum elevation.

Session 7 - Phase Three: Pre-Arrest Screening

Divided Attention

Concentrating on more than one thing at a time (mental tasks and physical tasks)



DWI Detection and Standardized Field Sobriety Testing 7-13

E. Divided Attention Tests: Concepts, Examples, Demonstration

Many of the most reliable and useful psychophysical tests employ the concept of divided attention: they require the subject to concentrate on more than one thing at a time (mental tasks and physical tasks). Driving is a complex divided attention task. In order to operate a vehicle safely, subjects must simultaneously control steering, acceleration and braking, react appropriately to a constantly changing environment, and perform many other tasks.

Alcohol and many other drugs reduce a person's ability to divide attention. Impaired subjects often ignore the less critical tasks of driving in order to focus their impaired attention on the more critical tasks. For example, a subject may ignore a traffic signal and focus instead on speed control. Even when impaired, many people can handle a single, focused attention task fairly well. For example, a subject may be able to keep the vehicle well within the proper traffic lane as long as the road remains fairly straight. However, most people, when impaired, cannot satisfactorily divide their attention to handle multiple tasks at the same time.

The concept of divided attention has been applied to psychophysical testing. Field sobriety tests that simulate the divided attention characteristics of driving have been developed and are being used by law enforcement agencies nationwide. The best of these tests exercise the same mental and physical capabilities a person needs to drive safely. A good, structured field sobriety test is simple and divides the subject's attention. Examples of divided attention tests include Walk and Turn (WAT) and One Leg Stand (OLS).

Session 7 - Phase Three: Pre-Arrest Screening

Typical Simultaneous Capabilities Required for Driving

- Information processing
- Short-term memory
- Judgment/decision making
- Balance
- Steady, sure reactions
- Clear vision
- Small muscle control
- Coordination of limbs

DWI Detection and Standardized Field Sobriety Testing 7-14

Typical simultaneous capabilities required for driving:

- Information processing
- Short-term memory
- Judgment and decision making
- Balance
- Steady, sure reactions
- Clear vision
- Small muscle control
- Coordination of limbs

Any test that requires a person to demonstrate two or more of these capabilities simultaneously is potentially a good psychophysical test.

Simplicity

Field sobriety tests should be reasonably simple for the average person to complete as instructed when sober.



Simplicity is the key to divided attention field sobriety testing. It is not enough to select a test that just divides the subject's attention. The test also must be one that is reasonably simple for the average person to complete as instructed when sober. Tests that are difficult for a sober subject to perform have little or no evidentiary value.

Session 7 - Phase Three: Pre-Arrest Screening

Two Divided Attention Field Sobriety Tests

Walk and Turn



One Leg Stand



DWI Detection and Standardized Field Sobriety Testing 7-16

Two divided attention field sobriety tests that have proven accurate and effective in DWI detection are the WAT and the OLS.

Session 7 - Phase Three: Pre-Arrest Screening

WAT

- **Validated by NHTSA**
- **79% accurate detecting 0.08 BAC**
- **Do NOT deviate from SFST instructions**
- **Two stages:**
 - **Instruction Stage**
 - **Walking Stage**

DWI Detection and Standardized Field Sobriety Testing 7-17

Walk and Turn

WAT is a test that has been validated through extensive research sponsored by the National Highway Traffic Safety Administration (NHTSA).

Based upon research using SFST-experienced personnel, WAT is 79% accurate at detecting subjects at or above 0.08 BAC.

WAT is a divided attention test consisting of two stages:

- Instruction stage
- Walking stage

WAT – Instruction Stage

- **Divides subject's attention**
 - **Balancing**
 - **Information processing**
- **Subject stands with feet in heel-to-toe position**
- **Arms at side**
- **Listen to instructions**

The Instruction Stage divides the subject's attention between a balancing task (standing while maintaining the heel-to-toe position) and an information processing task (listening to and remembering instructions).


In the Instruction Stage, the subject must stand with their feet in a heel-to-toe position, keep their arms at their sides, and listen to the instructions.

Session 7 - Phase Three: Pre-Arrest Screening

WAT – Walking Stage

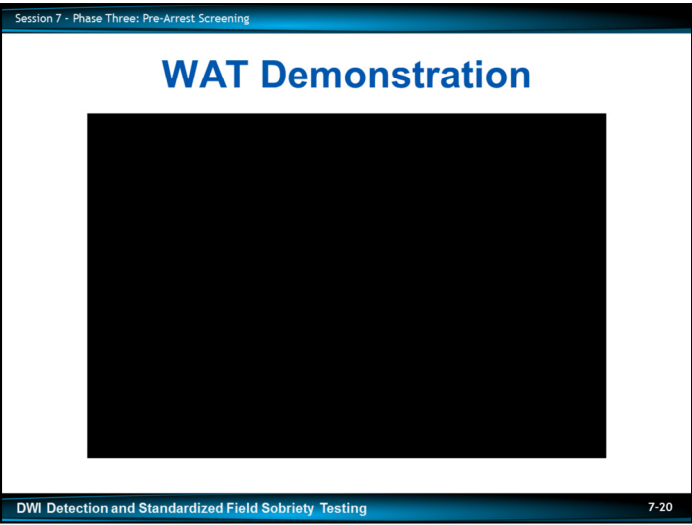
Divides subject's attention

- **Balancing**
- **Small muscle control**
- **Short term memory**



DWI Detection and Standardized Field Sobriety Testing 7-19

In the Walking Stage, the subject takes nine heel-to-toe steps, turns in a prescribed manner, takes nine heel-to-toe steps back, counts the steps out loud, and watches their feet. During the turn, the subject keeps their front foot on the line, turns in a prescribed manner, and uses the other foot to take several small steps to complete the turn. The Walking Stage divides the subject's attention among a balancing task (walking heel-to-toe and turning), a small muscle control task (counting out loud), and a short term memory task (recalling the number of steps and the turning instructions). The walking stage divides the subject's attention between a task of listening, comprehending, and carrying out the instruction.



WAT Test Clues

1. Cannot keep balance while listening to the instructions
2. Starts too soon
3. Stops while walking
4. Does not touch heel-to-toe
5. Steps off the line
6. Uses arms to balance
7. Improper turn
8. Incorrect number of steps

The WAT test is administered and interpreted in a standardized manner, i.e., the same way every time. Officers administering the WAT test observe the subject's performance for eight clues:

1. Cannot keep balance while listening to the instructions
2. Starts too soon
3. Stops while walking
4. Does not touch heel-to-toe
5. Steps off the line
6. Uses arms to balance
7. Improper turn
8. Incorrect number of steps

Inability to complete the WAT test may occur when the subject is in danger of falling or otherwise cannot complete the test.

OLS

- **Validated by NHTSA**
- **83% accurate detecting 0.08 BAC**
- **Two stages:**
 - **Instruction Stage**
 - **Balance and Counting Stage**

One Leg Stand

The OLS has also been validated through NHTSA-sponsored research.

Based upon research using SFST-experienced personnel, OLS is 83% accurate at detecting subjects at or above 0.08 BAC.

It is a divided attention test consisting of two stages:

- Instruction stage
- Balance and counting stage

OLS – Instruction Stage

Divides subject's attention

- Balancing
- Information processing



In the Instruction Stage, the subject must stand with their feet together, keep their arms at their sides, and listen to instructions.

Balance and Counting Stage


- **Divides subject's attention**
 - **Balancing task**
 - **Information processing**
- **30 second timing is important!**

In the Balance and Counting Stage, the subject must raise one foot, either foot, with the raised foot approximately six inches off the ground, with both legs straight and the raised foot parallel to the ground. Have the subject, while looking at the elevated foot, count out loud in the following manner: "one thousand one", "one thousand two", "one thousand three" until told to stop. This divides the subject's attention between balancing (standing on one foot) and information processing (counting out loud).

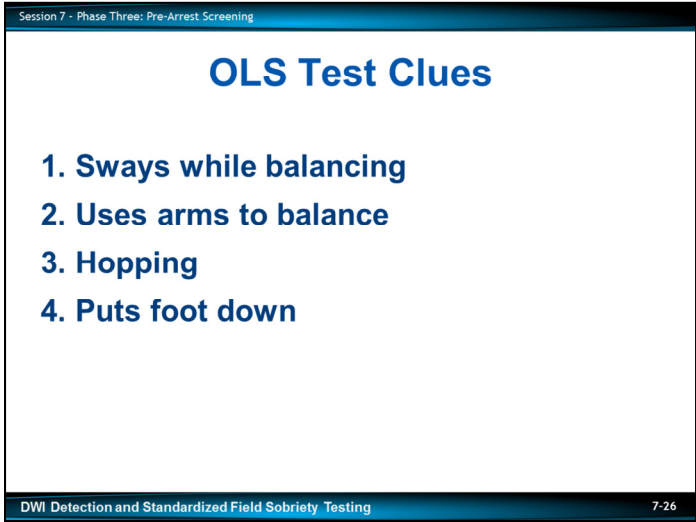
The timing for a thirty-second period by the officer is an important part of the OLS test. The original research conducted by SCRI in 1977 showed many impaired subjects are able to stand on one leg for up to 25 seconds, but few can do so for 30 seconds.

Session 7 - Phase Three: Pre-Arrest Screening

OLS Demonstration



DWI Detection and Standardized Field Sobriety Testing 7-25



OLS is also administered and interpreted in a standardized manner. Officers carefully observe the subject's performance and look for four specific clues:

1. Sways while balancing
2. Uses arms to balance
3. Hopping
4. Puts foot down

Inability to complete the OLS test occurs when the subject is in danger of falling or otherwise cannot complete the test.

Session 7 - Phase Three: Pre-Arrest Screening

PBT

- Stage in pre-arrest screening
- Demonstrate association of alcohol with observable evidence
- Impairment established through sensory evidence
- Does not indicate level of impairment

DWI Detection and Standardized Field Sobriety Testing 7-27

F. Advantages and Limitations of Preliminary Breath Testing

Preliminary breath testing (PBT), like psychophysical testing, is a stage in the pre-arrest screening of a DWI subject. Usually the subject is not yet under arrest when requested to submit to the PBT.

The basic purpose of PBT is to demonstrate the association of alcohol with the observable evidence of the subject's impairment. The subject's impairment is established through sensory evidence: what the officer sees, hears, and smells.

The PBT provides the evidence that alcohol is the chemical basis of impairment by yielding an on-the-spot indication of the subject's BAC. The PBT provides direct indication of the BAC level. **It does not indicate the level of the subject's impairment.** Impairment varies widely among individuals with the same BAC level.

PBT – Investigative Stage

- **Accusatory stage has not yet begun**
- **Not sole basis for a DWI arrest**
- **Provides direct indication of alcohol impairment**
- **Administer after SFSTs**

The DWI incident remains at the investigative stage; the accusatory stage has not yet begun. The PBT result is only one of many factors the officer considers in determining whether the subject should be arrested for DWI. Whenever possible, it should not be the sole basis for a DWI arrest. The PBT result is an important factor because it provides direct indication of alcohol impairment. All other evidence, from initial observation of the vehicle in operation through psychophysical testing, indicates alcohol impairment.

Session 7 - Phase Three: Pre-Arrest Screening

PBT Advantages

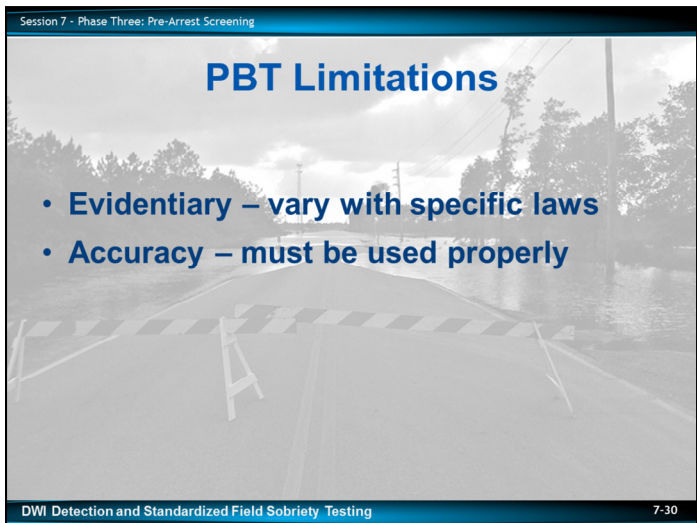
- **Corroborate other evidence**
- **Confirm officer's judgment**
- **Confirm alcohol as cause of impairment**
- **Help establish probable cause for DWI arrest**

DWI Detection and Standardized Field Sobriety Testing 7-29

PBT Advantages

A PBT offers several important advantages for DWI detection. It may:

- Corroborate other evidence by demonstrating the suspicion of alcohol impairment is consistent with the officer's observations of the subject's mental and physical impairment
- Confirm the officer's own judgment and help gain confidence in evaluating alcohol impairment accurately based on observations and psychophysical tests
 - Many officers experienced in DWI enforcement find they rely less and less on the PBT as their confidence in their own powers of detection increases
- Disclose the possibility of medical complications or impairment due to drugs other than alcohol
 - The PBT can confirm or deny alcohol is the cause of the observed impairment
 - For example, observed psychophysical impairment coupled with a PBT result showing a very low BAC indicates an immediate need to investigate the possibility the subject has ingested a drug other than alcohol or suffers from a medical problem
- Help to establish probable cause for a DWI arrest
 - The role of the PBT in establishing probable cause may be affected by the evidentiary value of PBT results in your State
 - Consult your specific PBT law, your supervisor, or the local prosecutor for clarification, if necessary



PBT Limitations

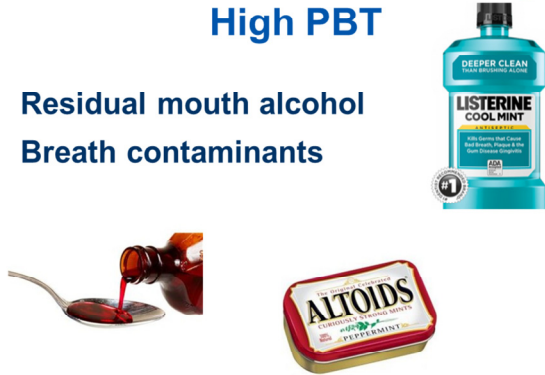
PBT may have both evidentiary limitations and accuracy limitations. Evidentiary limitations vary with specific laws. In some States, PBT results are admissible as evidence; in other States they are not admissible. Where the results are admissible, there may be differences in the weight or value they are given. Consult your State PBT law, your supervisor, or your local prosecutor, as necessary, for clarification.

Although all PBT instruments currently used by law enforcement are reasonably accurate, they are subject to the possibility of some error, especially if they are not used properly. There are factors that can affect the accuracy of PBT devices. Some of these factors tend to produce "high" test results; others tend to produce "low" results.

Session 7 - Phase Three: Pre-Arrest Screening

Possible Factors Affecting High PBT

- Residual mouth alcohol
- Breath contaminants



DWI Detection and Standardized Field Sobriety Testing 7-31

There are two common factors that tend to produce high results on a PBT.

Residual Mouth Alcohol – After a person takes a drink, some of the alcohol will remain in the mouth. If the person exhales soon after drinking, the breath sample will pick up some of this leftover mouth alcohol. In this case, the breath sample will contain an additional amount of alcohol and the test result will be higher than the true BAC.

It takes approximately 15 minutes for the residual alcohol to be eliminated from the mouth.


The only sure way to eliminate this factor is to make sure the subject does not consume any alcohol for at least 15 to 20 minutes before conducting a breath test. Remember, too, most mouthwashes, breath sprays, cough syrups, etc., contain alcohol and may produce residual mouth alcohol. Therefore, do not permit the subject to put anything in their mouth for at least 15 to 20 minutes prior to testing.

Breath Contaminants – Some types of PBTs might react to certain substances other than alcohol. For example, substances such as ether, chloroform, acetone, acetaldehyde, and cigarette smoke may produce a positive reaction on certain devices. If so, the test would be contaminated and its result would be higher than the true BAC. Normal characteristics of breath samples, such as halitosis (bad breath), food odors, etc., do not affect accuracy.

Session 7 - Phase Three: Pre-Arrest Screening

Possible Factors Affecting Low PBT

- **Breath sample cooling**
- **Breath sample composition**

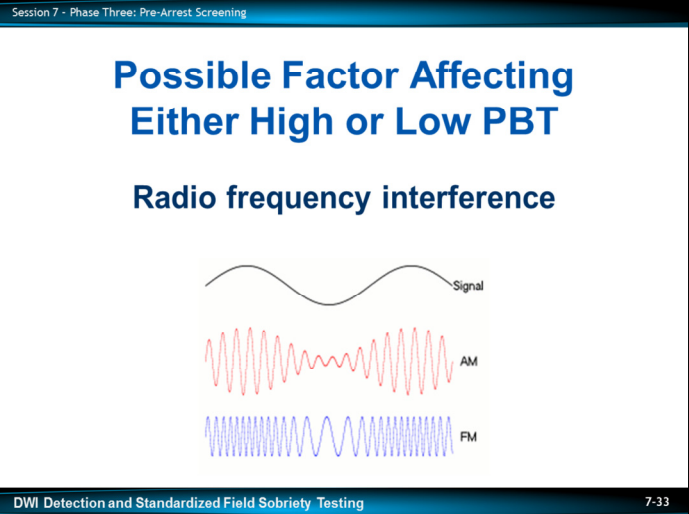


DWI Detection and Standardized Field Sobriety Testing 7-32

There are two common factors that tend to produce low PBT results.

Breath Sample Cooling – If the captured breath sample is allowed to cool before it is analyzed, some of the alcohol vapor in the breath may turn to liquid and precipitate out of the sample. If that happens, the subsequent analysis of the breath sample will produce a low BAC result.

Breath Sample Composition – Breath composition means the mixture of the tidal breath and alveolar breath. Tidal breath is breath from the upper part of the lungs and the mouth. Alveolar breath is deep lung breath. Breath testing should be conducted on a sample of alveolar breath, obtained by having the subject blow into the PBT instrument until all air is expelled from the lungs.



Radio frequency interference (RFI) can produce either high or low test results, or can prevent a breath test device from producing any result. Care should be exercised when utilizing a PBT around radio equipment.



G. The Arrest Decision

Your arrest/no arrest decision is the culmination of the DWI detection process. That decision is based on all of the evidence that has come to light since your attention was first drawn to the vehicle or individual.

PHASE ONE:

- Initial observation of vehicle in motion
- Observation of the stop

PHASE TWO:

- Face-to-face observation and interview
- Observation of the exit

PHASE THREE:

- SFSTs
- PBTs

Your decision involves a careful review of each of the observations you have made. Conduct a "mental summary" of the evidence collected during vehicle in motion, personal contact, and pre-arrest screening. If all of the evidence, taken together, establishes probable cause to believe a DWI offense has been committed, you should arrest the subject.

Session 7 - Phase Three: Pre-Arrest Screening

QUESTIONS?

DWI Detection and Standardized Field Sobriety Testing 7-35

Test Your Knowledge

1. The two major evidence gathering tasks of Phase Three are _____ and _____
2. The major decision in Phase Three is _____
3. The entire DWI detection process culminates in _____
4. Divided attention tests require the subject to _____

Test Your Knowledge

1. The two major evidence gathering tasks of Phase Three are _____

2. The major decision in Phase Three is _____

3. The entire DWI detection process culminates in _____

4. Divided attention tests require the subject to _____

Test Your Knowledge

5. Among the mental and physical capabilities a person needs to drive safely are these four:

- A.
- B.
- C.
- D.

6. The two stages of the WAT are:

- A.
- B.

5. Among the mental and physical capabilities a person needs to drive safely are these four:

- A. _____
- B. _____
- C. _____
- D. _____

6. The two stages of the WAT are:

- A. _____
- B. _____

Test Your Knowledge

- 7. The two stages of the OLS are:
 - A.
 - B.
- 8. The purpose of PBT is _____
- 9. Two factors that produce high results on a PBT are:
 - A.
 - B.

7. The two stages of the OLS are:

A. _____

B. _____

8. The purpose of PBT is _____

9. Two factors that produce high results on a PBT are:

A. _____

B. _____

Test Your Knowledge

10. Two factors that produce low results on a PBT are:
- A.
 - B.

10. Two factors that produce low results on a PBT are:

A. _____

B. _____

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DWI Detection
and
Standardized
Field Sobriety
Testing

Session 8 – Concepts and Principles of the
Standardized Field Sobriety Tests (SFSTs)



February 2018

Session 8

Concepts and Principles of the Standardized Field Sobriety Tests (SFSTs)



Learning Objectives


- Discuss development and validity of research and standardized elements, clues, and interpretation of the three SFSTs
- Discuss different types of nystagmus and their effects on HGN test



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

- Discuss the development and validity of the research and the standardized elements, clues, and interpretation of the three Standardized Field Sobriety Tests (SFSTs)
- Discuss the different types of nystagmus and their effects on the Horizontal Gaze Nystagmus (HGN) test

Learning Objectives

- Discuss and properly administer the three SFSTs
 - Discuss and properly recognize clues of the three SFSTs
 - Describe and properly record results of the three SFSTs on standard note-taking guide
 - Identify limitations of the three SFSTs
- 

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- Discuss and properly administer the three SFSTs
 - Discuss and properly recognize the clues of the three SFSTs
 - Describe in a clear and convincing manner and properly record the results of the SFSTs on a standard note-taking guide
 - Identify the limitations of the three SFSTs

CONTENT SEGMENTS

- A. Overview: Development and Validation
- B. SFST Field Validation Studies
- C. Horizontal Gaze Nystagmus
- D. Vertical Gaze Nystagmus
- E. Walk and Turn
- F. One Leg Stand
- G. Taking Field Notes on the Standardized Field Sobriety Tests

LEARNING ACTIVITIES

- Instructor-Led Demonstration
- Participant Practice Session
- Demonstration

Overview: Development and Validation

- NHTSA research began in 1975 in California
- Three final reports published
 - California: 1977 (lab study only)
 - California: 1981 (lab/field study)
 - Maryland, Washington, DC, Virginia, North Carolina: 1983 (field study only)

A. Overview: Development and Validation

For many years, law enforcement officers have utilized field sobriety tests to determine a driver's impairment due to alcohol influence. The performance of the driver on those field sobriety tests was used by the officer to develop probable cause for arrest and as evidence in court. A wide variety of field sobriety tests existed and there was a need to develop valid SFSTs.

Original Research Objectives

- Evaluate currently-used physical coordination tests
- Develop more sensitive tests
- Standardize tests

The original research objectives were to:

- Evaluate currently-used physical coordination tests to determine their relationship to intoxication and driving impairment
- Develop more sensitive tests that would provide more reliable evidence of impairment
- Standardize the tests and observations

Beginning in late 1975, extensive scientific research studies were sponsored by the National Highway Traffic Safety Administration (NHTSA) through a contract with the Southern California Research Institute (SCRI) to determine which roadside field sobriety tests were the most accurate. SCRI published the following three reports:

- California: 1977 (Lab)
- California: 1981 (Lab and Field)
- Maryland, District of Columbia, Virginia, North Carolina: 1983 (Field)

Volunteers Were Subjected to Six Tests

- One Leg Stand
- Finger-to-Nose
- Finger Count
- Walk and Turn
- Tracing
- Nystagmus



SCRI traveled to law enforcement agencies throughout the United States to select the most commonly used field sobriety tests. Six tests were used in the initial stages of this study.

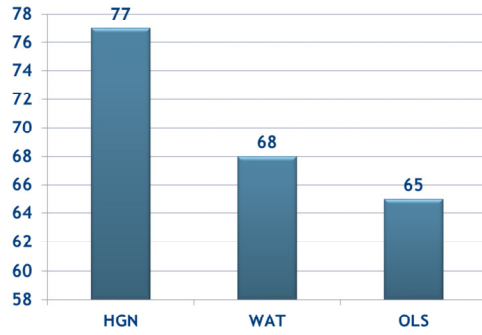
1. One Leg Stand (OLS)
2. Finger-to-Nose (FTN)
3. Finger Count
4. Walk and Turn (WAT)
5. Tracing (a paper and pencil exercise)
6. Nystagmus (called alcohol gaze nystagmus in final report)

Laboratory research indicated three of these tests, when administered in a standardized manner, were highly accurate and reliable tests for distinguishing blood alcohol concentrations (BACs) at or above 0.10; HGN, WAT, and OLS.

The research showed these three tests were the most accurate and the remaining tests were merely reassessing the same skills.

While many field sobriety tests are valid tests, the SFSTs have been validated through numerous research studies.

Original SCRI Test Data Results



NHTSA analyzed the original SCRI research laboratory test data and found:

- HGN, by itself, was 77% accurate
- WAT, by itself, was 68% accurate
- OLS, by itself, was 65% accurate

Third Phase: Field Validation and Standardization Objectives

- Standardized, practical, and effective procedures
- Determine feasibility of procedures in enforcement conditions
- Determine if tests discriminate in field as well as in laboratory

B. SFST Field Validation Studies

The final phase of this study was conducted as a field validation.

- Standardized, practical, and effective procedures were developed
- Determine the feasibility of the procedures for these tests in actual enforcement conditions
- The tests were determined to discriminate in the field as well as in the laboratory

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Standardized Elements

- **Administrative Procedures**
- **Clues**
- **Criteria**

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The three standardized tests were found to be highly reliable in identifying subjects whose BACs were at or above 0.10. The results of the study unmistakably validated the SFSTs.

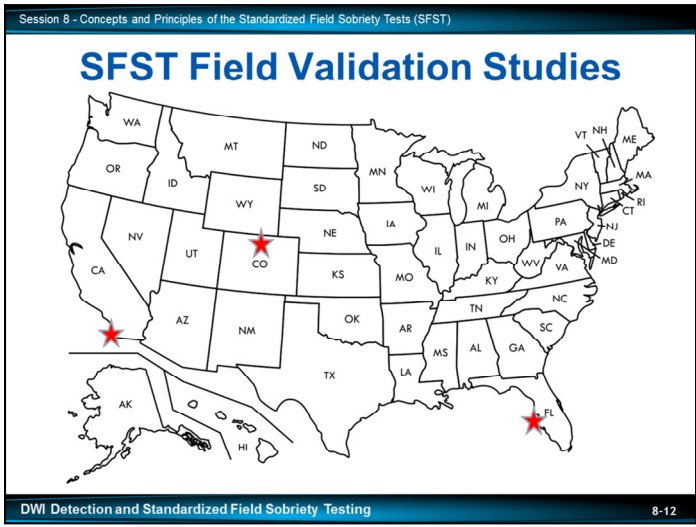
The “Standardized” elements included:

- Standardized Administrative Procedures
- Standardized Clues
- Standardized Criteria

Importance of Large Scale Field Validation Study

- **First significant assessment of workability under actual enforcement conditions**
- **First time completely objective clues and scoring criteria had been defined for tests**
- **Results of study validated SFSTs**

The large scale field validation study was the first significant assessment of the workability of the standardized tests under actual enforcement conditions. It was also the first time completely objective clues and scoring criteria had been defined for these tests. The results of this study validated the SFSTs.

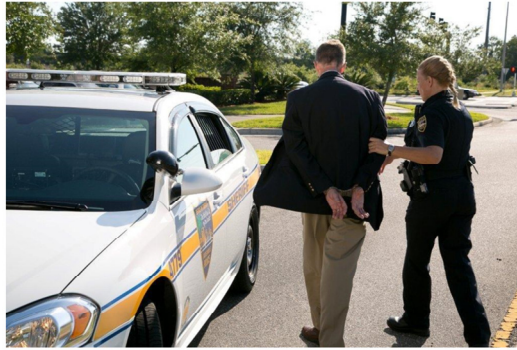


Three SFST validation studies were undertaken between 1995 and 1998:

- Colorado - 1995
- Florida - 1997
- San Diego - 1998

In order to understand the results of the research studies discussed in this course, it is important to define what is meant by a correct arrest decision. A correct arrest decision is made when an officer, after completing the third phase of the detection process, decides to arrest a subject and that subject tested above the illegal per se limit for BAC or the officer decides to release a subject who is below the illegal per se limit for BAC.

“Correct” and “Incorrect” Arrest Decisions



For purposes of this study, a correct decision was when the person was above the per se limit and was arrested, or the person was below the per se limit and was released.

The remaining subjects, incorrect arrest decisions, fall into two other categories. Members of the first group were not arrested but tested above the per se limit for BAC. The Colorado Study noted a number (approximately 33%) of these individuals were considered alcohol tolerant and performed well on the SFSTs even though their BACs were above the per se limit. Although these release decisions were recorded as errors based on the procedures outlined in the study, this non-arrest decision ultimately benefited the driver.

For purposes of this study, the subjects who were arrested, but their BAC was below the per se limit, were also considered incorrect arrests. Many States stipulate in their statute a driver is considered DWI if they are either above the per se limit for BAC or have lost the normal use of their mental or physical faculties. Even though these arrests are legally justifiable according to an individual State’s statute, these decisions are recorded as errors in the research based on the procedures outlined in the study.

Each of these studies have shown the SFSTs are scientifically validated and are a reliable method for distinguishing between impaired and unimpaired drivers.

It is important for the officer who is trained in SFST to prepare themselves to understand and explain these statistics in layman terms in order to effectively articulate them to a jury in a courtroom. Remember, if you do not know the answer to a defense question you can say, “I DON’T KNOW.”

Colorado Field Validation Study of SFST

- **First full field validation study using SFST-experienced law enforcement**
- **86% correct arrest/release decision based on three SFSTs**
- **93% of those arrested had a BAC of 0.05 or higher**

“A Colorado Validation Study of Standardized Field Sobriety Test Battery”

- The Colorado SFST validation study was the first full field study that utilized law enforcement personnel experienced in the use of SFSTs
- The initial 1977 study utilized only a few experienced officers in DWI enforcement in both a laboratory setting and field setting
 - These officers received approximately four hours of training in field sobriety testing prior to the laboratory study
- In the Colorado study, correct arrest/release decisions at a 0.05 BAC were 86% accurate based on the three SFSTs (HGN, WAT, OLS) and 93% of arrested drivers had a BAC of 0.05 or higher
 - These results, by officers who were trained in the SFST curriculum, were substantially higher than the initial 1977 study results

Florida Field Validation Study of SFST

- 95% correct arrest decision based on three SFSTs
- Validated SFSTs at 0.08 BAC and above

“Florida Validation Study of the Standardized Field Sobriety Test Battery”

- The Florida SFST field validation study was undertaken in order to answer the question of whether SFSTs are valid and reliable indices of the presence of alcohol when used under present-day traffic and law enforcement conditions
- Correct decisions to arrest were made 95% of the time based on the three SFSTs (HGN, WAT, OLS)

This was the second SFST field validation study undertaken. This study was the first study conducted at the lower BAC limit of 0.08.

San Diego Field Validation Study of SFST

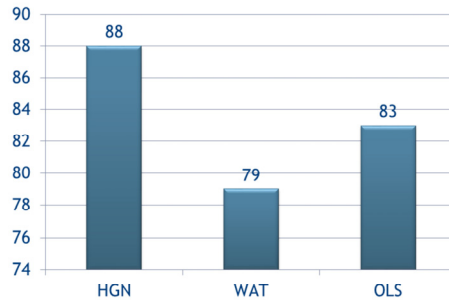
- **91% correct-arrest decision for 0.08 BAC and above using three SFSTs**
- **HGN is still most reliable of three SFSTs and supports arrest decisions at 0.08 BAC**

“Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 %”

- The San Diego SFST validation field study was undertaken because of the nationwide trend towards lowering the BAC limits to 0.08
 - The question to be answered was “Do SFSTs discriminate at BACs below 0.10%?”
- The study examined the validity of SFSTs for both .08% and .04%
- Correct arrest decisions were made 91% of the time based on the three SFSTs (HGN, WAT, OLS) at the 0.08 level and above

This is the most current research used to describe the accuracy of the SFSTs.

San Diego Field Validation Study of SFST



- HGN was 88% accurate
- WAT was 79% accurate
- OLS was 83% accurate

The results of this study provide clear evidence of the validity of the three-tests to support arrest decisions at above or below 0.08. It strongly suggests the SFSTs also identify BACs at 0.04 and above.

Results: Three SFST 1990's Field Studies

Study.....	% Correct
Colorado	86% Arrest/Release Decisions
Florida	95% Arrest Decisions
San Diego	91% Arrest Decisions

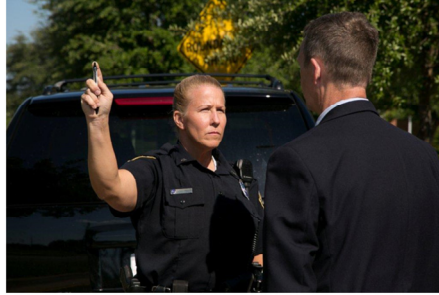
It is necessary to emphasize this validation applies only when:

- The tests are administered in the prescribed, standardized manner
- The standardized clues are used to assess the suspect's performance
- The standardized criteria are employed to interpret that performance

If any one of the SFST elements is changed, the validity may be compromised.

HGN

Involuntary jerking of eyes,
occurring as eyes gaze to the side



C. Horizontal Gaze Nystagmus

Definition Review: Involuntary jerking of the eyes, occurring as the eyes gaze to the side.

In addition to being involuntary:

- Person is usually unaware it is happening
- Person is powerless to stop it or control it

Key Summary Point: Alcohol and certain other drugs cause HGN.

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Categories of Nystagmus

- Vestibular
- Neural
- Pathological Disorders and Diseases

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Categories of Nystagmus

HGN is not the only kind of nystagmus. There are other circumstances under which the eyes will jerk involuntarily.

It is important to know some of the other common types of nystagmus and to be aware of their potential impact on field sobriety tests.

Nystagmus of several different origins may be seen. The three general categories of nystagmus are:

- Vestibular
- Neural
- Pathological Disorders and Diseases

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Vestibular Nystagmus

- **Rotational**
- **Post Rotational**
- **Caloric**
- **Positional Alcohol Nystagmus**

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Vestibular Nystagmus is caused by movement or action to the vestibular system.

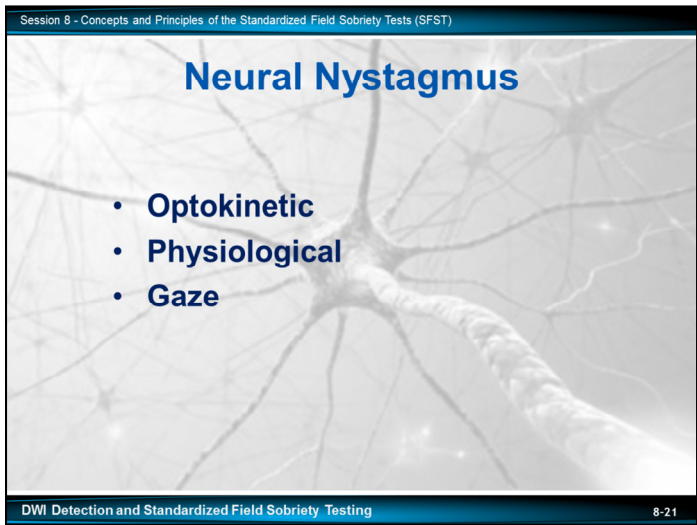
Types of Vestibular Nystagmus:

- Rotational Nystagmus occurs when the person is spun around or rotated rapidly, causing the fluid in the inner ear to be disturbed. If it were possible to observe the eyes of a rotating person, they would be seen to jerk noticeably.
- Post Rotational Nystagmus is closely related to Rotational Nystagmus: when the person stops spinning, the fluid in the inner ear remains disturbed for a period of time and the eyes continue to jerk.

Neither Rotational nor Post Rotational Nystagmus will interfere with the HGN test because of the conditions under which they occur.

- Caloric Nystagmus occurs when fluid motion in the canals of the vestibular system is stimulated by temperature as by putting warm water in one ear and cold in the other.
- Positional Alcohol Nystagmus (PAN) occurs when a foreign fluid, such as alcohol, that alters the specific gravity of the blood is in unequal concentrations in the blood and the vestibular system. This causes the vestibular system to respond to gravity in certain head positions, resulting in nystagmus.

In the original HGN study, research was not conducted for performing HGN on people lying down. Current research demonstrates HGN can be performed on someone in this position.



Nystagmus can also result directly from neural activity:

- Optokinetic Nystagmus occurs when the eyes fixate on an object that suddenly moves out of sight, or when the eyes watch sharply contrasting moving images.


Examples of Optokinetic Nystagmus include watching strobe lights, rotating lights, or rapidly moving traffic in close proximity. The HGN test will not be influenced by Optokinetic Nystagmus when administered properly. During the HGN test, the suspect is required to fixate the eyes on a penlight, pencil, or similar object that moves in accordance with the HGN testing procedures, thus Optokinetic Nystagmus will not occur. The movement of the stimulus and the fixation on the stimulus by the subject precludes this form of nystagmus from being observed by the officer.

- Physiological Nystagmus is a natural nystagmus that keeps the sensory cells of the eye from tiring. It is the most common type of nystagmus. It happens to all of us, all the time. This type of nystagmus produces extremely minor tremors or jerks of the eyes. These tremors are usually too small to be seen with the naked eye. Physiological Nystagmus will have no impact on our SFSTs because it's tremors are usually invisible.
- Gaze Nystagmus is a form of nystagmus that occurs when the eyes attempt to maintain visual fixation on a stimulus.

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Gaze Nystagmus

- **Horizontal**
- **Vertical**
- **Resting**



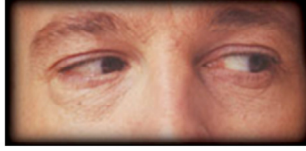
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For our purposes, Gaze Nystagmus is separated into three types:

- Horizontal
- Vertical
- Resting

Horizontal Gaze Nystagmus

- Involuntary jerking of eyes, occurring as eyes gaze to side
- Presence may also indicate other drug categories



Horizontal Gaze Nystagmus is an involuntary jerking of the eyes, occurring as the eyes gaze to the side. It is the observation of the eyes for Horizontal Gaze Nystagmus that provides the first and most accurate test in the SFSTs. Although this type of nystagmus is indicative of alcohol impairment, its presence may also indicate use of certain other drugs.

Examples of other drug categories are: CNS Depressants, Inhalants, and Dissociative Anesthetics such as PCP and its analogs.

Vertical Gaze Nystagmus

Involuntary jerking of eyes (up and down)



Vertical Gaze Nystagmus is an involuntary jerking of the eyes (up and down) which occurs when the eyes gaze upward at maximum elevation. The presence of this type of nystagmus is associated with high doses of alcohol for that individual. It may also be present with certain other drugs. The drugs that cause VGN are the same ones that cause HGN.

There is no known drug that will cause VGN without causing at least four clues of HGN. If VGN is present and HGN is not, it could be a medical condition.

For VGN to be recorded, it must be distinct and sustained for a minimum of four seconds at maximum elevation.

Resting Nystagmus

Jerking of eyes as they look straight ahead



Resting Nystagmus is referred to as a jerking of the eyes as they look straight ahead. Its presence usually indicates a medical condition or high doses of a Dissociative Anesthetic drug such as PCP. If detected, take precautions. (OFFICER SAFETY.)

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Pathological Disorder Nystagmus

- Brain tumors and other brain damage
- Some inner ear diseases
- Rare in the driving population

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Nystagmus may also be caused by certain pathological disorders. They include brain tumors and other brain damage or some diseases of the inner ear. These pathological disorders occur in very few people and in even fewer drivers.

Medical Impairment

- Equal Pupil Size
- Resting Nystagmus
- Equal Tracking



Medical Impairment

The examinations you conduct to assess possible medical impairment include:

- Equal Pupil Size
- Resting Nystagmus
- Equal Tracking

Pupil size will be affected by some medical conditions or injuries. If the two pupils are distinctly different in size, it is possible the subject:

- Has a prosthetic eye
- Is suffering from a head injury
- Has a neurological disorder

Resting Nystagmus is referred to as jerking as the eyes look straight ahead. This condition is not frequently seen. Its presence usually indicates a pathology or high doses of a drug such as a Dissociative Anesthetic like PCP.

Resting Nystagmus may also be a medical problem. Tracking ability will be affected by certain medical conditions or injuries involving the brain.

This observation is a medical assessment. If the two eyes do not track together, the possibility of a serious medical condition or injury is present.

Medical Impairment

Even though possibility of alcohol and/or drug impairment exists, be aware of medical conditions having symptoms in common with alcohol influence.



By passing a stimulus across both eyes, you can check to see if both eyes are tracking equally. If they don't (i.e., if one eye tracks the stimulus, but the other fails to move or lags behind the stimulus) there is the possibility of a neurological disorder.

If a person has sight in both eyes, but the eyes fail to track together, there is a possibility the person is suffering from an injury or illness affecting the brain.

HGN Medical Impairment Assessment Procedures

Check eyes for:

- Equal Pupil Size
- Resting Nystagmus
- Equal Tracking



Procedures to Assess Possible Medical Impairment

Prior to administration of HGN, the eyes are checked for Equal Pupil Size, Resting Nystagmus, and Equal Tracking (can they follow an object together). If the eyes do not track together, or if the pupils are noticeably unequal in size, the chance of medical disorders or injuries causing the nystagmus may be present. If the eyes track together, continue with the test and document the results.

Officers are reminded to ask questions about the subject's eye and general health conditions prior to administering the HGN test. If a subject responds or volunteers information that he or she is blind in one eye or has an artificial eye, and the subject has equal tracking, the officer should make note of the abnormality and proceed with the HGN test. If there are any abnormal findings on the pre-test checks, the officer may choose not to continue with the testing. If HGN testing is continued, officers are reminded this does not follow the standardized protocol and should acknowledge such in any report. If HGN testing is conducted on a person with a blind eye, typical inconsistent findings could be related to the blind eye not being able to see or track the stimulus, or when the normal eye can no longer see the stimulus, e.g., when checking Distinct and Sustained Nystagmus at Maximum Deviation on the blind eye side.

HGN Testing: Three Clues

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

Procedures of Horizontal Gaze Nystagmus Testing: The Three Clues

The test you will use at roadside is HGN – an involuntary jerking of the eyes occurring as the eyes gaze to the side. When a person is impaired by alcohol or certain drugs, some jerking will be seen if the eyes are moved far enough to the side.

- Lack of Smooth Pursuit (Clue Number One) – The eyes can be observed to jerk or "bounce" as they follow a smoothly moving stimulus, such as a pencil or penlight
 - The eyes of an impaired person will not follow smoothly, i.e., windshield wipers moving across a dry windshield
- Distinct and Sustained Nystagmus At Maximum Deviation (Clue Number Two) – Distinct and sustained nystagmus is evident when the eye is held at maximum deviation for a minimum of four seconds and continues to jerk toward the side
- Onset of Nystagmus Prior To 45 Degrees (Clue Number Three) – The point at which the eye is first seen jerking. If the jerking begins prior to 45 degrees it is evident the person has a BAC above 0.08, as shown by recent research.

The higher the degree of impairment, the sooner the nystagmus will be observable.

Administrative Procedures

1. Check for eyeglasses
2. Verbal instructions
3. Position stimulus (12-15 inches and slightly above eye level)
4. Check for Equal Pupil Size and Resting Nystagmus
5. Check for Equal Tracking

HGN and VGN can be observed directly and does not require special equipment. You will need a contrasting stimulus for the subject to follow with their eyes. This can be a penlight or pen. The stimulus used should be held slightly above eye level so the eyes are wide open when they look directly at it. It should be held approximately 12 - 15 inches in front of the nose. Remain aware of your position in relation to the subject at all times.

OFFICER SAFETY IS THE NUMBER ONE PRIORITY ON ANY TRAFFIC STOP.

Administrative Procedures

1. Check for eyeglasses
2. Verbal instructions
3. Position stimulus (12-15 inches and slightly above eye level)
4. Check for Equal Pupil Size and Resting Nystagmus
5. Check for Equal Tracking

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Administrative Procedures
6. Lack of Smooth Pursuit
7. Distinct and Sustained Nystagmus at Maximum Deviation
8. Onset of Nystagmus Prior to 45 Degrees
9. Total the clues
10. Check for Vertical Nystagmus

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- 6. Lack of Smooth Pursuit
- 7. Distinct and Sustained Nystagmus at Maximum Deviation
- 8. Onset of Nystagmus Prior to 45 Degrees
- 9. Total the clues
- 10. Check for Vertical Nystagmus

HGN Procedures

1. Check for eyeglasses
2. Verbal instructions
3. Position stimulus

Administrative Procedures for HGN

It is important to administer the HGN test systematically using the following steps to ensure nothing is overlooked.

There are 10 steps in the systematic administration of the HGN test.

Step 1: Check for Eyeglasses (Note if subject wears contacts especially colored contacts because some colored contacts may affect the ability to compare pupil size)

Begin by instructing the subject to remove eyeglasses, if worn.

It does not matter whether the subject can see the stimulus with perfect clarity. The subject just needs to see it and be able to follow it.

Step 2: Verbal Instructions

Give the subject the appropriate verbal instructions:

- Put feet together, hands at the side
- Keep head still
- Look at the stimulus
- Follow movement of the stimulus with the eyes only
- Keep looking at the stimulus until told the test is over

Sep 3: Position the Stimulus

Position the stimulus approximately 12 - 15 inches (30 - 38 cm) in front of subject's nose and slightly above eye level to commence the test.

Resting Nystagmus may be observed at this time. Officers should note whether the subject displays Resting Nystagmus.

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HGN Procedures

4. Equal Pupil Size and Resting Nystagmus
5. Equal Tracking

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Step 4: Equal Pupil Size and Resting Nystagmus
Check for Equal Pupil Size and Resting Nystagmus.

Step 5: Equal Tracking
Check for Equal Tracking. Move the stimulus from center to far right, to far left, and back to center. The speed of the stimulus should be approximately the same speed used as checking for the Lack of Smooth Pursuit. This check may be done more than once.

HGN Procedures

- 6. Check for Lack of Smooth Pursuit**
- 7. Check for Distinct and Sustained Nystagmus at Maximum Deviation**
- 8. Check for Onset of Nystagmus Prior to 45 Degrees**

Step 6: Lack of Smooth Pursuit

Check the left eye for lack of the "Smooth Pursuit" clue. If the eye is observed to jerk while moving, that is one clue.

Check the right eye for lack of the "Smooth Pursuit" clue and compare.

Step 7: Check the right and left eye for the "Distinct and Sustained Nystagmus at Maximum Deviation" clue. If the jerkiness is distinct and sustained, that is one clue.

Step 8: Onset of Nystagmus Prior to 45 Degrees

Check the left eye for the "Onset of Nystagmus Prior to 45 Degrees" clue. If the jerking begins prior to 45 degrees, that is one clue.

Check the right eye for "Onset of Nystagmus Prior to 45 Degrees" clue and compare.

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HGN Procedures

- 9. Total the clues**
- 10. Check for Vertical Gaze Nystagmus**

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Step 9: Total the clues

Maximum number of clues possible for each eye: 3
 Total maximum number of clues possible for both eyes: 6

Step 10: Check for Vertical Nystagmus

It is possible all three clues definitely will be found in one eye, while only two (or sometimes only one) will show up in the other eye. It is always necessary to check both eyes and to check them independently. Notwithstanding, it is unlikely the eyes of someone under the influence of alcohol will behave totally different. Thus, if one eye shows all three clues distinctly while the other eye gives no evidence of nystagmus, the person may be suffering from one of the pathological disorders covered previously.

Test Interpretation

Look for three clues of nystagmus in each eye:

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

Test Interpretation

You should look for three clues of nystagmus in each eye.

- Lack of Smooth Pursuit (The eye cannot follow a moving object smoothly)
- Distinct and Sustained Nystagmus at Maximum Deviation (nystagmus is distinct and sustained when the eye is held at maximum deviation for a minimum of four seconds)
- Onset of Nystagmus Prior to 45 Degrees

Based on recent research, if you observe four or more clues it is likely the subject's BAC is at or above 0.08. Using this criterion, you will be able to classify about 88% of your subjects accurately. This was determined during laboratory and field testing and helps you weigh the various SFSTs as you make your arrest decision.

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Three Clues of HGN

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

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Three Clues of Horizontal Gaze Nystagmus

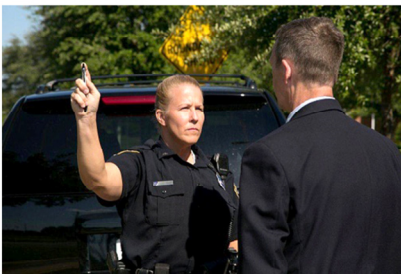
When we administer the HGN test, we look for three specific clues as evidence of alcohol influence. We check each eye independently for each clue.

For standardization, begin with the subject's left eye. Check for the first clue. Next, check right eye for same clue. Repeat this procedure for each clue starting with left eye, then right eye. Compare and document the results.

When we are checking an eye, it is good practice to administer the test by the numbers each time, to make sure no step is overlooked.

Clue Number 1

Lack of Smooth Pursuit



Clue No. 1: Lack of Smooth Pursuit

The first clue requires the subject move the eye to follow the motion of a smoothly moving stimulus.


The stimulus may be the eraser on a pencil, the tip of a penlight, the tip of your finger, or any similar small object.

Begin by holding the stimulus vertically approximately 12 - 15 inches (30 - 38 cm) in front of the subject's nose and slightly above eye level.

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Clue Number 1

Lack of Smooth Pursuit



DWI Detection and Standardized Field Sobriety Testing 8-40

Move the stimulus smoothly all the way out to the right (checking subject's left eye first) then move the stimulus smoothly all the way across the subject's face to the left (checking the subject's right eye), then back to center. Carefully watch the subject's left eye then right eye and determine if they are able to pursue smoothly.

Make at least two complete passes with the stimulus.

If a person is not impaired by alcohol (or drugs that cause HGN), the eyes should move smoothly as the object is moved back and forth.

Analogy: movement of the eyes of a person not impaired by alcohol (or drugs that cause HGN) will be similar to the movement of windshield wipers across a wet windshield versus an impaired person and windshield wipers moving across a dry windshield.

Mechanics of Clue Number 1

- **Move object steadily at a speed that takes approximately 2 seconds to bring the eye from center to side**

The Mechanics of Clue Number 1

It is necessary to move the object smoothly in order to check the eye's ability to pursue smoothly. The stimulus should be moved from center position, all the way out to the right (checking subject's left eye) where the eye can go no further, and then all the way back across subject's face all the way out to the left where the eye can go no further (checking subject's right eye) and then back to the center.

The object must be moved steadily, at a speed that takes approximately 2 seconds to bring the eye from center to side.

In checking for this clue, make at least two complete passes in front of the eyes.

If you are still not able to determine whether or not the eye is jerking as it moves, additional passes may be made in front of the eyes.


Live Demonstration Clue Number 1



Live Demonstration of the Mechanics of Clue No. 1

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Participant Practice Clue Number 1



DWI Detection and Standardized Field Sobriety Testing 8-43

Participant Practice of the Mechanics of Clue No. 1

Participant Led Demonstration Clue Number 1




Participant Led Demonstration

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Clue Number 2

Distinct and Sustained Nystagmus at Maximum Deviation



DWI Detection and Standardized Field Sobriety Testing 8-45

Clue No. 2: Distinct and Sustained Nystagmus at Maximum Deviation

Once you have completed the check for Lack of Smooth Pursuit, you will check the eyes for distinct and sustained nystagmus when the eye is held at maximum deviation, beginning with the subject's left eye.

The Mechanics of Clue Number 2

Once again, position the stimulus approximately 12 - 15 inches (30 - 38 cm) in front of subject's nose and slightly above eye level.

Move the stimulus off to the right (checking subject's left eye) until the eye has gone as far as possible.

Hold the stimulus steady at that position for a minimum of four (4) seconds and carefully watch the eye.

Then, move the stimulus back across the subject's face all the way out to the left (subject's right eye).

Clue Number 2

Distinct and Sustained Nystagmus at Maximum Deviation



Four seconds will not cause fatigue nystagmus. This type of nystagmus may begin if a subject's eye is held at maximum deviation for more than 30 seconds.

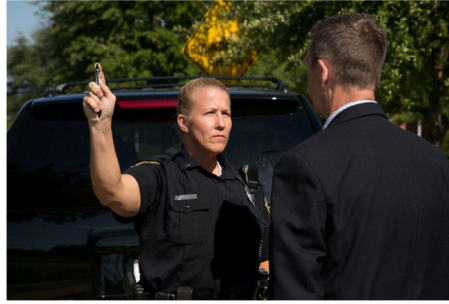
Hold the stimulus steady and carefully watch the eye.

If the person is impaired, the eye is likely to exhibit definite, distinct and sustained jerking when held at maximum deviation for a minimum of 4 seconds.

In order to "count" this clue as evidence of impairment, the nystagmus must be distinct and sustained for a minimum of 4 seconds.

If you think you see only slight nystagmus at this stage of the test or if you have to convince yourself nystagmus is present, then it isn't really there.

Live Demonstration Clue Number 2



Live Demonstration of the Mechanics of Clue No. 2

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Participant Led Demonstrations Clue Number 2



DWI Detection and Standardized Field Sobriety Testing 8-48

*Participant practice of the mechanics of Clue No. 2
Participant Led Demonstrations*

Clue Number 3

Onset of Nystagmus Prior to 45 Degrees



Clue No. 3: Onset of Nystagmus Prior to 45 Degrees

Once again, position the stimulus approximately 12 - 15 inches (30 - 38 cm) in front of subject's nose and slightly above eye level.

The angle of onset of nystagmus is simply the point at which the eye is first seen jerking.

Examples: With someone at a very high BAC (0.20+), the jerking might begin almost immediately after the eye starts to move toward the side. For someone at 0.08 BAC, the jerking might not start until the eye has moved nearly to the 45 degree angle.

Generally speaking, the higher the BAC, the sooner the jerking will start as the eye moves toward the side.

If the jerking begins prior to 45 degrees, that person's BAC could be 0.08 or above.

Clue Number 3

Onset of Nystagmus Prior to 45 Degrees



It is not difficult to determine when the eye has reached the 45 degree point, but it does require some practice.

If you start with the stimulus approximately 12 - 15 inches (30 - 38 cm) directly in front of the nose, you will reach 45 degrees when you have moved the stimulus an equal distance to the side. Another important indicator that can be used to determine if the eye is within 45 degrees is at 45 degrees, some white usually will still be visible in the corner of the eye (for most people). (Although rare, there may be times when a person's eye may be at a 45 degree angle and no white in the corner of the eye is visible.)

Mechanics of Clue Number 3



The Mechanics of Clue No. 3

The stimulus is positioned approximately 12 - 15 inches from (30 - 38 cm) subject's nose and slightly above eye level. It is necessary to move the stimulus slowly to identify the point at which the eye begins to jerk.

Start moving the stimulus towards the right (left eye) at the speed that would take approximately 4 seconds for the stimulus to reach a 45 degree angle.

As you are slowly moving the stimulus, watch the eye carefully for any sign of jerking.

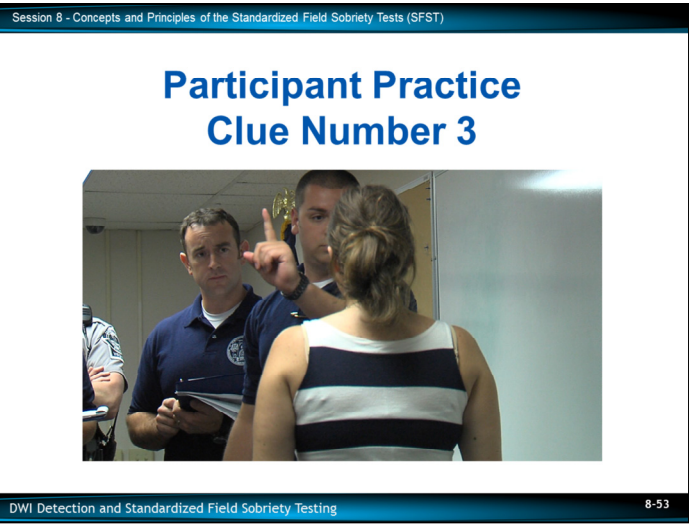
When you see the jerking begin, immediately stop moving the stimulus and hold it steady at that position.

With the stimulus held steady, look at the eye and verify the jerking is continuing.

If the jerking is not evident with the stimulus held steady, you have not located the point of onset. Therefore, resume moving the stimulus slowly toward the side until you notice the jerking again.

When you locate the point of onset of nystagmus, you must determine whether it is prior to 45 degrees.

Verify some white is still showing in the corner of the eye.



Participant practice of the mechanics of Clue No. 3

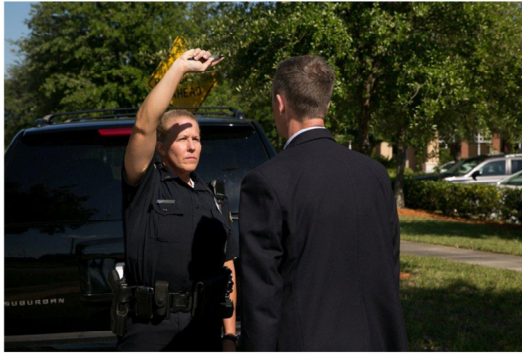
Coaching and critiquing participants practice.

Participant led demonstration.

Administrative Procedures

6. Lack of Smooth Pursuit
7. Distinct and Sustained Nystagmus as Maximum Deviation
8. Onset of Nystagmus Prior to 45 Degrees
9. Total the clues
10. Check for Vertical Nystagmus

Vertical Gaze Nystagmus



D. Vertical Gaze Nystagmus (VGN)

The VGN test is simple to administer. During the VGN test, look for jerking as the eyes move up and are held for a minimum of four seconds at maximum elevation.

- Position the stimulus horizontally, about 12 - 15 inches in front of the subject's nose
- Instruct the subject to hold the head still and follow the object with the eyes only
- Raise the object until the subject's eyes are elevated as far as possible
- Hold for a minimum of four seconds
- Watch closely for evidence of the eyes jerking upward

Participant led demonstration.

For VGN to be recorded, it must be distinct and sustained for a minimum of four seconds at maximum elevation.

VGN may be present in subjects under the influence of high doses of alcohol for that individual, and some other drugs.

Walk and Turn

Divided Attention Test Mental Task and Physical Task

Instruction stage
Walking stage



E. Walk and Turn

Test Stages

Like all divided attention tests, WAT has two stages. They are:

- Instruction stage
- Walking stage

Both stages are important because they can affect the subject's overall performance on the test.

Walk and Turn

Divided Attention Test Mental Task and Physical Task

Instruction stage
Walking stage



Test Conditions

Whenever possible, the WAT test should be conducted on a reasonably dry, hard, level, non-slippery surface. There should be sufficient room for subjects to complete nine heel-to-toe steps. Recent field validation studies have indicated varying environmental conditions have not affected a subject's ability to perform this test.

Standardizing this test for every type of road condition is unrealistic. The original research study recommended this test be performed on a dry, hard, level, non slippery surface and relatively safe conditions. If not, the research recommends:

- 1) subject be asked to perform the test elsewhere, or
- 2) only HGN be administered

The original SCRI studies suggested individuals over 65 years of age or people with back, leg, or inner ear problems had difficulty performing this test. Less than 1.5% of the test subjects in the original studies were over 65 years of age. Also, the SCRI studies suggest individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes. Officers should consider all factors when conducting SFSTs.

Safety Precautions

- **Keep subject to your left when starting demonstration**
- **Be aware of surroundings**
- **Officer should not turn his/her back to the subject for safety reasons**

Procedures for Walk and Turn Testing

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Administrative Procedures Instruction Stage

Verbal instructions

- Assume heel-to-toe stance
- Arms down at sides
- Don't start until told

DWI Detection and Standardized Field Sobriety Testing 8-64

Instruction Stage: Initial Positioning and Verbal Instructions

For standardization in the performance of this test, have the subject assume the heel-to-toe stance by giving the following verbal instructions, accompanied by demonstrations:

Place your left foot on the line (real or imaginary).

Place your right foot on the line ahead of the left foot, with the heel of your right foot against the toe of the left foot.

Place your arms down at your sides.

Maintain this position until I have completed the instructions. Do not start to walk until told to do so. Do you understand the instructions so far? (Make sure subject indicates understanding.)

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Administrative Procedures Walking Stage

- **Nine heel-to-toe steps, turn, nine heel-to-toe steps**
- **Turn procedures:**
 - **Turn around on line**
 - **Several small steps**

DWI Detection and Standardized Field Sobriety Testing 8-65

Demonstrations and Instructions for the Walking Stage

Explain the test requirements by giving instructions, accompanied by demonstrations:
When I tell you to start, take nine heel-to-toe steps on the line, turn, and take nine heel-to-toe steps down the line.

When you turn, keep the front (lead) foot on the line, and turn by taking a series of small steps with the other foot, like this.

While you are walking, keep your arms at your sides, watch your feet at all times, and count your steps out loud.

Once you start walking, don't stop until you have completed the test.

Do you understand the instructions? (Make sure subject understands.)

Instruct the person to begin the test.

WAT Test Clues

- **Cannot keep balance while listening to instructions**



Test Interpretation

You may observe a number of different behaviors when a subject performs this test. Original research demonstrated the behaviors listed below are likely to be observed in someone with a BAC at or above 0.08. Look for the following clues each time this test is given:

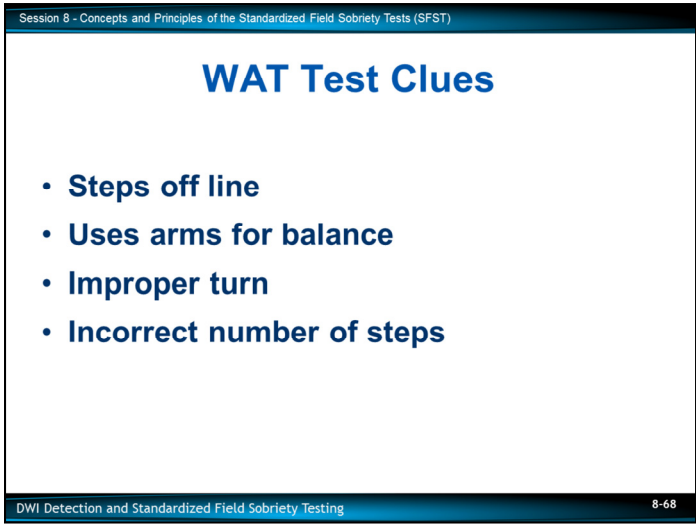
- Cannot keep balance while listening to the instructions. Two tasks are required at the beginning of this test. The subject must balance heel-to-toe on the line, and at the same time, listen carefully to the instructions. Typically, the person who is impaired can do only one of these things. The subject may listen to the instructions, but not keep balance. Record this clue if the subject does not maintain the heel-to-toe position throughout the instructions. (Feet must actually break apart or step off the line.) Do not record this clue if the subject sways or uses the arms to balance but maintains the heel-to-toe position.

WAT Test Clues

- **Starts too soon**
- **Stops while walking**
- **Does not touch heel-to-toe**



-
- Starts too soon. The impaired person may also keep balance, but not listen to the instructions. Since you specifically instructed the subject not to start walking "until I tell you to begin," record this clue if the subject does not wait.
 - Stops while walking. The subject stops while walking. Do not record this clue if the subject is merely walking slowly.
 - Does not touch heel-to-toe. The subject leaves a space of one half inch or more between the heel and toe on any step.



- Steps off the line. The subject steps so that one foot is entirely off the line.
- Uses arms for balance. The subject raises one or both arms six or more inches from the sides in order to maintain balance.
- Improper turn. The subject removes the front foot from the line while turning. Also record this clue if the subject has not followed directions as instructed, i.e., spins or pivots around or loses balance while turning.
- Incorrect number of steps. Record this clue if the subject takes more or fewer than nine steps in either direction.

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

WAT Test Clues Summary

SFSTs are a tool to assist you in seeing visible signs of impairment and are not a pass/fail test.

DWI Detection and Standardized Field Sobriety Testing 8-69

If subject can't do the test, record observed clues and document the reason for not completing the test, e.g., subject's safety.

Remember the SFSTs are a tool to assist you in seeing visible signs of impairment and are not a pass/fail test.

Subject gets into a "leg lock" position (legs crossed, unable to move.)


If the subject has difficulty with the test (for example, steps off the line), continue from that point, not from the beginning. This test may lose its sensitivity if it is repeated several times.

Observe the subject from a safe distance and limit your movement which may distract the subject during the test. **Always consider officer safety.**

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

WAT Test Criterion

**2 or more clues indicates BAC
at or above 0.08 (79% accurate)**



DWI Detection and Standardized Field Sobriety Testing 8-70

Based on recent research, if the subject exhibits two or more clues on this test or fails to complete it, classify the subject's BAC as at or above 0.08. Using this criterion, you will be able to accurately classify 79% of your subjects.

Review of Divided Attention Definition

WAT is a field sobriety test based on the important concept of divided attention.

The test requires the subject to divide attention among mental tasks and physical tasks.

The mental tasks include comprehension of verbal instructions, processing of information, and recall of memory.

The physical tasks include balance and coordination. The subject is required to maintain balance and coordination while standing still, walking, and turning.

WAT Test Criterion

Instruction Stage




Instruction Stage

Test Demonstrations

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

OLS



DWI Detection and Standardized Field Sobriety Testing 8-73

Test Conditions

OLS requires a reasonably dry, hard, level, and non slippery surface. Subject's safety should be considered at all times.

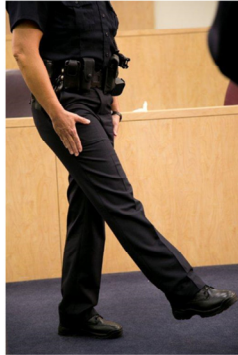
Standardizing this test for every type of road condition is unrealistic. The original research study recommended this test be performed on a dry, hard, level, non slippery surface and relatively safe conditions. If not, the research recommends:

- 1) subject be asked to perform the test elsewhere, or
- 2) only HGN be administered

However, recent field validation studies have indicated that varying environmental conditions have not affected a subject's ability to perform this test.

The original SCRI studies suggested individuals over 65 years of age, people with back, leg or inner ear problems, or people who are overweight by 50 or more pounds may have difficulty performing this test. Less than 1.5% of the test subjects in the original studies were over 65 years of age. There was no data containing the weight of the test subjects included in the final report. Also, the SCRI studies suggest individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes.

OLS



Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Administrative Procedures Instruction Stage

- **Stand straight, feet together**
- **Keep arms at sides**
- **Maintain position until told otherwise**

DWI Detection and Standardized Field Sobriety Testing 8-75

Instruction Stage: Initial Positioning and Verbal Instructions

Initiate the test by giving the following instructions, accompanied by demonstrations.

Please stand with your feet together and your arms down at the sides, like this.

Do not start to perform the test until I tell you to do so.

Do you understand the instructions so far?

Administrative Procedures Balance and Counting Stage

- Raise either leg
- Keep raised foot approximately six inches (15 cm) off ground, parallel to the ground
- Keep both legs straight and arms at your side
- Keep eyes on raised foot
- Count out loud in the following manner: “one thousand one, one thousand two, one thousand three and so on,” until told to stop

Demonstrations and Instructions for the Balance and Counting Stage

Explain the test requirements using the following verbal instructions accompanied by demonstrations:

When I tell you to start, raise either leg with the foot approximately six inches off the ground, keeping your foot parallel to the ground.

Keep both legs straight and your arms at your side.

While holding that position, count out loud in the following manner: “one thousand one, one thousand two, one thousand three,” and so on until told to stop.

Keep your arms at your sides at all times and keep watching the raised foot.

Do you understand?

Go ahead and perform the test. (Officer should always time the 30 seconds. Test should be discontinued after 30 seconds.)

Observe the subject from a safe distance.

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OLS Test Clues

- **Sways while balancing**
- **Uses arms for balance**

DWI Detection and Standardized Field Sobriety Testing 8-77

Test Interpretation

You may observe a number of different behaviors when a subject performs this test. The original research found the behaviors listed below are the most likely to be observed in someone with a BAC at or above 0.08. When administering the OLS test, we look for certain specific behaviors. Each behavior or action is considered one clue. There is a maximum number of 4 clues on this test. Look for the following clues each time the OLS test is administered.

The subject sways while balancing – This refers to side to side or back and forth motion of the body, or a swaying motion of the foot, while the subject maintains the OLS position.

Slight tremors of the foot or body should not be interpreted as swaying.

Uses arms for balance – Subject moves arms 6 or more inches from the side of the body in order to keep balance.

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

OLS Test Clues

- **Hopping**
- **Puts foot down**

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Hopping – Subject is able to keep one foot off the ground, but resorts to hopping in order to maintain balance.

Puts foot down – The subject is not able to maintain the OLS position, putting the foot down one or more times during the 30 second count.

If the subject puts the foot down, give instructions to pick the foot up again and continue counting from the point at which the foot touched.


If subject can't do the test, record observed clues and document the reason for not completing the test, e.g. subject's safety.

Remember time is critical in this test. The original SCRI research has shown a person with a BAC above 0.10 can maintain balance for up to 25 seconds, but seldom as long as 30.

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

OLS Test Criterion

**2 or more clues indicates BAC
at or above 0.08 (83% accurate)**



DWI Detection and Standardized Field Sobriety Testing 8-79

Based on recent research, if an individual shows two or more clues or fails to complete the OLS, there is a good chance the BAC is at or above 0.08. Using that criterion, you will accurately classify 83% of the people you test as to whether their BAC's are at or above 0.08.

Observe the subject from a safe distance and minimize movement during the test so as not to interfere. If the subject puts the foot down, give instructions to pick the foot up again and continue counting from the point at which the foot touched the ground. If the subject counts very slowly, terminate the test after 30 seconds.

Review of Divided Attention Definition

OLS is another field sobriety test that employs divided attention.

The subject's attention is divided among such simple tasks as balancing, listening, and counting out loud.

Although none of these is particularly difficult in itself, the combination can be very difficult for someone who is impaired.

OLS Test Demonstration



Test Demonstrations

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Taking Field Notes on the SFSTs

IV Pre-Arrest Screening

- Equal Tracking Yes No
- Equal Pupils Yes No
- Resting Nyst. Yes No

Horizontal Gaze Nystagmus

- Lack of Smooth Pursuit
- Dist. and Sust. Nystagmus at Maximum Deviation
- Nystagmus Onset Prior to 45 Degrees
- Vertical Gaze Nystagmus (circle one)
- Other: _____

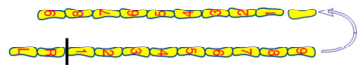
Left Right

Y	N

Walk and Turn

Instruction Stage

- Cannot keep balance
- Starts too soon



Walking Stage

- Stops walking
- Misses heel-to-toe
- Steps off line
- Uses arms for balance
- Actual steps taken

First Nine Steps

Second Nine Steps

Improper Turn (Describe) _____

Cannot do Test (Explain) _____

Other: _____

DWI Detection and Standardized Field Sobriety Testing
8-81

G. Taking Field Notes on the Standardized Field Sobriety Tests

For purposes of the arrest report and courtroom testimony, it is not enough to report the number of clues on the three tests.

The numbers are important to the police officer in the field because they help determine whether there is probable cause to arrest.

But to secure a conviction, more descriptive evidence is needed.

The officer must be able to describe how the subject performed on the tests and what the subject did.

The standard note taking guide is designed to help develop a clear description of the subject's performance on the tests.

Medical Assessment

- Equal Tracking Yes No
- Equal Pupils Yes No
- Resting Nyst. Yes No

- Equal Pupils Yes No
- Equal Tracking Yes No
- Resting Nystagmus Yes No
- Other _____

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

HGN

Horizontal Gaze Nystagmus

	Left	Right
• Lack of Smooth Pursuit	<input type="checkbox"/>	<input type="checkbox"/>
• Dist. & Sust. Nystagmus at Maximum Deviation	<input type="checkbox"/>	<input type="checkbox"/>
• Nystagmus Onset Prior to 45 Degrees	<input type="checkbox"/>	<input type="checkbox"/>
• Vertical Gaze Nystagmus(circle one)	Y or N	
Other _____		

DWI Detection and Standardized Field Sobriety Testing 8-83

Complete the entire procedure for both eyes, checking "yes" or "no" for each clue.

Check box (✓) if the clue is present.

For standardization, test the subject's left eye first.

Then, check for the same clue in the right eye.

If clue is not present, leave box blank.

After both eyes have been completely checked, total the number of HGN clues observed.

Complete the check for VGN.

If present, circle Y. If not present, circle N.

In the section labeled "other", record any facts, circumstances, conditions or observations that may be relevant to this procedure.

Examples of additional evidence of impairment emerging while checking for nystagmus:

- Subject unable to keep head still
- Subject swaying noticeably
- Subject utters incriminating statements

Examples of conditions that may interfere with subject's performance while checking for nystagmus:
Wind, dust, etc. (irritating subject's eyes).

NOTE: Try to face subject away from flashing or strobe lights that could cause visual or other distractions that could impede the test.

Visual or other distractions impeding the test.

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

WAT (Continued)

Walk and Turn

Instruction Stage

- Cannot keep balance
- Starts too soon

--	--

Walking Stage

- Stops walking
- Misses heel-to-toe
- Steps off line
- Uses arms for balance
- Actual steps taken

First Nine Steps

Second Nine Steps

Improper Turn (Describe) _____

Cannot do Test (Explain) _____

Other: _____

DWI Detection and Standardized Field Sobriety Testing
8-85

If subject fails to touch heel-to-toe, record how many times this happens and place a letter "M" at bottom of vertical line to indicate missed heel-to-toe.

If subject steps off the line while walking, record it by drawing a line from the appropriate footprint at the angle in the direction in which the foot stepped. Do this for each nine steps.

If subject uses arms for balance, give some indication of how often or how long this happens. Example: subject raised arms from sides three times. Place three check marks (✓) or a "3" in the box.

Record the actual number of steps taken by subject, in each direction.

For the next clue, "Improper Turn," record a description of the turn.

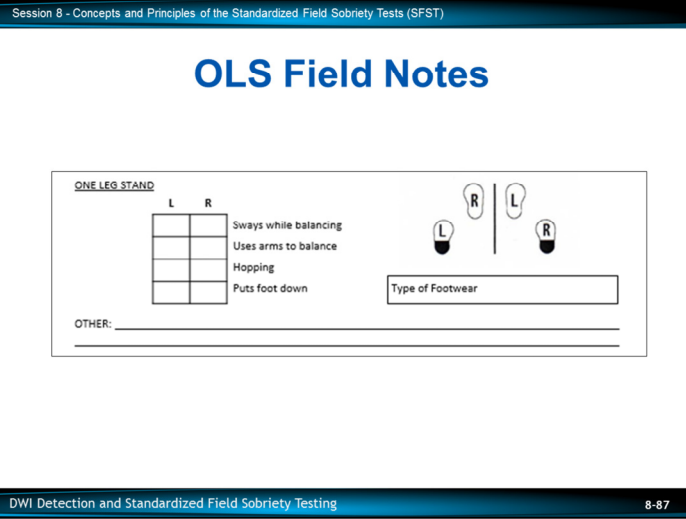
- Example: turned incorrectly
- Example: stumbled, to left
- Example: wrong direction
- Example: no small steps
- If the turn is correct, note: N/A

If the subject is unable to safely complete the test, you may stop the test early. Document the reasons the test was stopped.

At end of the test, examine each factor and determine the total number of clues recorded.

In the section labeled "other", record any facts, circumstances, conditions, or observations that may be relevant to this test.

Examples of additional evidence of impairment emerging during WAT test.



Record the subject's performance separately.

For each clue, record how often it appears with a check mark (✓).

If subject sways, indicate how often with a (✓) check mark.

Indicate above the feet the number they were counting when they put their foot down.

Check marks (✓) or a number should be made to indicate the number of times the subject swayed, used arms, hopped or put foot down.

Place check marks (✓) in or near the small boxes to indicate how many times you observed each of the clues. In addition, if the subject puts the foot down during the test, record when it happened. To do this, write the count number at which the foot came down.

For example, suppose, when standing on the left leg, the subject lowered the right foot at a count of "one thousand thirteen," and again at "one thousand twenty."

If subject uses arms for balance, indicate how often arms were raised.

If subject is hopping, indicate how many hops were taken.

If subject puts foot down, indicate how many times the foot came down.

If the subject is unable to safely complete the test, you may stop the test early. Document the reason(s) the test was stopped.

QUESTIONS?

Test Your Knowledge

1. WAT is an example of _____ field sobriety test.
2. The WAT requires a real or imaginary line and _____
3. During the _____ stage of the WAT, the suspect is required to count out loud.

Test Your Knowledge

1. WAT is an example of _____ field sobriety test.

2. The WAT requires a real or imaginary line and _____

3. During the _____ stage of the WAT, the subject is required to count out loud.

Test Your Knowledge

- 4. Based upon the San Diego study, the WAT test can determine whether a subject's BAC is above or below 0.08, _____ % of the time**
- 5. In the WAT test, a subject who steps off the line during the first 9 steps and once again during the second 9 steps and who uses arms for balance twice during the second 9 steps has produced _____ distinct clue(s).**

-
4. Based upon the San Diego study, the WAT test can determine whether a subject's BAC is above or below 0.08, _____ % of the time.

 5. In the WAT test, a subject who steps off the line during the first 9 steps and once again during the second 9 steps and who uses arms for balance twice during the second nine steps has produced _____ distinct clue(s).

Test Your Knowledge

- 6. The WAT test has _____ possible clues.
- 7. During the _____ stage of the OLS test the subject must maintain balance while standing on one foot
- 8. The OLS test requires the subject keep the foot raised for _____ seconds.

6. The WAT test has _____ possible clues.

7. During the _____ stage of the OLS test the subject must maintain balance for 30 seconds.

8. The OLS requires the subject keep the foot elevated for _____ seconds.

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Test Your Knowledge

9. Based upon the San Diego study, the OLS test can determine whether a subject's BAC is above or below 0.08, _____ % of the time
10. In the OLS test, a subject who sways has produced _____ clue(s)
11. In the OLS test, a subject who uses arms for balance, is hopping, and puts foot down has produced _____ clue(s).

DWI Detection and Standardized Field Sobriety Testing 8-93

9. Based upon the San Diego study, the OLS test can determine whether a subject's BAC is above or below 0.08, _____ % of the time.

10. In the OLS test, a subject who sways has produced _____ clue(s).

11. In the OLS test, a subject who uses arms for balance, is hopping, and puts foot down has produced _____ clue(s).

Session 8 - Concepts and Principles of the Standardized Field Sobriety Tests (SFST)

Test Your Knowledge

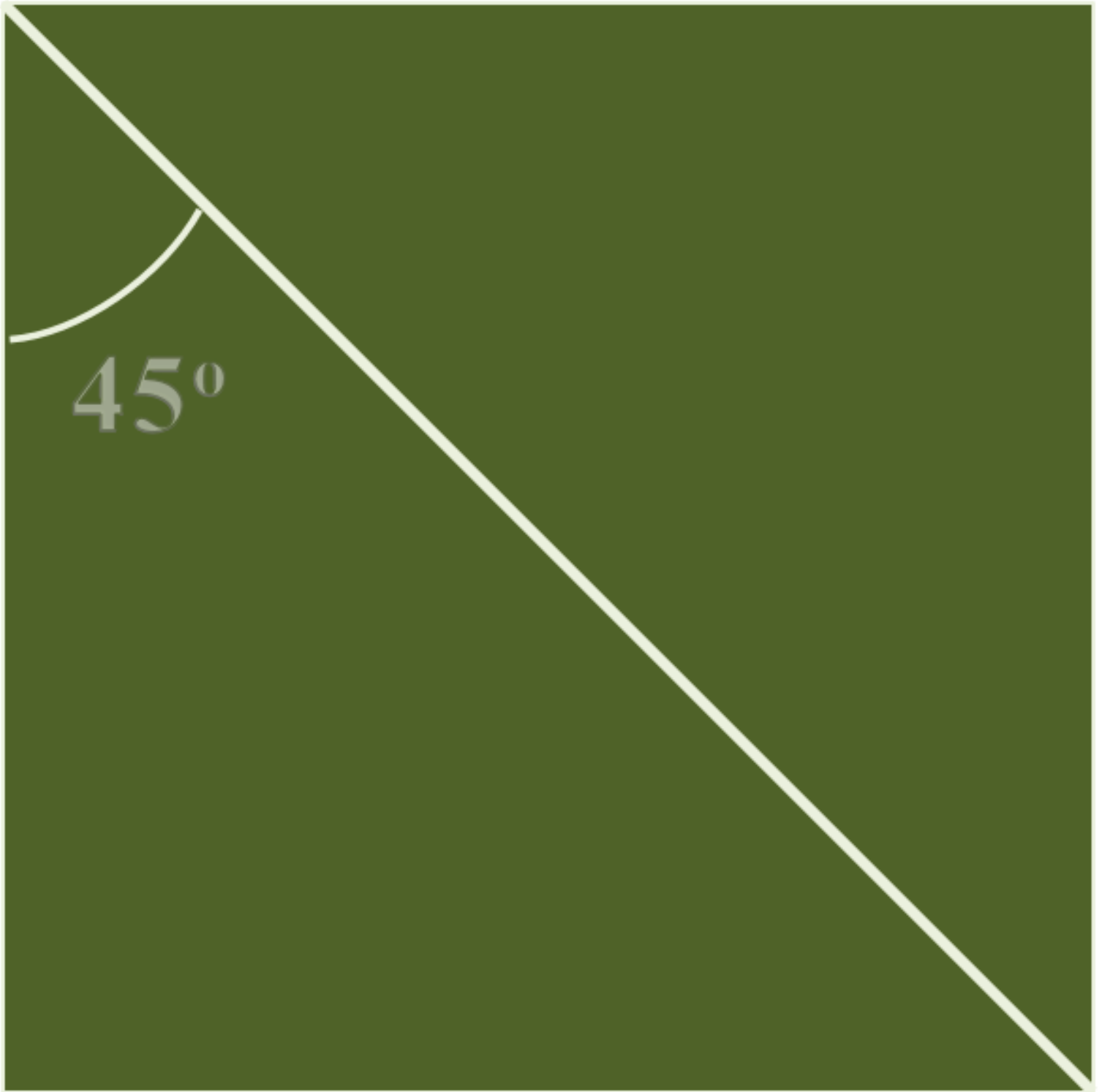
- 12. The maximum number of clues for HGN that can appear in one eye is _____.**
- 13. Based upon the San Diego study, the HGN test can determine whether a subject's BAC is above 0.08, _____ % of the time.**
- 14. The third clue of HGN is an Onset of Nystagmus Prior to _____ Degrees.**

DWI Detection and Standardized Field Sobriety Testing 8-94

12. The maximum number of clues for HGN that can appear in one eye is _____.

13. Based upon the San Diego study, the HGN test can determine whether a subject's BAC is above 0.08, _____% of the time.

14. The third clue of HGN is an Onset of Nystagmus Prior to _____ Degrees.



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DWI Detection
and
Standardized
Field Sobriety
Testing

Session 9 – Test Battery Demonstrations



February 2018

Session 9

Test Battery Demonstrations



Learning Objective

- **Demonstrate appropriate administrative procedures for SFSTs**



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

- Demonstrate the appropriate administrative procedures for the Standardized Field Sobriety Tests (SFSTs)

CONTENT SEGMENTS

A. Live Classroom Demonstrations

LEARNING ACTIVITIES

Instructor-Led Presentation

Instructor-Led Demonstrations

Three tests:

- HGN and VGN
- WAT
- OLS

A. Live Classroom Demonstrations

Instructor-Led Demonstrations

Session 9 - Test Battery Demonstrations

Participant-Led Demonstration

Three tests:

- HGN and VGN
- WAT
- OLS

DWI Detection and Standardized Field Sobriety Testing 9-5

Participant-Led Demonstration

QUESTIONS?

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 10 – “Dry Run” Practice Session



February 2018

Session 10

"Dry Run" Practice Session



Learning Objective

- **Demonstrate proper administration of the three SFSTs**



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

- Demonstrate the proper administration of the three Standardized Field Sobriety Tests (SFSTs)

CONTENT SEGMENTS

- A. Procedures and Group Assignments
- B. Live Administration of SFSTs
- C. Hands on Practice

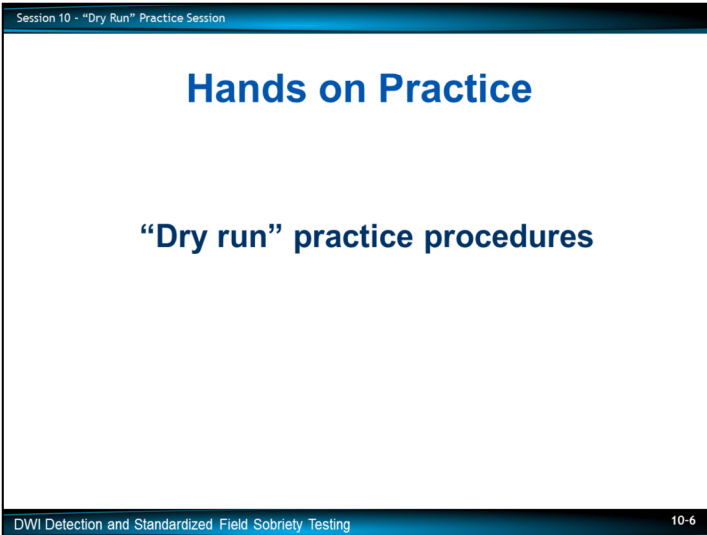
LEARNING ACTIVITIES

- Instructor-Led Presentation
- Participant Practice Session
- Instructor-Led Presentation

SFSTs Live Administration

Participants observe technique and
scoring only

B. Live Administration of SFSTs



C. Hands on Practice

Session 10 - "Dry Run" Practice Session

QUESTIONS?

DWI Detection and Standardized Field Sobriety Testing 10-7

PARTICIPANT PROFICIENCY EXAMINATION

STANDARDIZED FIELD SOBRIETY TESTS

Name _____ Date _____/_____/_____

Agency _____

I. HORIZONTAL GAZE NYSTAGMUS

1. ___ Have subject remove glasses if worn.
2. ___ Stimulus held in proper position (approximately 12"-15" from nose, just slightly above eye level).
3. ___ Check for equal pupil size and resting nystagmus.
4. ___ Check for equal tracking.
5. ___ Smooth movement from center of nose to maximum deviation in approximately 2 seconds and then back across subject's face to maximum deviation in right eye, then back to center. Check left eye, then right eye. (Repeat)
6. ___ Eye held at maximum deviation for a minimum of 4 seconds (no white showing). Check left eye, then right eye. (Repeat)
7. ___ Eye moved slowly (approximately 4 seconds) from center to 45 angle. Check left eye, then right eye. (Repeat)
8. ___ Check for Vertical Gaze Nystagmus. (Repeat)

II. WALK AND TURN

1. ___ Instructions given from a safe position.
2. ___ Tells subject to place feet on a line in heel-to-toe manner (left foot behind right foot) with arms at sides and gives demonstration.
3. ___ Tells subject not to begin test until instructed to do so and asks if subject understands.
4. ___ Tells subject to take nine heel-to-toe steps on the line and demonstrates.
5. ___ Explains and demonstrates turning procedure.
6. ___ Tells subject to return on the line taking nine heel-to-toe steps.
7. ___ Tells subject to count steps out loud.
8. ___ Tells subject to look at feet while walking.
9. ___ Tells subject not to raise arms from sides.
10. ___ Tells subject not to stop once they begin.
11. ___ Asks subject if all instructions are understood.

III. ONE LEG STAND

1. ___ Instructions given from a safe position.
2. ___ Tells subject to stand straight, place feet together, and hold arms at sides.
3. ___ Tells subject not to begin test until instructed to do so and asked if subject understands.
4. ___ Tells subject to raise one leg, either leg, approximately 6" from the ground, keeping raised foot parallel to the ground, and gives demonstration.
5. ___ Tells subject to keep both legs straight and to look at elevated foot.
6. ___ Tells subject to count out loud in the following manner: one thousand one, one thousand two, one thousand three, and so on until told to stop, and gives demonstration.
7. ___ Checks actual time subject holds leg up. (Time for 30 seconds.)

Instructor: _____

Note: In order to pass the proficiency examination, the student must explain and proficiently complete each of the steps listed.

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DWI Detection
and
Standardized
Field Sobriety
Testing

Session 11 – “Testing Subjects” Practice:
First Session



February 2018

Session 11

"Testing Subjects" Practice: First Session



Learning Objectives

- Properly administer SFSTs
- Properly observe and record subject's performance utilizing standard note-taking guide
- Properly interpret subject's performance
- Properly use and maintain SFST Field Arrest Log



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

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject's performance utilizing the standard note-taking guide
- Properly interpret the subject's performance
- Properly use and maintain the SFST Field Arrest Log

CONTENT SEGMENTS

- A. Procedures
- B. Hands on Practice
- C. Use and Maintenance of SFST Field Arrest Log
- D. Session Wrap Up

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Presentation
- Instructor-Led Discussion

Procedures

- Same teams as dry run
- Each team member administers one complete series of tests to at least one drinking volunteer
- Prepare descriptive written test record on each volunteer tested
- Other team members observe and record performance

A. Procedures

Procedures

- Escort volunteer to next scheduled team
- When segment is complete, volunteers are escorted to breath testing station
- BACs announced during "wrap-up"

B. Hands on Practice



C. Use and Maintenance of SFST Field Arrest Log (The International Association of Chiefs of Police (IACP) strongly recommends the use of this log)

The SFST Field Arrest Log is used to record the results of the SFSTs performed on suspected impaired subjects.

This log is important in documenting an officer's experience and proficiency in performing and interpreting SFSTs.

It is highly recommended by the IACP and the National Highway Traffic Safety Administration (NHTSA), that officers utilize an SFST log for the following reasons:

- Records training proficiency
- Records field proficiency
- Documents the officer’s experience

All of these combined helps to establish the officer’s credibility in administering the SFSTs and may be used as evidence in court.

SFST Field Arrest Log Components

- Actual date SFSTs were administered
- Subject's full name
- Results of each SFST test

This log has the following components:

- The actual date the SFSTs were administered
- Subject's full name
- Results of each SFST test
- Classification of BAC as above or below 0.08 BAC
- Arrest/Not Arrest
- Subject's measured BAC (if available)
- Remarks

Utilization of Log

Team Reports

- **Volunteer observations**
- **Record results**
- **Comments**
- **Questions**
- **Observations**

D. Session Wrap Up

QUESTIONS?

Sample Dry Erase Board Array for Tabulating Results

“Designated Subjects”	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
“A”				
“B”				
“C”				
“D”				
“E”				
“F”				
“G”				
“H”				
“I”				
“J”				

SFST Field Arrest Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest / Not Arrest	Measured BAC	Remarks

ALCOHOL WORKSHOP PARTICIPANT STATEMENT OF INFORMED CONSENT

I, _____, hereby agree to participate in the alcohol
(Print Name)

workshop conducted on ____/____/____ by _____.
(Agency/Department)

I understand that I will consume alcohol, and may become impaired or intoxicated. I specifically agree that my participation as a volunteer drinker in this program makes it imperative that I refrain from driving for at least twelve hours following completion of the program.

I understand that, while participating in the program, I will be required to submit to breath tests to determine my blood alcohol concentration. I also understand that I will be required to submit to psychophysical examinations and other non-intrusive clinical tests to assess the extent of my impairment.

I represent that I am in good physical health, and that I am not an alcoholic. I attest that I am not now under the influence of alcohol or any other drug. I attest that I have not consumed any drug, medication, or other substance that would make my consumption of alcohol at this time inadvisable. I affirm that there exists no condition that should preclude my participation in this alcohol workshop as a volunteer drinker.

I have been informed of the purpose of this workshop, namely, to assist in training police officers to recognize and investigate persons impaired by alcohol and other drugs. I acknowledge that I may refuse to consume any or all of the alcohol offered to me during this workshop. I also consent to being photographed or video recorded, by instructors, for training purposes only.

Signature

Date ____/____/____

Witness

VOLUNTEER DRINKER QUESTIONNAIRE

VOLUNTEER: _____

DATE: _____

LOCATION: _____

Wearing Glasses? Yes No

Wearing Contacts? Yes No

Eye Problems? _____

Sick or Injured? _____

Diabetic? _____

Epileptic? _____ Other: _____

Physical Defects? _____

Under Doctor's Care? _____

Taking Any Medications or Drugs? Yes No What: _____

Been Drinking? Yes No What: _____ When: _____

Last Sleep? _____

Number of Hours? _____

Last Ate – Time: _____ What: _____

Age _____ Eye Color _____

Height _____ Sex M F

Weight _____ Build _____

DOSING CHART

MIX: _____

TOTAL NUMBER OZ ETOH _____ TYPE _____ PROOF _____

	BEFORE DRINKING	PRE-TESTNG	POST TESTING
Lack of Smooth Pursuit	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Maximum Deviation	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Angle of Onset			
Pupil Size	MM	MM	MM
Pulse	BPM	BPM	BPM
Blood Pressure	/	/	/
BAC/Time	/	/	/

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 11-A – Dry Lab



February 2018

Session 11-A

Dry Lab



Learning Objectives

- Properly administer SFSTs
- Properly observe and record subject's performance utilizing standard note-taking guide
- Properly interpret subject's performance
- Properly use and maintain SFST Field Arrest Log



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

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject's performance utilizing the standard note-taking guide
- Properly interpret the subject's performance
- Properly use and maintain the SFST Field Arrest Log

CONTENT SEGMENTS

- A. Procedures
- B. Hands on Practice
- C. Use and Maintenance of SFST Field Arrest Log
- D. Session Wrap Up

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Presentation
- Instructor-Led Discussion

Procedures

- Same teams as dry run
- Each subject will be viewed performing all three tasks
- Only one opportunity to view each subject
- Record number of clues observed in appropriate boxes on video score worksheet

A. Procedures

Procedures

- **Class will be divided into two groups**
- **One half will watch video subjects**
- **Other half will practice administration of SFSTs**
- **At conclusion of video, participants will switch roles**

B. Hands on Practice



C. Use and Maintenance of SFST Field Arrest Log (the International Association of Chiefs of Police (IACP) strongly recommends the use of this log)

The SFST Field Arrest Log is used to record the results of the SFSTs performed on suspected impaired subjects.

This log is important in documenting an officer's experience and proficiency in performing and interpreting SFSTs.

It is highly recommended by the IACP and the National Highway Traffic Safety Administration (NHTSA), that officers utilize an SFST log for the following reasons:

- Records training proficiency
- Records field proficiency
- Documents the officer’s experience

All of these combined helps to establish the officer’s credibility in administering the SFSTs and may be used as evidence in court.

SFST Field Arrest Log Components

- Actual date SFSTs were administered
- Subject's full name
- Results of each SFST test

This log has the following components:

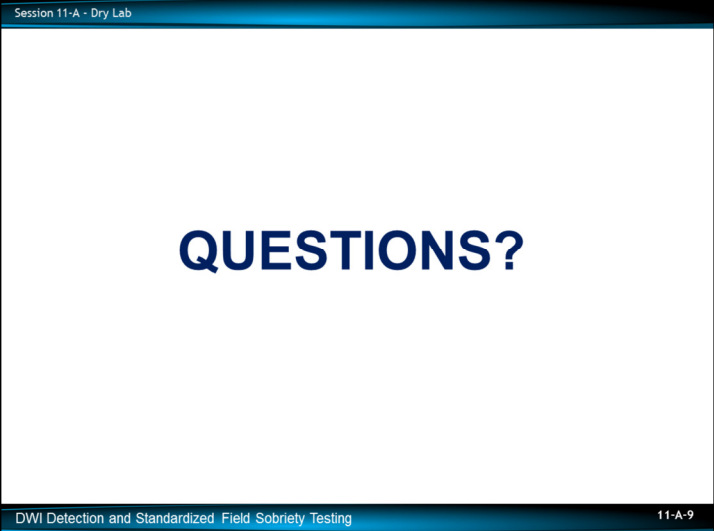
- The actual date the SFSTs were administered
- Subject's full name
- Results of each SFST test
- Classification of BAC as above or below 0.08 BAC
- Arrest/Not Arrest
- Subject's measured BAC (if available)
- Remarks

Utilization of Log

Team Reports

- Video subject observations
- Record results
- Comments?
- Questions?
- Observations?

D. Session Wrap Up



**The Use of Video in Training for
Standardized Field Sobriety Tests (SFST)**

A. James McKnight and Elizabeth A. Langston

**National Public Services Research Institute
8201 Corporate Drive, Suite 220
Landover, MD 20785**

September 1993

TECHNICAL REPORT

NHTSA Contract No. DTNH22-92-C-05109

**Prepared for
U.S. Department of Transportation
National Highway Traffic Safety Administration
400 7th Street, S.W.
Washington, D.C. 20590**

Technical Report Documentation Page

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4. Title and Subtitle The Use of Video in Training for SFSTs		5. Report Date September 1993
7. Author(s) A.J. McKnight and E.A. Langston		6. Performing Organization Code
9. Performing Organization Name and Address National Public Services Research Institute, 8201 Corporate Drive, Suite 220, Landover, MD 20745		8. Performing Organization Report No.
12. Sponsoring Agency Name and address National Highway Traffic Safety Administration, 400 Seventh Street, S.W. Washington, D.C. 20590		10. Work Unit No. (TR AIS)
15. Supplementary Notes Dr. Richard Compton served as Contracting Officer's Technical Representative		11. Contract or Grant No. DTNH22-91-R-05109
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15. Supplementary Notes Dr. Richard Compton served as Contracting Officer's Technical Representative		14. Sponsoring Agency Code

16. Abstract
 The NHTSA training program to certify law enforcement officers in administration of SFSTs includes two “workshops” in which trainees administer sobriety tests to alcohol-dosed subjects has led to consideration of video as an alternative training method. A preliminary study showed that Certified SFST examiners scoring videotaped performance of alcohol-dosed subjects obtained the same results as examiners scoring the subjects directly. An experiment was therefore undertaken to compare three alternative methods of conducting training during the workshops: live alcohol-dosed subjects (alcohol), video-recorded performances of alcohol-dosed subjects (video), and a combination of the video and alcohol methods (video/alcohol). A total of 133 SFST trainees were randomly assigned to the three training methods. The results disclosed extremely small and statistically nonsignificant differences among the three workshop methods in the proficiency with which trainees administered and scored the SFST with alcohol-dosed subjects in a final performance test. It was concluded that video provides an acceptable alternative to live dosed subjects in training law enforcement officers to administer SFSTs.

17. Key Words
 Alcohol, Drinking and Driving,
 Sobriety Tests

18. Distribution Statement
 Available to the public through the
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21. No. of Pages

22. Price

The Role of Video Training

The use of videos in Sessions XIA and XIVA is not intended to imply that video can serve as a “substitute” for training with live dosed subjects. However, a combination of practical and moral obstacles to use of alcohol-dosed subjects in training has threatened to prevent the administration of SFST courses in many jurisdictions. Here the choice is not between video and alcohol workshops but between video and no instruction at all. The results of this study clearly resolve that decision.

REMINDER: Only the NHTSA/IACP options videos are approved for this instruction.

The Conclusions of this Study

From the results of this study, the following conclusions may be offered:

1. Video administration of the SFST of alcohol-dosed subjects can be used as an alternative to the use of live alcohol-dosed subjects in either or both of the current training “workshops” without altering the ability of trainees to administer or score the test.
2. Current SFST training leads to significant gains in knowledge of administration procedures and scoring criteria. However, gains in scoring the Walk and Turn and One Leg Stand are minimal owing to the objectivity of the scoring criteria.
3. The only significant differences among approaches to teaching the workshop involve the direction of trainee scoring errors on the Walk and Turn and One Leg Stand, where trainees from the video workshop tend to report slightly fewer impairment clues than certified examiners, while those participating in either or both alcohol workshops tend to report more clues.

REFERENCES

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McKnight, A. J.; Marques, P. R. Estimating alcohol impairment from behavioral clues. *Journal of Alcohol Studies*. 1991; 52(5): pp 389-397

Russ, N. W.; Geller, E. S. Evaluation of a server intervention program for preventing drunk driving. Final Report No. DD-3 ed.; Blacksburg, VA: Virginia Polytechnic Institute and State University, Department of Psychology; 1986. 56 pages.

Tharp, V.; Burns, M.; Moskowitz, H. Development and field test of psychophysical tests for DWI arrest; 1981; NHTSA Report # DOT-HS-805-864. Available from NTIS, Springfield, VA 22151.

Sample Dry Erase Board Array for Tabulating Results

"Designated Subjects"	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
"A"				
"B"				
"C"				
"D"				
"E"				
"F"				
"G"				
"H"				
"I"				
"J"				

SFST Field Arrest Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest / Not Arrest	Measured BAC	Remarks

Video Score Sheet

SUSPECT'S NAME: _____ OFFICER'S NAME: _____

Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	Unequal Pupil Size: Explain:	
Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy		
Lack of Smooth Pursuit	Left Eye	Right Eye	Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No
Distinct Nystagmus At Maximum Deviation			Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery
Onset of Nystagmus Prior To 45 Degrees			

HGN CLUES

Observed	Actual

WALK AND TURN TEST

Cannot keep balance_ Starts too soon _____

WALK AND TURN



Stops Walking Misses Heel-to-Toe Steps Off Line Uses Arms Actual Steps Taken	1 st Nine 2 nd Nine <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 50%; height: 20px;"></td><td style="width: 50%; height: 20px;"></td></tr> <tr><td style="width: 50%; height: 20px;"></td><td style="width: 50%; height: 20px;"></td></tr> <tr><td style="width: 50%; height: 20px;"></td><td style="width: 50%; height: 20px;"></td></tr> <tr><td style="width: 50%; height: 20px;"></td><td style="width: 50%; height: 20px;"></td></tr> </table>								

Observed	Actual

Improper Turn (Describe)	Cannot Do Test (explain)
--------------------------	--------------------------

Team Information
Team No: _____
Arrest Decision:
Yes: _____
No: _____
BAC:
Above 0.10: _____
Below 0.10: _____
Above 0.08: _____
Below 0.08: _____

ONE LEG STAND	
L <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	R <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Sways while balancing Uses arms to balance Hopping Puts foot down	

ONE LEG STAND

Observed	Actual

DWI Detection
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Session 12 – Processing the Arrested Subject,
Report Writing, and Preparation for Trial



February 2018

Session 12

Processing the Arrested Subject, Report Writing, and Preparation for Trial



Learning Objectives

- Discuss importance of correct processing and report writing procedures in DWI arrests
- Discuss correct sequence of DWI processing procedures



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

- Discuss the importance of correct processing and report writing procedures in DWI arrests
- Discuss the correct sequence of DWI processing procedures

Learning Objectives

- **Discuss the essential elements of a DWI report**
- **Successfully complete a narrative arrest report**
- **Discuss the importance of trial preparation**



-
- Discuss the essential elements of a DWI report
 - Successfully complete a narrative arrest report
 - Discuss the importance of trial preparation

CONTENT SEGMENTS

- A. The Processing Phase
- B. Narrative DWI Arrest Report
- C. Case Preparation and Pretrial Conference
- D. Guidelines for Direct Testimony

LEARNING ACTIVITIES

Instructor-Led Presentations
Video Presentation
Instructor-Led Demonstrations
Participant Presentations

Foundation for Successful Testimony

- Relationship between law enforcement officer(s) involved with arrest and prosecuting attorney(s)
- Effective communication and a clear understanding



A. The Processing Phase

The foundation for preparation and successful testimony is the relationship between the law enforcement officer(s) involved with the arrest and the prosecuting attorney(s) associated with the case. Effective communication and a clear understanding of each group’s objectives and expectations is essential for successful prosecution.

You, as the State’s primary witness, play an important part in illustrating to the judge/jury the impairment of the defendant. In addition to verbal testimony, visual aids are often helpful in painting the picture of the entire DWI detection process. Visual aids engage the judge/jury and increase the retention of information. In addition, it is important you do not use legal, law enforcement, or medical terms unless absolutely necessary. The use of plain English assists the judge, jury, and others involved in the case to understand the specifics of all the testimony.

Testimony

- Be prepared to speak to evidence
- Take time
- Listen
- Organize response before answering questions



Since testimony constitutes the majority of time spent in trial, it is imperative, in addition to effective communication techniques, the witness be well prepared to speak to the evidence related to the case. Direct examination is your opportunity to tell the story. It should be an exchange between the prosecutor and the law enforcement officer. Take the time to think and make sure you completely understand the question and organize your response before you answer. NEVER answer a question you do not fully understand. Cross examination is NOT the time to showboat. Always listen carefully to the question and again make sure you completely understand the question before you answer. If you do not understand the question, ask for clarification. If you are not able to fully understand the question during direct or cross examination, it is acceptable to say “I do not know,” “I cannot answer that question,” or “I cannot answer that question without further explanation.” Always make sure you listen closely to the question and don’t answer a question you don’t understand.

Remember: When it comes to successful testimony, there is NO substitution for preparation.

Successful Prosecution

- **Organize and present relevant evidence**
- **All evidence must be compiled during three phases of detection**



The successful prosecution of a DWI case often depends upon the officer's ability to organize and present all relevant evidence of each element of the DWI violation. Keep in mind virtually all of this evidence must be compiled during the three phases of detection – vehicle in motion, personal contact, and pre-arrest screening. The officer must be able to establish the level of impairment at the time the violation occurred, therefore, observations are critical. Subsequent evidence of impairment, such as chemical test result(s) and/or the evidence gathered during a drug evaluation, will be admissible only when a proper arrest has been made. The efforts expended in detecting, apprehending, investigating, and testing/evaluating the DWI offender will be of little value if there is not sufficient evidence to prove every element of the violation.

No matter how much evidence you collect, if it is not presented clearly, completely, and convincingly in court, the case may be lost. Therefore, it is essential officers develop the ability to write a clear, complete, and concise report describing their observations and results. Additionally, the officer must be able to articulate that information to the judge/jury.

Types of Evidence

- **Physical**
- **Established facts**
- **Illustrative**
- **Demonstrative**
- **Written documentation**
- **Testimony**



Evidence of a DWI violation may be of various types:

- Physical (or real) evidence: something tangible, visible, audible (e.g., a blood sample or a partially empty can of beer)
- Well established facts (e.g., judicial notice of accuracy of the breath test device when proper procedures are followed)
- Illustrative evidence: visual aids (e.g., photo of the crash scene, defendant, or diagram of the roadway)
- Demonstrative evidence: demonstrations performed in courtroom (e.g., Standardized Field Sobriety Tests (SFSTs) or other field sobriety tests)
- Written documentation (e.g., the citation, the alcohol influence report, the drug evaluation report, evidential chemical test results, etc.)
- Testimony (the officer's verbal description of what was seen, heard, smelled, etc.)

Prosecutor

- Prove every element of offense
- Establish proper procedures were followed



The prosecutor must be able to establish and prove every element of the offense. The prosecutor also must establish the proper procedures were followed, including:

There was a reasonable suspicion or another valid reason for stopping/contacting the driver.

The driver was operating or in actual physical control of the vehicle.

There was probable cause to arrest the driver.

Proper Arrest Procedures

- **Miranda warning**
- **Subsequent observations/interview of defendant**
- **Chemical test**

-
- Proper regard was given to the defendant's Miranda rights
 - Subsequent observations/interview of the defendant provided additional evidence relevant to the offense
 - There was a proper request for a chemical test

The prosecutor's case will largely be based upon the thoroughness of the officer's investigation and the clarity of his/her testimony.

While it is true many items which are critical to the prosecution are documented on special forms, the officer must keep in mind the prosecutor may not have the time to search out relevant facts. The decision may be made to amend, reduce, or even dismiss the case on the basis of the arrest report alone.

It is essential the report clearly, completely, and accurately describe the total sequence of events from the point the driver was first observed, through the arrest, the chemical test, and subsequent release or incarceration.

Guidelines for Note Taking

- **Recognition and retention of facts**
- **Must establish each element of violation**
- **Recognize and recall facts and circumstances**
- **Rely on your own field notes**

Guidelines for Note Taking

One of the critical tasks in the DWI enforcement process is the recognition and retention of facts that establish reasonable suspicion to stop the driver, investigate further, and the probable cause to arrest persons for DWI. The evidence gathered during the detection process must establish each element of the violation and must be documented to support successful prosecution of the defendant. This evidence is largely sensory (see, smell, hear) in nature and, therefore, is extremely short lived.

Law enforcement officers must be able to recognize and act on facts and circumstances with which they are confronted. But the officer must also be able to recall those observations – and describe them clearly and convincingly – to secure a conviction. The officer is inundated with evidence of DWI (sights, sounds, smells, etc.), recognizes it, and bases the decision to stop, investigate, and arrest on their observations.

Since evidence of a DWI violation is short lived, police officers need a system and tools for recording field notes at scenes of DWI investigations. Technological advances have made it possible to use audio, video, and digital recorders in the field. They provide an excellent means of documenting this short-lived evidence. However, the vast majority of officers must rely on their own field notes. One way of improving the effectiveness of field notes is to use a structured note-taking guide. This type of form makes it very easy to record brief notes on each step of the detection process and ensures vital evidence is documented. Field notes provide the information necessary for completion of required DWI report forms and assist the officer in preparing a written narrative of the investigation. Since they can be used to refresh the officer's memory, field notes could be useful if the officer is required to provide oral testimony.

Processing Tasks

- **Inform driver of arrest**
- **“Pat down” or frisk**
- **Handcuff defendant**
- **Secure defendant in patrol vehicle**
- **Secure defendant’s vehicle, passengers, property**



The Processing Phase of a DWI Enforcement incident is the bridge between arrest and conviction of a DWI offender. Processing involves the proper assembly and organization of all of the evidence obtained during the detection phase. This ensures the evidence will be available and admissible in court. Processing also involves obtaining additional evidence, such as a chemical test or tests of the subject's breath, blood, etc.

Typically, the processing phase may involve the following tasks:

- Inform the driver they are under arrest
- "Pat down" or frisk the defendant
- Handcuff the defendant
- Secure the defendant in the patrol vehicle
- Secure the defendant’s vehicle, passengers, property

Processing Tasks

- **Transport defendant**
- **Arrange for video recording**
- **Implied consent advisory**
- **Administer evidentiary chemical test(s)**

-
- Transport the defendant to an appropriate facility
 - Arrange for video recording of booking process (if applicable)
 - Advise the defendant of rights and obligations under the implied consent law
 - Administer the evidentiary chemical test(s)

Processing Tasks

- **Miranda Admonition**
- **Interview defendant**
- **Incarcerate or release defendant**
- **Complete required reports**

-
- Advise the defendant of Constitutional Rights (Miranda Admonition)
 - Interview the defendant
 - Incarcerate or release the defendant
 - Complete the required reports

Processing Tasks



Essentials of Prosecution's Case

- Reasonable suspicion for contact
- Probable cause for arrest
- Proper arrest procedures
- Post-arrest evidence
- Request for chemical test(s)/results
- Clear and concise report

B. Narrative DWI Arrest Report

Report writing is an essential skill for a police officer. Good report writing becomes second nature with practice. While there is no one best way to write an arrest report, it is critical the report be detailed regarding every phase of the detection and arrest process. It is helpful to follow a simple format. Departmental policies and/or special instructions or requirements of the prosecutor provide some guidance.

It is important for officers to understand the essential ingredients of the prosecution's case. Clarity and completeness of an officer's observations and relaying this information in a clear and concise report is critical. Additionally, an officer must be able to establish he/she had reasonable grounds for the arrest and followed proper arrest procedures. Proper arrest procedures include advising the defendant of their constitutional rights and gathering additional post-arrest evidence. The admissibility of chemical test evidence requires a proper request in accordance with your State's guidelines.

Detection and Arrest

- **Mentally note relevant facts**
- **Field notes**
- **Follow departmental policies**



Detection and Arrest

During the detection phase of the DWI arrest process, the arresting officer must mentally note relevant facts to support the decision to arrest.

These facts are then recorded in the form of field notes and can be used to refresh officer's memory when the formal arrest/narrative report is prepared.

Writing the Report – Phase One

- Initial Observations
- Driving/Actual Physical Control
- Vehicle Stop



The following block outline format identifies some of the important components in a DWI arrest/narrative report:

Initial Observations – Describe your first observations of the driver’s actions. What drew your attention to the vehicle/driver? Your first observations are important because they help establish your reasonable suspicion to stop. This should include details about the driving before you initiated the traffic stop. Be sure to record the time and location of the first event.

Driving or Actual Physical Control – In some cases, you may not use the driving behavior as the basis for the contact. Your first contact could result from a crash investigation or a motorist assistance type of contact. Your observations and documentation must establish the driver was operating or in actual physical control of the vehicle. You can use circumstantial evidence, such as seat belt marks, ownership of the vehicle, location of the keys, admissions, witness statements, etc. to establish this element.

Vehicle Stop – Record any unusual actions taken by the driver. How did the driver react to the emergency light and/or siren? How far did the driver travel after emergency equipment was activated? How did the driver pull over? Was it a normal stop? Be detailed and specific.

Writing the Report – Phase Two

- **Contact With Driver**
- **Exit the vehicle**
- **Preliminary Questions**



Contact With Driver – Record your observations of the driver's personal appearance, condition of the eyes, speech, odors, inappropriate or inconsistent responses to questions, etc. Record the name and condition of passengers in the vehicle and where they were located. Describe any unusual actions taken by the driver or passengers.

Exit From Vehicle – Record your observations of the driver's exit from the vehicle and include any unusual actions taken by the driver. Be specific about how the driver exits the vehicle. For example: climbs out of the vehicle, uses the vehicle for support, leans on the vehicle, walks slowly and/or deliberately, stumbles, etc.

Preliminary Questions – Record the preliminary questions you ask of the driver as well as their responses. Pay close attention to any inconsistent responses and any other physical signs of impairment. For example: driver responds “I’m just trying to get home” when asked “are you diabetic or epileptic?”

Writing the Report – Phase Three

- **SFSTs**
- **Other field sobriety test(s)**
- **Arrest**



SFSTs – This should include specific details about the validated clues noted during the test. It should also include all other observations made during the SFSTs such as: did not follow directions, how quickly or slowly the driver performed the test, etc.

Include specific details about the clues observed. For example, missed heel-to-toe on steps 3, 4, and 5 by at least three inches each step, etc.

Field Sobriety Tests – Describe the driver's actions when you administered other field sobriety tests. Be specific.

Arrest – Document the arrest decision and ensure all elements of the crime have been accurately described.

Writing the Report – Post Arrest

ON SCENE:

- **Disposition of passengers**
- **Disposition of vehicle and property**
- **Witness' statements**
- **Transport defendant**

ON SCENE:

Disposition of Passengers – Make sure passengers are identified, interviewed, and safely released.

Disposition/Location of Vehicle and Keys – Indicate where the vehicle was secured or towed and the location of the keys. If the vehicle was released to another party or was driven by a backup officer, record that fact. Document disposition of any property seized.

Witness' Statements – List all witnesses (including other officers), contact information, and attach copies of their statements (if any). Additionally, make notes of any verbal statements made by witnesses.

Transport of Defendant – Describe where the defendant was transported for evidential testing. Document time of departure and arrival. (This information can be obtained from the radio log). Note any spontaneous or voluntary comments made by the defendant.

Writing the Report – Post Arrest

POST SCENE:

- **Implied consent/Miranda warning**
- **Evidentiary test(s)**
- **Notifications**
- **Citation/Complaint**
- **Book or release**



POST SCENE:

Implied Consent/Miranda Warning – Document the admonishments given at the appropriate point in the investigation.

Evidentiary Test(s) – Document which test(s) were administered and by whom. Be sure to include the evidential test(s). If the defendant is authorized to request additional chemical tests and does so, record the type of test, time administered, location, and party administering the test.

The foregoing list is not intended to be all inclusive. In many cases, several points may not be applicable and additional information not listed may apply.

Notification of Defendant's Attorney or Other Party – Document the time and result of defendant's telephone call to an attorney or other party.

Citation/Complaint – Document the traffic citation/complaint was issued at the appropriate time, if applicable.

Book or Release – Document the time and place of incarceration or the name and address of the responsible party to whom the defendant was released. Be sure to record the time.

Writing the Report

- **Narrative must be detailed and accurate**
- **Successful prosecution depends on your ability to describe events observed**



The narrative does not necessarily have to be lengthy, but it must be detailed and accurate. Remember, successful prosecution depends on your ability to describe the events you observed. Often a trial can be avoided (i.e., a defendant may plead guilty) when you do a thorough job in preparing your arrest report.

A sample report providing an example of the block outline format is at the end of this session.

DWI Incident Report

Defendant: Jarod Primo Age:31

Date of Arrest: XX/XX/XX

Time of Arrest: 9:20 PM

• Initial Observation:

- ✓ Defendant driving white SUV
- ✓ Driving without license plate
- ✓ Drifted over the center line twice
- ✓ Weaving within lane
- ✓ Four lane roadway, clear, breezy, traffic light

DWI Incident Report

Defendant: Jarod Primo, Age:31

Date of Arrest: 4-14-XX

Time of Arrest: 9:20 PM

Initial Observation:

- Defendant driving white SUV
- Driving without license plate
- Drifted over the center line twice
- Weaving within lane
- Slow response to stop command
- Failed to stop at stop sign
- Four lane roadway, clear, breezy, traffic light

DWI Incident Report

- **Initial Observation:**
 - ✓ Slow response to stop command
 - ✓ Crossed over fog line
 - ✓ Failed to use turn signal
 - ✓ Failed to stop at stop sign

Initial Observation:

- Slow response to stop command
- Crossed over fog line
- Failed to use turn signal
- Failed to stop at stop sign

DWI Incident Report

- **Contact with Driver**
 - ✓ **Driver was sole occupant**
 - ✓ **Produced credit card instead of DL**
 - ✓ **Forgot to produce registration/insurance**
 - ✓ **Odor of alcoholic beverage in vehicle**
 - ✓ **Admissions of drinking**
 - ✓ **Unsteady on exit from vehicle**

Contact with Driver

- Driver was sole occupant
- Produced credit card instead of DL
- Forgot to produce registration/insurance
- Odor of alcoholic beverage in vehicle
- Admissions of drinking (2 drinks)
- Unsteady on exit from vehicle

Any other observations during contact with driver

SFSTs



DWI Detection and Standardized Field Sobriety Testing

SFSTs

- Horizontal Gaze Nystagmus (HGN) – Lack of Smooth Pursuit, Distinct and Sustained Nystagmus at Maximum Deviation, and Onset of Nystagmus Prior to 45 Degrees in both eyes
- Walk and Turn (WAT) – Could not maintain balance during instructions, improper turn, used arms for balance (2x), steps off line, and stops while walking
- One Leg Stand (OLS) – Raised right foot, put foot down on 1010 and 1014, raised left arm for balance, hopped, and reached the count of 1014 in 30 seconds

Any other observations?

The Arrest

Based on observations of defendant's driving, physical appearance, and performance of SFSTs, she was placed under arrest for DWI.

Case Preparation

- Use field notes to document evidence
- Accurately note statements and other observations
- Review case with other officers
- Collect and preserve evidence
- Prepare required documents

C. Case Preparation and Pretrial Conference

As was discussed in Session 4, case preparation begins with your first observation and contact with the driver. It is essential all relevant facts and evidence are mentally noted and later documented in field notes, narrative report, or other official forms.

Guidelines for Case Preparation

- Use field notes to document evidence
- Accurately note statements and other observations
- Review case with other officers who witnessed the arrest or otherwise assisted you and write down relevant facts
- Collect and preserve all physical evidence
- Prepare all required documents and a narrative report

Report Consistency

- Adequately explain inconsistencies
- Review records and reports
- Properly document evidence

Remember, it is essential all reports be consistent. If differences occur, be sure to adequately explain them. The defense will try to impeach your testimony by pointing out seemingly minor inconsistencies.

Preparation for Trial

Upon receipt of a subpoena or other notification of a trial date, review all records and reports to refresh your memory. If appropriate, revisit the scene of the arrest. Compare notes with assisting officers to ensure all facts are clear.

During discovery, list all evidence and properly document it. Remember, evidence may be excluded if proper procedures are not followed.

Attention to detail is very important.

Pretrial Conference



Pretrial Conference

- **Be prepared**
- **Discuss all evidence/conclusions**
- **Identify strengths and issues**
- **Review potential questions**
- **Identify defense challenges**

Successful prosecution is dependent upon the prosecutor's ability to present a clear and convincing case based on your testimony, physical evidence, and supporting evidence/testimony from other witnesses and/or experts.

If at all possible, arrange a pretrial conference with the prosecutor. In preparation for the pretrial conference, you should review the entire case file. During the conference, discuss with the prosecutor all evidence and all bases for your conclusions. If there are strengths or issues in your case, bring them to the prosecutor's attention. Ask the prosecutor to review the questions that will be asked on the witness stand. Identify questions of which you do not have the answer to the prosecutor. Ask the prosecutor to review questions and challenges the defense attorney may use. Review your credentials and qualifications with the prosecutor.

If you cannot have a pretrial conference, try to identify the main points and weaknesses about the case and be sure to discuss these with the prosecutor during the few minutes you will have just before the trial.

Direct Testimony

- Describe in detail case facts, all observations, SFSTs clues/observations
- Be professional
- Use plain language
- Make eye contact with judge/jury
- Repeat important points

D. Guidelines for Direct Testimony

Your basic task is to establish the facts of the case:

- The subject was driving or in actual physical control of a vehicle on a highway or other specified location within the court's jurisdiction and was impaired by alcohol and/or other drugs.

In other words, to present evidence to establish reasonable suspicion for the stop, probable cause for the arrest, and conclusive evidence regarding every element of the offense.

Describe in a clear, detailed, and convincing manner all relevant observations during the three detection phases and those subsequent to the arrest. Describe clearly how the defendant performed (e.g., stepped off the line twice on steps 2 and 4, raised the arms on steps 5 and 7 going out and step 3 coming back, etc.). By presenting your observations clearly and convincingly, you will allow evidence of the defendant's impairment to speak for itself. Direct testimony should include all relevant information about this incident.

Always keep in mind juries typically focus on an officer's demeanor as much or more than on the content of the testimony. Strive to maintain your professionalism and impartiality. Be clear in your testimony, explain technical terms in layman's language, don't use jargon, abbreviations, acronyms, etc. Make eye contact with the judge/jury; they are the people you are trying to convince. Repeat important points and continued observations about the defendant.

Cross Examination

- Be polite
- Don't become agitated
- If you don't know the answer
 - ✓ Don't guess
 - ✓ "I don't know"

Cross Examination/Defense Challenges

In many cases, you will be the key witness for the prosecution. Therefore, the defense will try very hard to cast doubt on your testimony.

Be polite and courteous. Do not become agitated in response to questions by the defense. Above all, if you don't know the answer to a question, say so. Don't guess at answers or compromise your honesty in any way. Be professional and present evidence in a fair and impartial manner.

Defense Challenges

- **Your observations/interpretations**
- **Your credentials**



The defense will ask questions to challenge your observations and interpretations. For example, you may be asked whether the signs, symptoms, and behaviors you observed of the defendant could have been caused by an injury or illness or by something other than the alcohol/drugs. You will be asked questions to create doubt about your observations. Answer these questions honestly, but carefully. If your observations are not consistent with an illness or injury, explain why not. Clearly testify your opinion is based on everything observed during the DWI investigation.

The defense will attempt to challenge your credentials by asking questions to cast doubt on your formal training. They will ask questions to "trip you up" on technical or scientific issues. Answer all questions about your training and experience completely and accurately, but don't embellish. Answer scientific or technical questions only if you have been trained in that area.

Defense Challenges

- **Your credibility**
- **SFSTs**



DWI Detection and Standardized Field Sobriety Testing

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The defense will ask questions to challenge your credibility. You may be asked several very similar questions in the hope your answers will be inconsistent. You may be asked questions designed to imply you had already formed your opinion before the defendant completed the SFSTs. Listen to the questions carefully and emphasize your arrest decision was made at the completion of your DWI investigation and based on ALL available evidence.

You may be asked questions that suggest you deviated from your training. These questions may suggest you eliminated portions of the tests or gave incomplete or confusing instructions. One way you can refute these defense challenges is by administering the SFSTs as you were trained. If deviations to the protocol occur, it is important to explain why. Standardization ensures both consistency and credibility.

You may be asked questions that suggest the SFSTs are not relevant. These questions will suggest SFSTs have no relationship to driving. For example, a defense attorney may suggest standing on one leg does not correlate with the ability to drive safely. The divided attention tests assess the same mental and physical capabilities a person needs to drive safely. These include:

- Information processing
- Short term memory
- Judgment and decision making
- Balance
- Steady, sure reactions
- Clear vision
- Small muscle control
- Coordination of limbs

QUESTIONS?

Trial Tips and Techniques

Courtroom Decorum

1. TELL THE TRUTH. Honesty is the best policy. Telling the truth requires a witness testify accurately as to what he knows. If you tell the truth and are accurate, you have nothing to fear on cross examination.
2. Provide your professional Curriculum Vitae to the prosecutor and, if requested, bring it to court with you.
3. READ YOUR INCIDENT REPORT prior to arrival at court. Go over the details and refresh your memory of the events of the arrest. If you cannot locate a copy of your report, ask the prosecutor prior to the court date.
4. Dress neatly and professionally; leave sunglasses, gloves, flashlight and other cumbersome equipment in your car before coming into the courtroom, unless needed for a demonstration.
5. Do not guess the answer to any question asked. It is OKAY to say "I don't know" or "I can't remember" in response to questions. Do not give the impression that you are guessing the answer by prefacing your response with "I think" or "I believe." If you do not know the answer, it is okay to look at your report and refresh your memory. Always give definitive, positive, sure answers.
6. Listen carefully to the question asked. Do not begin your answer until the attorney has finished asking the question. Be sure you understand the question before you attempt to give an answer. It is appropriate if you don't understand the question to say "I don't understand your question." If necessary, ask that the question be repeated or rephrased.
7. Take your time. Do not feel pressured to give a quick answer. Take time after the question is asked to think before you answer. After a question is asked, there may be an objection. When you hear the word, "objection," stop testifying.
8. Answer the question that is asked, then stop. Do not volunteer information not asked. Explain an answer if you feel your answer appears ambiguous or incomplete. You are always permitted to explain your answer. Tell the prosecutor prior to your testimony if there is anything you feel they do not know about the case.
9. Always be professional in the courthouse. Jurors could be anywhere at any time.
10. Speak loud and clear so that you can be easily heard.
11. Look at the judge/jury when testifying. Always make eye contact with who you are trying to convince. During a bench trial, look at the judge. During a jury trial, look at the jury. This applies even when the attorney asking the question is not standing near the judge or jury box. Always talk to the judge or jury and maintain eye contact with them, even if it feels unnatural.

12. Always be courteous, even when the defense attorney is not. Control your emotions, and never allow yourself to be drawn into an argument. Remember, the best way to make a good impression with the judge/jury is to be courteous and professional. You were just doing your job during the arrest, and presenting the facts in court as they occurred.
13. Testify in plain language. Do not say, "The perpetrator exited the vehicle" when in reality "the defendant got out of his car." The person on trial is never a "lady" or "gentlemen," but is always "the defendant." Do not use military times without clarifying the time in laymen's terms. Do not use call signals. It makes more sense to the jury when you speak the same language they do.
14. It is the best practice to discuss the case with the prosecutor before trial. A defense attorney may ask if you've had a pretrial conference with the prosecutor. Tell the truth. Preparation for court is acceptable. Be straight forward in answering all questions.
15. Always tell the truth. No case is worth sacrificing your credibility.

Specific DWI Trial Recommendations

1. Never give the numerical PBT reading of the defendant when asked by the prosecutor. However, if the defense attorney asks you for the NUMERICAL reading, give it to him/her. The prohibition of PBT results of a defendant do not apply to witnesses, such as passengers in the car.
2. Discuss with the prosecutor, pre-trial, whether or not to demonstrate how you conducted field sobriety tests. Be certain that you can do in court all the tests you asked the defendant to perform at the time of the arrest. If you cannot do them, the jury will not expect that the defendant could have done them properly.
3. Know the reasons for giving field sobriety tests:
 - They are **divided attention tests**, designed to detect when a person is impaired by alcohol and/or drugs
 - They provide evidence of impairment in cases where the defendant refuses to take a chemical test under implied consent
 - They prevent an arbitrary decision to arrest, and allow an officer to articulate the reasons for concluding that a driver was DWI
4. If you testify to the accuracy of the field sobriety tests, make sure you know the studies, percentages, and their significance. Considered independently, the nystagmus test was 88% accurate, the Walk and Turn, 79% accurate, and the One Leg Stand, 83% accurate in identifying subjects whose BAC were .08 or more.
5. Remember, you should not testify that the defendant passed or failed the SFSTs. The tests are not scored "pass" or "fail." You should testify if the defendant completed the tests as instructed. These tests simply identify impairment.

Sample DWI Incident Report

Defendant: Jarod Primo
Age: 31
Date of Birth: 10/03/XX
Date of Arrest: XX-XX-XX
Time of Arrest: 9:20 pm
CA - D.L. #: CA 1234567

First Observations:

On XX-XX-XX at approximately 9:00 p.m., I was patrolling northbound on State Road 113, a four-lane divided highway, traveling toward Woodland, California in Yolo County. I observed a white sport utility vehicle traveling ahead of me northbound in the right lane of SR 113. I noticed the S/V drift outside of its travel lane to the left, crossing the line divider the entire width of its left side tires. The vehicle corrected its path, returned to the right lane, and then drifted to the left again. The left side tires again crossed completely over the center line before the vehicle corrected and returned to the right lane. As I moved closer to the vehicle, I noticed there was no license plate displayed on the rear of the S/V. I signaled for the vehicle to stop by activating my emergency lights. The driver did not respond for approximately 700-800 feet, so I activated an audible siren to alert the driver. After a few more seconds, the driver reacted to my signal and exited the freeway at exit 34, County Road 25A and crossed over the fog line. At the foot of the ramp the S/V did not stop at the stop sign or signal his turn, but rolled through it during a right turn onto CR 25A. The S/V made another right turn and came to a stop on County Road 100 approximately 300 feet south of CR 25A.

Observations After the Stop:

I approached the S/V on the passenger side and made contact with the driver who was the sole occupant. I immediately noticed the driver had red, bloodshot, watery eyes. I advised him of the reasons for the stop and asked if his vehicle had any mechanical problems. He stated, "no." I requested his driver's license, registration, and insurance. The driver handed me a visa credit card, which was removed from his wallet located in a storage pocket in the center of his vehicle dashboard. He did not attempt to produce his registration or insurance card. I asked him where he was coming from. He replied "Downtown," and that he had been "with some friends." I noticed his speech was slurred when he was speaking to me and I detected the odor of an alcoholic beverage that was greater when he spoke. I asked him where he was headed and he replied, "just going home." I informed him he had produced a credit card and asked again for him to produce his driver license. When he provided his driver license, I identified the driver by the photo on his California driver license (#CA1234567) as Jared Primo. I asked him how much alcohol he had consumed tonight and he replied "Just a couple of drinks." I asked him again for his registration and proof of insurance and he reached into his glove box and retrieved his vehicle registration.

I noticed his movements were uncoordinated as he leaned over and retrieved this document. I asked him to exit the vehicle and step to the front of his vehicle car. He asked "Why? What's going on?" I informed him I detected the odor of an alcoholic beverage coming from within the vehicle and I wanted to ensure he was safe to drive. He rolled his eyes and muttered "Whatever," but complied with my request. When he stepped from the vehicle he was unsteady on his feet and staggered slightly as he walked towards the front of the vehicle. I asked him several pre-field sobriety test questions. As I communicated with him, I continued to smell an odor of alcoholic beverage emitting from his breath. The defendant stated he had no mechanical problems with his vehicle, he was not sick or injured, and he had no physical problems. He stated he ate some pizza "a few hours ago," he was not aware of the location where we were stopped, and that he had consumed two beers between 2-3 hours ago when he was downtown. While questioning the defendant, he occasionally swayed forward and backward.

Field Sobriety Tests:

This evaluation was performed on the west shoulder of CR 100 Drive, just south of CR 25A. The evaluation surface was level packed dirt. Lighting conditions consisted of patrol vehicle headlights, spotlights, overhead lights, and my flashlight. The weather was clear with a slight breeze and Primo was wearing athletic shoes.

Horizontal Gaze Nystagmus (explained):

In checking Primo's eyes, I observed equal tracking in both eyes, equal pupil size in both eyes, and no resting nystagmus in either eye. I observed lack of smooth pursuit, distinct and sustained nystagmus at maximum deviation, and an onset of nystagmus prior to 45 degrees in both of Primo's eyes. Vertical Gaze Nystagmus was not observed.

Walk and Turn (explained and demonstrated):

Instruction Stage: Lost balance (feet broke apart) and swayed noticeably from side to side.

Walking Stage:

Raised left arm over 6 inches away from body to assist with balance at steps 3 and 5 during the first set of nine steps, and raised his right arm during the second set of steps from 3-8.

Missed heel to toe once (#6 during first set of nine steps).

Turn: Primo only took one step during the turn instead of several small steps as instructed.

One Leg Stand (explained and demonstrated):

Primo raised his right foot and began counting. He put his foot down on counts 1010 and 1014. He used his arms for balance (6+ inches from body) and was swaying while balancing on many occasions. He hopped on 1013. He counted to 1014 during the thirty seconds of the test.

Arrest:

Based on the following information, I formed the opinion that Primo was driving under the influence:

- Driving at night with no license plate
- Weaving out of his lane into another lane
- Driving to the right of the solid white fog line freeway
- Failing to stop for stop sign when exiting SR 113 at CR 25A
- I observed divided attention problems while retrieving his license/registration and insurance
- His red, bloodshot, watery eyes and slurred speech
- His admissions to consuming alcoholic beverages
- Staggering after exiting vehicle
- Odor of alcoholic beverage emitting from his breath
- I observed signs of impairment as he performed the standardized field sobriety tests

I arrested Primo for driving under the influence of an alcoholic beverage at 9:20 p.m. Primo was given the proper chemical testing advisement. He chose a breath test and was transported to the breath testing facility. He provided two breath samples of 0.095 and 0.092 at 9:50 p.m. and 9:52 p.m. He was then booked along with his property.

Recommendations:

I recommend a copy of this report be forwarded to the district attorney's office for review and prosecution of Primo for driving under the influence and driving with a blood alcohol concentration at or above the legal state limit.

Vehicle Disposition:

Primo's vehicle was stored by Reliable Towing.

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 13 – Moot Court



February 2018

Session 13

Moot Court



Learning Objectives

- **Discuss need for competent courtroom testimony**
- **Demonstrate proper techniques of courtroom testimony**



At the conclusion of this session, participants will be able to:

- Discuss the need for competent courtroom testimony
- Demonstrate the proper techniques of courtroom testimony

CONTENT SEGMENTS

- A. Procedures
- B. Moot Court Exercise

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant's Courtroom Testimony Exercise
- Instructor-Led Discussion

Courtroom Testimony

Prosecuting
the Impaired Driver
Arrest of Defendant
(Entire sequence)

A. Procedures

The purpose of this exercise is to have you demonstrate your ability to testify in a logical sequence to the evidence you collected during the three phases of DWI Detection with Report Writing video.

Session 13 - Moot Court

Moot Court Exercise

- Officers testify
- Refer to written reports if necessary
- Discussion

DWI Detection and Standardized Field Sobriety Testing 13-5

B. Moot Court Exercise

A representative from each group will be called to testify.
You should only testify to what you actually observed. You may refer to your written reports if necessary.

QUESTIONS?

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 14 – “Testing Subjects” Practice:
Second Session



February 2018

Session 14

"Testing Subjects" Practice: Second Session



Learning Objectives

- Properly administer SFSTs
- Properly observe and record subject's performance utilizing field note-taking guide
- Properly interpret subject's performance



At the conclusion of this session, participants will be able to:

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject's performance utilizing the field note-taking guide
- Properly interpret the subject's performance

CONTENT SEGMENTS

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

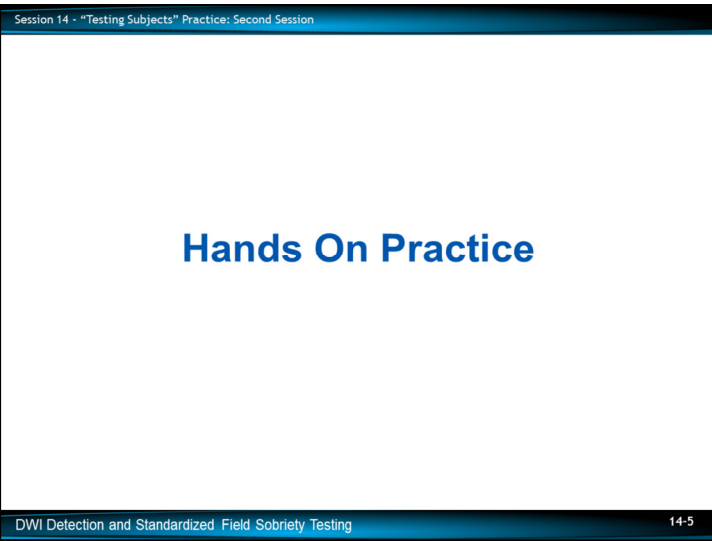
LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Discussion

Administer SFSTs

- **Volunteers who have consumed alcohol**
- **Each team member will administer one complete series of tests to at least one drinking volunteer**
- **Each team prepares a descriptive, written test record on each volunteer tested**

A. Procedures



B. Hands on Practice

Session Wrap Up

- **SFST results on each volunteer**
- **Observations concerning the relationship between volunteers' BACs and their performances on the tests**

C. Session Wrap Up

Sample Dry Erase Board Array for Tabulating Results

"Designated Subjects"	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
"A"				
"B"				
"C"				
"D"				
"E"				
"F"				
"G"				
"H"				
"I"				
"J"				

SFST Field Arrest Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest / Not Arrest	Measured BAC	Remarks

ALCOHOL WORKSHOP PARTICIPANT STATEMENT OF INFORMED CONSENT

I, _____, hereby agree to participate in the alcohol
(Print Name)

workshop conducted on ____/____/____ by _____.
(Agency/Department)

I understand that I will consume alcohol, and may become impaired or intoxicated. I specifically agree that my participation as a volunteer drinker in this program makes it imperative that I refrain from driving for at least twelve hours following completion of the program.

I understand that, while participating in the program, I will be required to submit to breath tests to determine my blood alcohol concentration. I also understand that I will be required to submit to psychophysical examinations and other non-intrusive clinical tests to assess the extent of my impairment.

I represent that I am in good physical health, and that I am not an alcoholic. I attest that I am not now under the influence of alcohol or any other drug. I attest that I have not consumed any drug, medication, or other substance that would make my consumption of alcohol at this time inadvisable. I affirm that there exists no condition that should preclude my participation in this alcohol workshop as a volunteer drinker.

I have been informed of the purpose of this workshop, namely, to assist in training police officers to recognize and investigate persons impaired by alcohol and other drugs. I acknowledge that I may refuse to consume any or all of the alcohol offered to me during this workshop. I also consent to being photographed or video recorded, by instructors, for training purposes only.

Signature

Date ____/____/____

Witness

VOLUNTEER DRINKER QUESTIONNAIRE

VOLUNTEER: _____

DATE: _____

LOCATION: _____

Wearing Glasses? Yes No

Wearing Contacts? Yes No

Eye Problems? _____

Sick or Injured? _____

Diabetic? _____

Epileptic? _____ Other: _____

Physical Defects? _____

Under Doctor's Care? _____

Taking Any Medications or Drugs? Yes No What: _____

Been Drinking? Yes No What: _____ When: _____

Last Sleep? _____

Number of Hours? _____

Last Ate – Time: _____ What: _____

Age _____ Eye Color _____

Height _____ Sex M F

Weight _____ Build _____

DOSING CHART

MIX: _____

TOTAL NUMBER OZ ETOH _____ TYPE _____ PROOF _____

	BEFORE DRINKING	PRE-TESTNG	POST TESTING
Lack of Smooth Pursuit	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Maximum Deviation	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Angle of Onset			
Pupil Size	MM	MM	MM
Pulse	BPM	BPM	BPM
Blood Pressure	/	/	/
BAC/Time	/	/	/

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 14-A – Dry Lab




February 2018

Session 14-A

Dry Lab



Learning Objectives

- Properly administer SFSTs
 - Properly observe and record subject's performance utilizing field note-taking guide
 - Properly interpret subject's performance
 - Properly use and maintain SFST Field Arrest Log
- 

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

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject's performance utilizing the field note-taking guide
- Properly interpret the subject's performance
- Properly use and maintain the SFST Field Arrest Log

CONTENT SEGMENTS

- A. Procedures
- B. Hands on Practice
- C. Use and Maintenance of SFST Field Arrest Log
- D. Session Wrap Up

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Presentation
- Instructor-Led Discussion

Procedures

- Same teams as dry run
- Each subject will be viewed performing all three tasks
- Only one opportunity to view each subject
- Record number of clues observed in appropriate boxes on video score worksheet

A. Procedures

Procedures

- Class will be divided into two groups
- One half will watch video subjects
- Other half will practice administration of SFSTs
- At conclusion of video, participants will switch roles

B. Hands on Practice



C. Use and Maintenance of SFST Field Arrest Log (the International Association of Chiefs of Police (IACP) strongly recommends the use of this log)

The SFST Field Arrest Log is used to record the results of the SFSTs performed on suspected impaired subjects.

This log is important in documenting an officer's experience and proficiency in performing and interpreting SFSTs.

It is highly recommended by the IACP and the National Highway Traffic Safety Administration (NHTSA), that officers utilize an SFST log for the following reasons

- Records training proficiency
- Records field proficiency
- Documents the officer’s experience

All of these combined helps to establish the officer’s credibility in administering the SFSTs and may be used as evidence in court.

SFST Field Arrest Log Components

- Actual date SFSTs were administered
- Subject's full name
- Results of each SFST test

This log has the following components:

- The actual date the SFSTs were administered
- Subject's full name
- Results of each SFST test

Classification of BAC as above or below 0.08 BAC

- Arrest/Not Arrest
- Subject's measured BAC (if available)
- Remarks

Utilization of Log

Team Reports

- Video subject observations
- Record results
- Comments?
- Questions?
- Observations?

D. Session Wrap Up

QUESTIONS?

**The Use of Video in Training for
Standardized Field Sobriety Tests (SFST)**

A. James McKnight and Elizabeth A. Langston

**National Public Services Research Institute
8201 Corporate Drive, Suite 220
Landover, MD 20785**

September 1993

TECHNICAL REPORT

NHTSA Contract No. DTNH22-92-C-05109

**Prepared for
U.S. Department of Transportation
National Highway Traffic Safety Administration
400 7th Street, S.W.
Washington, D.C. 20590**

Technical Report Documentation Page

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7. Author(s) A.J. McKnight and E.A. Langston		8. Performing Organization Report No.
9. Performing Organization Name and Address National Public Services Research Institute, 8201 Corporate Drive, Suite 220, Landover, MD 20745		10. Work Unit No. (TRAI5)
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		14. Sponsoring Agency Code
15. Supplementary Notes Dr. Richard Compton served as Contracting Officer's Technical Representative		

16. Abstract

The NHTSA training program to certify law enforcement officers in administration of SFSTs includes two “workshops” in which trainees administer sobriety tests to alcohol-dosed subjects has led to consideration of video as an alternative training method. A preliminary study showed that Certified SFST examiners scoring videotaped performance of alcohol-dosed subjects obtained the same results as examiners scoring the subjects directly. An experiment was therefore undertaken to compare three alternative methods of conducting training during the workshops: live alcohol-dosed subjects (alcohol), video-recorded performances of alcohol-dosed subjects (video), and a combination of the video and alcohol methods (video/alcohol). A total of 133 SFST trainees were randomly assigned to the three training methods. The results disclosed extremely small and statistically nonsignificant differences among the three workshop methods in the proficiency with which trainees administered and scored the SFST with alcohol-dosed subjects in a final performance test. It was concluded that video provides an acceptable alternative to live dosed subjects in training law enforcement officers to administer SFSTs.

17. Key Words

Alcohol, Drinking and Driving,
Sobriety Tests

18. Distribution Statement

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The Role of Video Training

The use of videos in Sessions XIA and XIVA is not intended to imply that video can serve as a “substitute” for training with live dosed subjects. However, a combination of practical and moral obstacles to use of alcohol-dosed subjects in training has threatened to prevent the administration of SFST courses in many jurisdictions. Here the choice is not between video and alcohol workshops but between video and no instruction at all. The results of this study clearly resolve that decision.

REMINDER: Only the NHTSA/IACP options videos are approved for this instruction.

The Conclusions of this Study

From the results of this study, the following conclusions may be offered:

1. Video administration of the SFST of alcohol-dosed subjects can be used as an alternative to the use of live alcohol-dosed subjects in either or both of the current training “workshops” without altering the ability of trainees to administer or score the test.
2. Current SFST training leads to significant gains in knowledge of administration procedures and scoring criteria. However, gains in scoring the Walk and Turn and One Leg Stand are minimal owing to the objectivity of the scoring criteria.
3. The only significant differences among approaches to teaching the workshop involve the direction of trainee scoring errors on the Walk and Turn and One Leg Stand, where trainees from the video workshop tend to report slightly fewer impairment clues than certified examiners, while those participating in either or both alcohol workshops tend to report more clues.

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Sample Dry Erase Board Array for Tabulating Results

"Designated Subjects"	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
"A"				
"B"				
"C"				
"D"				
"E"				
"F"				
"G"				
"H"				
"I"				
"J"				

SFST Field Arrest Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest / Not Arrest	Measured BAC	Remarks

Video Score Sheet

SUSPECT'S NAME: _____ OFFICER'S NAME: _____

Pupil Size: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	Tracking: <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	Unequal Pupil Size: Explain:	
Resting Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No	Eyelids: <input type="checkbox"/> Normal <input type="checkbox"/> Droopy		
Lack of Smooth Pursuit	Left Eye	Right Eye	Vertical Nystagmus <input type="checkbox"/> Yes <input type="checkbox"/> No
Distinct Nystagmus At Maximum Deviation			Eyes: <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery
Onset of Nystagmus Prior To 45 Degrees			


HGN CLUES

Observed	Actual

WALK AND TURN TEST

Cannot keep balance_ Starts too soon _____

WALK AND TURN



Stops Walking

Misses Heel-to-Toe

Steps Off Line

Uses Arms

Actual Steps Taken

1 st Nine	2 nd Nine

Observed	Actual

Improper Turn (Describe)	Cannot Do Test (explain)
--------------------------	--------------------------

Team Information

Team No: _____

Arrest Decision:

Yes: _____

No: _____

BAC:

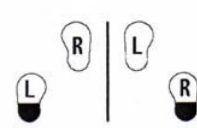
Above 0.10: _____

Below 0.10: _____

Above 0.08: _____

Below 0.08: _____

ONE LEG STAND



L

R

Sways while balancing

Uses arms to balance

Hopping

Puts foot down

ONE LEG STAND

Observed	Actual

DWI Detection
and
Standardized
Field Sobriety
Testing

Session 15 – Review and
Proficiency Examinations



February 2018

Session 15

Review and Proficiency Examinations



Learning Objective

- **Demonstrate knowledge and proficiency in administering SFSTs**



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

- Demonstrate knowledge and proficiency in administering the Standardized Field Sobriety Tests (SFSTs)

CONTENT SEGMENTS

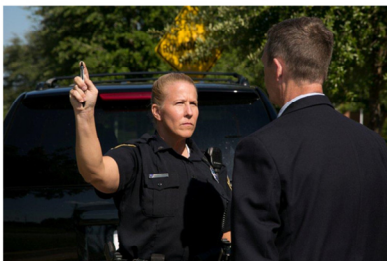
- A. Review of Horizontal Gaze Nystagmus (HGN)
- B. Review of Walk and Turn (WAT)
- C. Review of One Leg Stand (OLS)
- D. Video Demonstrations
- E. Proficiency Exam

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Instructor- and Participant-Led Demonstrations
- Video Demonstration (Second Showing (IF TIME PERMITS))
- Participant Proficiency Examination

HGN Review

Involuntary jerking of the eyes, occurring as the eyes gaze to the side



A. Review of Horizontal Gaze Nystagmus

Involuntary jerking of the eyes, occurring as the eyes gaze to the side.

The subject is generally unaware of the nystagmus.

Nystagmus is caused by alcohol and/or other drugs and some medical conditions.

Three Clues of HGN

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

Three specific clues of HGN.

Look for these clues in each eye:

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

Clue Number 1

Lack of Smooth Pursuit



Clue No. 1: Lack of Smooth Pursuit

Position stimulus approximately 12-15 inches (30-38 cm) in front of subject's nose, slightly above eye level.

Start with the left eye.

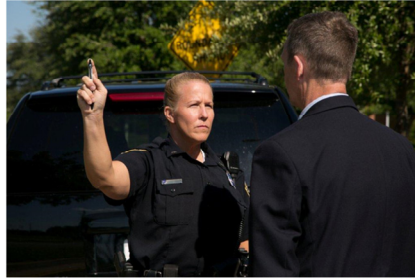
Move the stimulus smoothly all the way to the right (checking subject's left eye) then all the way to the left (across subject's nose) to the left (checking subject's right eye).

Make at least two complete passes.

Observe eyes for signs of nystagmus as they move side to side.

Clue Number 2

Distinct and Sustained Nystagmus at Maximum Deviation



Clue No. 2: Distinct and Sustained Nystagmus at Maximum Deviation

Move the stimulus to the right until the subject's left eye reaches maximum deviation.

Verify no white is showing in the corner of the eye.

Hold the stimulus steady for a minimum of four seconds and watch for distinct and sustained nystagmus.

Repeat for right eye.

Check each eye twice for each clue.

Clue Number 3

Onset of Nystagmus Prior to 45 Degrees



Clue No. 3: Onset of Nystagmus Prior to 45 Degrees

Position stimulus approximately 12-15 inches (30-38 cm) in front of subject's nose, slightly above eye level.

Begin to make a slow pass in front of the left eye.

When you see nystagmus, stop the stimulus.

Hold the stimulus steady and verify the nystagmus continues.

Verify there is still some white showing in the corner of the eye.

Repeat for right eye

Check each eye twice for each clue.

Administrative Procedures

- **Eyeglasses**
- **Verbal instructions**
 - ✓ Feet together, hands at sides
 - ✓ Head still
 - ✓ Look at stimulus
 - ✓ Follow movement with eyes
- **Position stimulus(12-15 inches)(30-38 cm)**
- **Pupil size and Resting Nystagmus**
- **Equal Tracking**

Nystagmus Administrative Procedures

Step 1: Check for Eyeglasses

Step 2: Verbal Instructions

- Feet together, hands at sides
- Head still
- Look at stimulus
- Follow movement with eyes

Step 3: Positioning the Stimulus

Step 4: Pupil Size and Resting Nystagmus

Step 5: Check for Equal Tracking

Administrative Procedures

- Check for Lack of Smooth Pursuit
- Check for Distinct and Sustained Nystagmus at Maximum Deviation
- Check for Onset of Nystagmus Prior to 45 Degrees
- Total the clues
- Check for VGN

-
- Step 6: Check for Lack of Smooth Pursuit
 - Step 7: Check for Distinct and Sustained Nystagmus at Maximum Deviation
 - Step 8: Check for Onset of Nystagmus Prior to 45 Degrees
 - Step 9: Total the clues
 - Step 10: Check for Vertical Gaze Nystagmus (VGN)

Check each eye independently beginning with the subject's left and compare.

HGN Test Criterion

4 or more clues indicates BAC above 0.08 (88% accurate).



Test Interpretation

Maximum possible number of clues is 6.

Test criterion is 4 or more.

Test is 88% accurate.

Based on the San Diego validation study.

Participant Led Demonstration

Test Administration

Verbal Instructions

Initial positioning of stimulus.

Check for each clue.

Estimate a 45 degree angle.

Critique

WAT

Divided Attention Mental Task and Physical Task

- Instruction stage
- Walking stage



B. Review Walk and Turn

Two Stage Test

1. Instruction stage
2. Walking stage

Instruction Stage Positioning

Place your right foot on the line ahead of the left foot, with the heel of your right foot against the toe of the left foot, keeping the arms at the sides.

Maintain this position until I have completed the instructions. Do not start until told to do so.

Administrative Procedures

Verbal instructions:

- Assume heel-to-toe stance
- Arms down at sides
- Don't start until told

9 heel-to-toe steps turn, 9 heel-to-toe steps

Turn procedures:

- Turn around on line
- Several small steps

Walk and Turn Administrative Procedures

Verbal instructions:

- Assume heel-to-toe stance
- Arms down at sides
- Don't start until told

9 heel-to-toe steps turn, 9 heel-to-toe steps

Turn procedures:

- Turn around on line
- Several small steps

Session 15 - Review and Proficiency Examinations

Administrative Procedures

While walking:

- Keep watching feet
- Arms down at sides
- Count steps out loud
- Don't stop during walk

DWI Detection and Standardized Field Sobriety Testing 15-14

WAT Administrative Procedures

While walking:

- Keep watching feet
- Arms down at sides
- Count steps out loud
- Don't stop during walk

WAT Test Clues

- **Cannot keep balance**
- **Starts too soon**
- **Stops while walking**
- **Does not touch heel-to-toe**

There are eight possible clues for the WAT test:

- Cannot keep balance (feet break away from the heel-to-toe stance)
- Starts too soon (subject starts walking before told to do so)
- Stops while walking
- Does not touch heel-to-toe

Session 15 - Review and Proficiency Examinations

WAT Test Clues

- Steps off line
- Uses arms for balance
- Improper turn
- Incorrect number of steps

DWI Detection and Standardized Field Sobriety Testing 15-16

- Steps off line
- Uses arms for balance
- Improper turn
- Incorrect number of steps

WAT Test Criterion

2 or more clues indicates BAC above 0.08 (79% accurate).



Test Interpretation

Eight specific clues of impairment.

Test criterion is 2 or more.

Test is 79% accurate.

Based on the San Diego validation study.

Participant Led Demonstration

Test Administration

Critique

OLS

Divided Attention Test Mental Task and Physical Task

- **Instruction stage**
- **Balance and counting stage**



C. Review of One Leg Stand

Two Stage Test

1. Instruction stage
2. Balance and Counting stage

Administrative Procedures

Instruction stage:

- **Stand straight, feet together**
- **Keep arms at sides**
- **Maintain position until told otherwise**

Stand with your feet together with your arms down at your sides.

Hold position until told to begin.

Administrative Procedures

Balance and counting stage:

- Raise either leg
- Keep raised foot approximately six inches (15 cm) off ground, foot parallel to the ground
- Keep both legs straight and arms at your side
- Keep eyes on raised foot
- Count out loud in the following manner: "One thousand one, one thousand two, one thousand three and so on", until told to stop

Simple verbal instructions:

- When I tell you to start, raise either leg with the foot approximately six inches off the ground, keeping your raised foot parallel to the ground
- Keep both legs straight and your arms at your side
- Keep both legs straight and to look at elevated foot
- Count out loud in the following manner: "one thousand one, one thousand two, one thousand three," and so on until told to stop

Simple physical demonstrations:

- Demonstrate OLS
- Demonstrate counting

OLS Test Clues

- **Sways while balancing**
- **Uses arms for balance**
- **Hopping**
- **Puts foot down**

Test Interpretation

There are four specific clues of impairment for the OLS test

- Sways while balancing
- Uses arms for balance
- Hopping
- Puts foot down

OLS Test Criterion

Two or more clues indicates BAC above
0.08 (83% accurate)



Test criterion is 2 or more.

Test is 83% accurate.

Based on the San Diego validation study

Participant Led Demonstration

Test Administration

Critique

Proficiency Examination

Demonstrate the ability to administer properly the three SFSTs

E. Proficiency Examination

Procedures

Administer Tests

- Horizontal Gaze Nystagmus
- Walk and Turn
- One Leg Stand

HGN

- Demonstrate ability to give proper verbal instructions
- Demonstrate ability to carry out the mechanics of testing for each clue
- Demonstrate ability to estimate a 45 degree angle

WAT

- Demonstrate ability to give proper verbal instructions
- Demonstrate ability to carry out appropriate physical demonstrations to support the verbal instructions

OLS

- Demonstrate ability to give proper verbal instructions
 - Demonstrate ability to carry out appropriate physical demonstrations to support the verbal instructions
-
-
-
-
-
-
-
-
-
-

Group Assignments

Group Assignments

Conduct Examinations

Re-Examinations

Re-examinations (as necessary)

QUESTIONS?

PARTICIPANT PROFICIENCY EXAMINATION

STANDARDIZED FIELD SOBRIETY TESTS

Name _____ Date _____/_____/_____

Agency _____

I. HORIZONTAL GAZE NYSTAGMUS

1. ___ Have subject remove glasses if worn.
2. ___ Stimulus held in proper position (approximately 12"-15" from nose, just slightly above eye level).
3. ___ Check for equal pupil size and resting nystagmus.
4. ___ Check for equal tracking.
5. ___ Smooth movement from center of nose to maximum deviation in approximately 2 seconds and then back across subject's face to maximum deviation in right eye, then back to center. Check left eye, then right eye. (Repeat)
6. ___ Eye held at maximum deviation for a minimum of 4 seconds (no white showing). Check left eye, then right eye. (Repeat)
7. ___ Eye moved slowly (approximately 4 seconds) from center to 45 angle. Check left eye, then right eye. (Repeat)
8. ___ Check for Vertical Gaze Nystagmus. (Repeat)

II. WALK AND TURN

1. ___ Instructions given from a safe position.
2. ___ Tells subject to place feet on a line in heel-to-toe manner (left foot behind right foot) with arms at sides and gives demonstration.
3. ___ Tells subject not to begin test until instructed to do so and asks if subject understands.
4. ___ Tells subject to take nine heel-to-toe steps on the line and demonstrates.
5. ___ Explains and demonstrates turning procedure.
6. ___ Tells subject to return on the line taking nine heel-to-toe steps.
7. ___ Tells subject to count steps out loud.
8. ___ Tells subject to look at feet while walking.
9. ___ Tells subject not to raise arms from sides.
10. ___ Tells subject not to stop once they begin.
11. ___ Asks subject if all instructions are understood.

III. ONE LEG STAND

1. ___ Instructions given from a safe position.
2. ___ Tells subject to stand straight, place feet together, and hold arms at sides.
3. ___ Tells subject not to begin test until instructed to do so and asked if subject understands.
4. ___ Tells subject to raise one leg, either leg, approximately 6" from the ground, keeping raised foot parallel to the ground, and gives demonstration.
5. ___ Tells subject to keep both legs straight and to look at elevated foot.
6. ___ Tells subject to count out loud in the following manner: one thousand one, one thousand two, one thousand three, and so on until told to stop, and gives demonstration.
7. ___ Checks actual time subject holds leg up. (Time for 30 seconds.)

Instructor: _____

Note: In order to pass the proficiency examination, the student must explain and proficiently complete each of the steps listed.

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DWI Detection
and
Standardized
Field Sobriety
Testing

Session 16 – Written Examination
and Program Conclusion



February 2018

Session 16

Written Examination and Program Conclusion



Learning Objectives

- Complete written examination with passing grade
- Provide comments and suggestions for improving course



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

- Complete a written examination with a passing grade
- Provide comments and suggestions for improving the course

CONTENT SEGMENTS

- A. Post Test
- B. Critique
- C. Review of Post Test
- D. Concluding Remarks
- E. Certificates and Dismissal

LEARNING ACTIVITIES

- Written Participant Examination
- Written Participant Critique
- Instructor-Led Presentation

Deterrence and DWI

- What approximate percentage of fatal crashes involve drivers who have been drinking?
- On any typical weekend night, approximately what percentage of cars are driven by persons who are DWI?

Suggested topics for review to prepare for the test.

Deterrence and DWI

- Approximately what percentage of fatal crashes involve drivers who have been drinking?

- On any typical weekend night, approximately what percentage of cars are driven by persons who are DWI?

Detection Phases

- What are the three phases of detection?
- What is the definition of "DWI detection"?
- What is the police officer's principal decision during Detection Phase One?

Detection Phases

- What are the three phases of detection?

- What is the definition of "DWI detection"?

- What is the police officer's principal decision during Detection Phase One?

Laws

- What does "Per Se" mean?
- The "illegal per se" law makes it an offense to operate a motor vehicle while _____.
- True or False: The implied consent law states suspected DWI drivers are deemed to have given their consent to submit to chemical testing.
- True or False: A person cannot be convicted of DWI if BAC was below 0.05.

Laws

- What does "Per Se" mean?

- The "illegal per se" law makes it an offense to operate a motor vehicle while

- True or False: The implied consent law states suspected DWI drivers are deemed to have given their consent to submit to chemical testing.

- True or False: A person cannot be convicted of DWI if BAC was below 0.05.

Alcohol Physiology

- **True or False: Alcohol is the most abused drug in the United States.**
- **Name three of the more commonly known alcohols.**

Alcohol Physiology

- True or False: Alcohol is the most abused drug in the United States.

- Name three of the more commonly known alcohols.

Field Sobriety Testing

- What does "nystagmus" mean?
- WAT is an example of a _____ attention test
- Name the eight distinct clues of WAT
- Name the four distinct clues of OLS
- Name the three distinct clues of HGN

Field Sobriety Testing

- What does "nystagmus" mean?

- Walk and Turn (WAT) is an example of a _____ attention test.
- Name the eight distinct clues of WAT.

- Name the four distinct clues of One Leg Stand (OLS).

- Name the three distinct clues of Horizontal Gaze Nystagmus (HGN).

Field Sobriety Testing

- What is the critical angle for determining whether the third clue of HGN is present?
- How many steps in each direction must the subject take in the WAT test?
- How long must the subject stand on one foot in the OLS test?

-
- What is the critical angle for determining whether the third clue of HGN is present?

- How many steps in each direction must the subject take in the WAT test? _____

- How long must the subject stand on one foot in the OLS test?

Course Critique

B. Critique

Purpose of the critique form: To identify possible improvements that can and should be made to this program.

Session 16 - Written Examination and Program Conclusion

Review of Post Test

DWI Detection and Standardized Field Sobriety Testing 16-15

C. Review of Post Test

If passing score is not achieved, participant(s) will be allowed to take a “make up” exam at a future date not less than fifteen days nor more than 30 days from the completion of the course.

Job Performance Objectives

You will become better able to:

- Recognize and interpret evidence of DWI violations
- Administer and interpret validated psychophysical SFSTs
- Describe DWI evidence clearly and convincingly

E. Certificates and Dismissal

QUESTIONS?

DWI Detection and SFST – Course and Instructor Evaluation

For items 1-6, please select your level of agreement with the following statements. Include any additional information in the space provided.

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. This course enabled me to understand enforcement’s role in general DWI deterrence. Comments: _____ _____	○	○	○	○	○
2. This course enabled me to understand the detection phases. Comments: _____ _____	○	○	○	○	○
3. This course enabled me to understand the requirements for organizing and presenting testimonial and documentary evidence in DWI cases. Comments: _____ _____	○	○	○	○	○
4. This course enabled me to improve my ability to recognize and interpret evidence of DWI violations. Comments: _____ _____	○	○	○	○	○
5. This course enabled me to administer and interpret validated psychophysical tests to DWI subjects. Comments: _____ _____	○	○	○	○	○
6. This course enabled me to improve my ability to describe DWI evidence clearly and convincingly in written reports and verbal testimony. Comments: _____ _____	○	○	○	○	○

Please rate how helpful each workshop session was for you personally.

Item	Poor	Fair	Good	Very Good	Excellent
Detection and General Deterrence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Legal Environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overview of Detection, Note Taking and Testimony	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phase One: Vehicle in Motion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phase Two: Personal Contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phase Three: Pre-Arrest Screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concepts and Principles of Standardized Field Sobriety Tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Test Battery Demonstrations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
“Dry Run” Practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
“Drinking Subjects” Practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Processing the Arrested Subject and Preparation for Trial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Report Writing Exercise and Moot Court	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please mark the appropriate word to indicate your agreement or disagreement with each of the following statements.

Item	Agree	Disagree	Not Sure
The program contains some information that is not needed and that should be deleted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are some important topics missing from the program that should be added.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The program is too short.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel this program has improved my own ability to enforce DWI laws.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The instructors did a good job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very glad I attended the program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The program is too long.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The instructors should have been better prepared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel fully qualified to use the nystagmus test now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Item	Agree	Disagree	Not Sure
I feel fully qualified to use the two divided attention tests now.	0	0	0
Too much time was spent practicing with drinking volunteers.	0	0	0
These three new tests definitely will improve our ability to identify impaired drivers.	0	0	0
I wish we had more practice with drinking volunteers.	0	0	0

If you absolutely had to delete one session or topic from this course, what would it be?

If you could add one new topic or session to this course, what would it be?

	Poor	Fair	Good	Very Good	Excellent
Please rate the overall quality of the course.	0	0	0	0	0

Please rate your instructors for this course. Rate the instructor(s) by selecting the appropriate response:

Instructor Name	Poor	Below Average	Average	Above Average	Excellent
Comments: _____ _____	0	0	0	0	0
Comments: _____ _____	0	0	0	0	0
Comments: _____ _____	0	0	0	0	0
Comments: _____ _____	0	0	0	0	0
Comments: _____ _____	0	0	0	0	0

Name (optional): _____

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DWI Detection
and
Standardized
Field Sobriety
Testing

Introduction to Drugged Driving



February 2018

Introduction to Drugged Driving



Learning Objectives

- Define term "drug"
- Describe drug involvement in motor vehicle crashes
- Name categories of drugs



At the conclusion of this session, participants will be able to:

- Define the term "drug"
- Describe in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and in DWI enforcement
- Name the categories of drugs

Learning Objectives

- Describe signs associated with drug categories
- Describe medical conditions
- Describe procedures for dealing with drug- or medically-impaired subjects



Learning Objectives

- Describe the observable signs usually associated with the drug categories
- Describe medical conditions and other situations that can produce similar signs
- Describe appropriate procedures for dealing with drug- or medically-impaired subjects

CONTENT SEGMENTS

- A. Overview
- B. Eye Examinations: Detecting Signs of Drug Influence
- C. Medical Conditions That May Mimic Drug Impairment
- D. Drug Categories and Their Observable Effects
- E. Combination of Drugs
- F. Dealing with Suspected Drug Influence or Medical Impairment

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice

Session Purpose

Improve your ability to recognize suspects who may be medically impaired or impaired by drugs other than alcohol and, when you encounter such suspects, take appropriate action.

A. Overview

The purpose of this session is to improve your ability to recognize suspects who may be medically impaired or impaired by drugs other than alcohol and, when you encounter such suspects, take appropriate action.

Alcohol certainly remains the most frequently abused drug and most impaired drivers are under the influence of alcohol

Many other drugs also are routinely abused by many drivers.

It is highly likely every experienced DWI enforcement officer has encountered at least some drivers who were under the influence of drugs other than alcohol.

Depending upon the specific types of drugs they have taken, some drug-impaired drivers may look and act quite a bit like persons who are under the influence of alcohol, but others will look and act very differently from alcohol-impaired drivers.

It is important you be able to recognize subjects who may be under the influence of other drugs, so you will know when to summon assistance from physicians or other appropriate persons or trained Drug Recognition Experts (DREs).

What is a “Drug”?

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

A Simple, Enforcement-Oriented Definition of Drugs

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

(Working definition derived from the 1985 California Vehicle Code.)

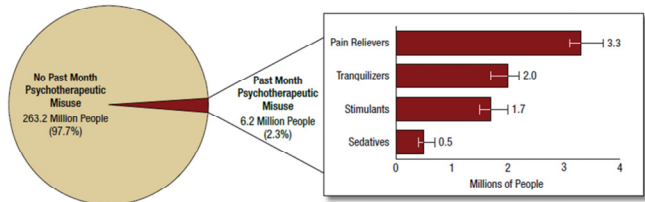
This definition includes some substances physicians don't usually think of as drugs.

Within this simple, 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.

Alcohol and Drug Use



NSDUH provides additional details on drugs used within the past 30 days in a manner other than prescription:

Type	Number of Users
Cocaine	1.9 Million
Hallucinogens	1.4 Million
Psychotherapeutics	6.2 Million
Pain Relievers	3.3 Million
Tranquilizers	2.0 Million
Stimulants	1.7 Million
Sedatives	0.5 Million

Session Overview – Introduction to Drugged Driving

Eye Examinations: Detecting Signs of Drug Influence



DWI Detection and Standardized Field Sobriety Testing Intro-11

B. Eye Examinations: Detecting Signs of Drug Influence

The eyes can disclose indicators of drug impairment or medical conditions.

Horizontal Gaze Nystagmus (HGN) is an excellent indicator of possible alcohol impairment.

There are a number of drugs other than alcohol that can cause HGN.

There are a number of other drugs that will not cause HGN.

There are many other clues the eyes will disclose, all of which will suggest the presence or absence of drugs or medical impairment.

Gaze Nystagmus

- **Resting Nystagmus – Occurs as eyes gaze straight ahead**
- **HGN**
- **VGN**

Gaze Nystagmus

Resting Nystagmus is defined as the involuntary jerking of the eyes as they gaze straight ahead. This condition is not frequently observed. Its presence may indicate Dissociative Anesthetic usage, high levels of an impairing substance for that subject or certain medical problem. If detected, take precautions. As always, exercise sound officer safety techniques and consider calling for medical aid.

During this course we will focus on two types of nystagmus:

- **HGN**
 - Occurs as the eyes move to the side
 - Useful in determining alcohol influence as well as some drug categories
- **Vertical Gaze Nystagmus (VGN)**
 - Occurs as the eyes move upward (vertical plane) to an elevated position as far as they can go
 - Associated with a high doses of alcohol and some drug categories for that individual
 - There is no known drug that will cause VGN without causing at least four clues of HGN

Resting Nystagmus



Resting Nystagmus

Sometimes persons impaired by Dissociative Anesthetics will exhibit Resting Nystagmus, i.e., the eyes jerk while they are looking straight ahead.

HGN



Horizontal Gaze Nystagmus

HGN is defined as the involuntary jerking of the eyes as they gaze toward the side. (As defined in the current SFST curriculum.)

Although this type of nystagmus is useful in determining alcohol influence, its presence may also indicate use of Central Nervous System (CNS) Depressants, Inhalants, and Dissociative Anesthetics (DID drugs).

HGN becomes observable:

- When a subject is impaired by alcohol
- As the subject's BAC increases the jerking will appear sooner
- When a subject is impaired by DID drugs

VGN



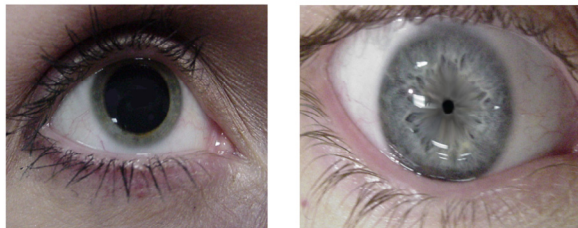
Vertical Gaze Nystagmus

The VGN test is very simple to administer.

- Position the stimulus horizontally. Approximately 12-15 inches (30-38 cm) in front of the subject's nose
- Instruct the subject to hold their head still and follow the stimulus with the eyes only
- Raise the stimulus until the subject's eyes are elevated as far as possible, hold for a minimum of four seconds
- Watch closely for evidence of jerking (up and down).

VGN may be present in subjects under the influence of CNS Depressants, Dissociative Anesthetics, or Inhalants.

Pupil Size Observations



Pupil Size Observations

- The pupil is basically a circular hole in the middle of the iris, which regulates the amount of light that passes through into the retina
- The pupils of the eyes continually adjust in size to accommodate different lighting conditions and refocus according to focal length
- When placed in a darkened environment, the pupils will normally expand in size, or dilate, to allow the eyes to capture as much light as possible
- When the lighting conditions are very bright, the pupils will normally shrink or constrict, to limit the amount of light that passes through and to keep the eyes from being over stimulated

Session Overview – Introduction to Drugged Driving

Medical Conditions That May Mimic Drug Impairment

- Head Trauma
- Stroke
- Diabetes
- Conjunctivitis
- Shock
- Multiple Sclerosis
- Other Conditions

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C. Medical Conditions That May Mimic Drug Impairment

There are various medical conditions and injuries that may cause subjects to appear to be impaired by alcohol and/or other drugs.

Some of the more common medical conditions that may mimic drug impairment include:

- Head Trauma
- Stroke
- Diabetes
- Conjunctivitis
- Shock
- Multiple Sclerosis
- Other Conditions

Methods of Ingestion



D. Drug Categories and Their Observable Effects

Methods of Ingestion

Oral

Oral ingestion is administered through the mouth.

Injection

- Is a common method of administering drugs, such as heroin (narcotic analgesic)
- Is also used to introduce Stimulants, Hallucinogens, Dissociative Anesthetics, and other Narcotic Analgesics into the body
- CNS Depressants can also be injected but this is not common due to the size of the needle required to deliver the substance

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

Methods of Ingestion (Continued)



Insufflation

The act of introducing a substance by inhaling through the nose for the purpose of intranasal absorption through the mucous membrane.

For a substance to be effective when insufflated it must be in a water soluble powder so it can be readily absorbed through the mucous membranes.

This method is commonly referred to as “snorting”.

Inhalation

The act of introducing a substance directly into the respiratory system through the nose and mouth for the purpose of absorbing the substance through the alveoli in the lungs.

This is a very rapid method of absorption and is often referred to as huffing, sniffing, or smoking.

Transdermal Absorption

A less common method of administering drugs. Transdermal means the chemical or drug is absorbed into a subject’s system through the skin.

Drug Categories and Their Observable Effects

- **CNS Depressants**
- **CNS Stimulants**
- **Hallucinogens**
- **Dissociative Anesthetics**
- **Narcotic Analgesics**
- **Inhalants**
- **Cannabis**

Seven Categories of “Drugs”

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

Within this simple, enforcement-oriented definition there are seven categories of drugs:

- CNS Depressants
- CNS Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

CNS Depressants

- Alcohol
- Barbiturates (Secobarbital)
- Non barbiturates (GHB/Soma)
- Anti-Anxiety Tranquilizers (Valium/Xanax)
- Antidepressants (Prozac/Elavil)
- Muscle relaxants



CNS Depressants

CNS Depressants slow down the operations of the brain and usually depress the heartbeat, respiration, and many other processes controlled by the brain.

The most familiar CNS Depressant is alcohol.

Other CNS Depressants include:

- Barbiturates (such as Secobarbital (Seconal), and Pentobarbital (Luminal))
- Non-Barbiturates (GHB-gamma-hydroxybutyrate and Soma)
- Anti-Anxiety Tranquilizers (Such as Valium, Librium, Xanax, and Rohypnol)
- Antidepressants (such as Prozac and Elavil)
- Muscle relaxants and many other drugs (Soma)

CNS Depressants usually are taken orally, in the form of pills, capsules, liquids, etc. However, CNS Depressants may be injected or insufflated.

In general, people under the influence of any CNS Depressant look and act like people under the influence of alcohol.

Indicators of CNS Depressant Influence



General indicators of CNS Depressant influence are:

- “Drunken” behavior and appearance
- Uncoordinated
- Drowsy
- Sluggish
- Disoriented
- Thick, slurred speech
- Unsteady, staggering (Gait Ataxia)

Eye indicators of CNS Depressant influence are:

- HGN usually will be present
- VGN may be present (with high doses)
- Pupil size usually will not be effected, except Methaqualone, Soma, and certain antidepressants may cause pupil dilation

CNS Stimulants

- Cocaine
- Amphetamines
- Methamphetamine



CNS Stimulants

CNS Stimulants accelerate the heart rate, respiration, and many other processes of the body.

The two most widely abused kinds of CNS Stimulants are Cocaine and methamphetamines.

Cocaine is made from the leaves of the coca plant.

Methamphetamines are chemically produced (manufactured) drugs.

Cocaine abusers may take the drug:

- By insufflation
- By smoking (freebase, or “Crack”)
- By injection
- Orally

Abusers of amphetamines and methamphetamines may take their drugs:

- By injection
- Orally
- By insufflation
- Smoked (methamphetamines only)

Indicators of CNS Stimulant Influence

- **Hyperactive**
- **Nervousness**
- **Talkative**



General indicators of CNS Stimulant influence:

People under the influence of CNS Stimulants tend to be hyperactive indicated by nervousness, extreme talkativeness, and an inability to sit still. They also are usually unable to concentrate or to think clearly for any length of time.

- Restlessness
- Talkative
- Excitation
- Euphoria
- Exaggerated reflexes
- Loss of appetite
- Anxiety
- Grinding teeth (bruxism)
- Redness to nasal area (if “snorting”)
- Body tremors

Eye indicators of CNS Stimulant influence:

- Neither HGN nor VGN will be observed
 - The pupils generally will be dilated
-
-
-
-
-
-
-

Hallucinogens

- **Peyote**
- **Salvia Divinorum**
- **LSD**
- **MDMA (Ecstasy)**



Hallucinogens

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

One common type of hallucination caused by these drugs is called synesthesia, which means a transposing of the senses.

Sounds, for example, may be transposed into sights.

Sights, for example, may be transposed into odors or sounds.

Some hallucinogenic drugs come from natural sources:

- Peyote is a Hallucinogen found in a particular species of cactus
- Psilocybin is a Hallucinogen found in a number of species of mushroom

Other Hallucinogens are synthetically manufactured:

- Lysergic Acid Diethylamide (LSD)
- 3,4-Methylenedioxyamphetamine (MDA)
- 3,4-Methylenedioxymethamphetamine or Ecstasy (MDMA)
- Many others

Indicators of Hallucinogen Influence

- Hallucinations
- Dazed appearance
- Body tremors
- Uncoordinated
- Perspiring
- Disoriented
- Paranoia
- Difficulty in speech
- Nausea
- Piloerection
(goose bumps)

General indicators of Hallucinogen influence:

Hallucinogen abusers usually take their drugs orally; however, some Hallucinogens can be smoked, injected or “snorted”.

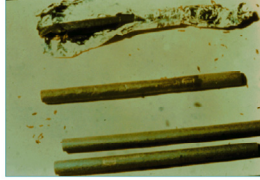
- Hallucinations
- Dazed appearance
- Body tremors
- Uncoordinated
- Perspiring
- Disoriented
- Paranoia
- Difficulty in speech
- Nausea
- Piloerection (goose bumps)

Eye indicators of Hallucinogen influence:

- Neither HGN nor VGN should be present
- The pupils usually will be noticeably dilated

Dissociative Anesthetics

- PCP
- Ketamine
- DXM



Dissociative Anesthetics

Dissociative Anesthetics is the category of drugs that includes Phencyclidine (PCP), its various analogs, and Dextromethorphan (DXM).

PCP is a synthetic drug first developed as an intravenous anesthetic.

Because PCP produces very undesirable side effects, it is no longer legally manufactured. However, an analog (chemical cousin) Ketamine is still being legally manufactured and available.

However, it is easy to manufacture:

- The formula for making PCP and PCP analogs have been widely publicized
- The manufacturing process involves readily-available chemicals

Many Dissociative Anesthetic users smoke the drug by using it to adulterate tobacco, marijuana, or various other substances.

Dissociative Anesthetics can also be taken orally, by injection, or inhaled.

Indicators of Dissociative Anesthetic Influence

- Warm to touch
- Perspiring
- Blank stare
- Repetitive speech
- Incomplete verbal responses
- Confused
- Muscle rigidity
- Possibly violent and combative



General indicators of Dissociative Anesthetics:

Dissociative Anesthetics can also be taken orally, by injection, or inhaled.

- Warm to the touch
- Perspiring
- Blank stare
- Repetitive speech
- Incomplete verbal responses
- Confused
- Muscle rigidity
- Possibly violent and combative

Eye Indicators of Dissociative Anesthetic influence:

- HGN generally will be present often with very early onset and very distinct jerking (rarely, Resting Nystagmus may be observed with high doses of dissociative anesthetics)
- VGN generally will be present
- Pupil Size usually will not be effected

Narcotic Analgesics

- Heroin
- Morphine
- Codeine
- Synthetic Opiates (e.g., Methadone, Fentanyl)

Narcotic Analgesics

Narcotic Analgesics include a large number of drugs that share three important characteristics:

- They will relieve pain
- They will produce withdrawal signs and symptoms when the drug is stopped after chronic administration
- They will suppress the withdrawal signs and symptoms of chronic morphine administration

Some drugs classified as Narcotic Analgesics are natural derivatives of opium:

- Heroin
- Morphine
- Codeine
- OxyContin

Some are synthetic Narcotic Analgesics, such as:

- Methadone
 - Demerol
 - Fentanyl
-
-
-
-
-
-
-

Indicators of Narcotic Analgesic Influence

- “On the nod”
- Droopy eyelids
- Depressed reflexes
- Dry mouth
- Facial itching
- Low, raspy speech
- Fresh puncture marks may be evident



General indicators of Narcotic Analgesic influence:

- “On the nod”
- Droopy eyelids
- Depressed reflexes
- Dry mouth
- Facial itching
- Low, raspy speech
- Fresh puncture marks may be evident

Eye indicators of Narcotic Analgesic influence:

- Neither HGN nor VGN will be present
- Pupils generally will be constricted

Session Overview – Introduction to Drugged Driving

“Tolerance”

- **Important characteristic of Narcotic Analgesics**
- **Same dose of drug will produce diminishing effects or a steadily larger dose is needed to produce the same effects**

DWI Detection and Standardized Field Sobriety Testing Intro-33

Tolerance

An important characteristic of Narcotic Analgesics is users develop tolerance to them.

“Tolerance” means the same dose of the drug will produce diminishing effects or a steadily larger dose is needed to produce the same effects.

A tolerant user who has taken his or her “normal” dose of Heroin, for example, may exhibit little evidence of divided attention impairment.

Inhalants

- Various glues
- Paint
- Gasoline
- Aerosol sprays
- Nitrous Oxide
- Ether
- Amyl Nitrite



Inhalants

Inhalants are breathable chemicals that produce mind-altering results.

Inhalants include many familiar household materials such as glue (“Toluene”), paint, gasoline, aerosol sprays, etc. that produce volatile fumes.

Some drugs classified as Inhalants include:

- Various glues (e.g. Toluene)
- Paint
- Gasoline
- Aerosol sprays (i.e., vegetable frying pan lubricants, hair sprays, insecticides)
- Nitrous Oxide
- Ether
- Amyl Nitrite

Certain anesthetics also may be used as Inhalants.

Indicators of Inhalant Influence

- **Disoriented**
- **Slurred speech**
- **Residue of substance**
- **Confusion**
- **Possible nausea**



General indicators of Inhalant influence:

- Disoriented
- Slurred speech
- Residue of substance on face, hands, clothing
- Confusion
- Possible nausea

Eye indicators of Inhalant influence:

- HGN generally will be present
- VGN may be present (especially with high doses)
- Pupil size generally will not be affected

Cannabis

- **Marijuana**
- **Hashish**
- **Hash oil**
- **Synthetic Cannabinoids**
- **Other forms of Cannabis**



Cannabis

Cannabis is a category of drugs derived from various species of plants such as the Cannabis Sativa and Cannabis Indica.

- Marijuana
- Hashish
- Hash oil
- Synthetic Cannabinoids
 - Marinol or Dronabinol
 - Spice, K2, JWH-18, etc.

Other forms of Cannabis include edibles, butane hash oils (wax), etc.

Cannabis products generally are smoked although they also can be ingested orally.

Indicators of Cannabis Influence

- Bloodshot eyes
- Body tremors
- Odor of marijuana
- Disoriented
- Relaxed inhibitions
- Difficulty in dividing attention



General Indicators of Cannabis Influence:

- Bloodshot eyes
- Body tremors
- Odor of marijuana
- Disoriented
- Relaxed inhibitions
- Difficulty in dividing attention

Eye indicators of Cannabis Influence:

- Neither HGN nor VGN will be present
- Pupil size generally will be dilated, but also may not be affected

Session Overview – Introduction to Drugged Driving

Common Combinations of Drugs



Alcohol and some other drug



PCP and Cannabis



Cocaine and Heroin

DWI Detection and Standardized Field Sobriety Testing
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Common Combinations of Drugs

- Alcohol and some other drug is the most frequent combination
- PCP and Cannabis is another common combination
- Cocaine and Heroin is another common combination

Because polydrug use is so common, you should not be surprised to encounter subjects who are under the influence of more than one category of drugs.

At some times and places polydrug users may be more common than single drug users.

Be especially alert to the possibility subjects who have been drinking alcohol may also have ingested some other drug or drugs.

The effects of polydrug use may vary widely depending on exactly what combination of drugs is involved, how ingested, and when they were ingested.

Possible Effects of Drug Combinations

- Null
- Overlapping
- Additive
- Antagonistic

Any particular combination of drugs may produce four general kinds of effects:

- Null: Neither drug has an effect on the indicator.
- Overlapping: Each drug may effect the subject in some different way. In combination, both effects may appear.
- Additive: The two drugs may independently produce some similar effects. In combination, these effects may be enhanced.
- Antagonistic: The two drugs may produce some effects that are exactly opposite. In combination, these effects may mask each other.

Session Overview – Introduction to Drugged Driving

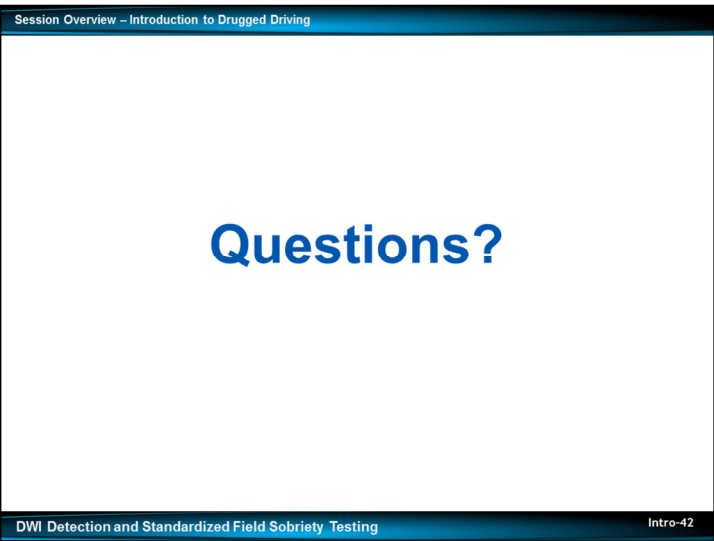
Dealing With Suspected Drug Influence or Medical Impairment

DWI Detection and Standardized Field Sobriety Testing Intro-41

F. Dealing With Suspected Drug Influence or Medical Impairment

Officers should be familiar with the various medical conditions that mimic drug impairment, i.e. diabetic shock and hypoglycemia. Officers should obtain appropriate medical treatment for drivers who are impaired by these conditions.

Drivers who are suspected of drug impairment should be processed in accordance with state and local laws. Wherever possible, a local DRE should be summoned to assist with the investigation.



Closing

Consult with a DRE, if possible and document in detail all observations.

Although this course is not designed to qualify you as a DRE, it is intended to make you more knowledgeable when encountering drivers impaired by substances other than alcohol.
