Participant Manual

DWI Detection and Standardized Field Sobriety Testing (SFST) Refresher

Revised: 02/2018
SESSION 1: INTRODUCTION AND OVERVIEW

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

• State the goals and objectives of the training
• Describe the training schedule and activities
• Describe the current DWI problem
• Identify the elements of the drug problem
• Define and describe impaired driving enforcement programs
• Understand the roles and responsibilities of the Drug Recognition Expert (DRE) and how this course supports the Drug Evaluation and Classification (DEC) Program
• Define the term drug in the context of traffic safety and impaired driving enforcement as referenced in the DEC Program

CONTENT SEGMENTS
A. Welcoming Remarks and Objectives
B. Administrative Details
C. Driving Under the Influence
D. Impaired Driving Enforcement System
E. DWI Detection and Standardized Field Sobriety Testing Program
F. Drugs and Highway Safety
G. Pre-Test
A. Welcoming Remarks and Objectives
Upon successfully completing this session, the participant will be able to:

- State the goals and objectives of the training
- Describe the training schedule and activities
- Describe the current DWI problem
- Identify the elements of the drug problem
• Define and describe impaired-driving enforcement programs
• Understand the roles and responsibilities of the DRE and how this course supports the DEC Program

B. Administrative Details
• Training schedule (breaks, etc.)
• Facilities (restrooms, lunchroom, etc.)
• Logistics (travel vouchers, etc.)
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.
C. Driving Under the Influence

Overview of the DWI Problem
• In 2016, 10,497 people were killed in alcohol-impaired crashes

• These fatalities accounted for 28 percent of the total motor vehicle traffic fatalities in the United States

• The 10,497 fatalities represent an average of one alcohol-impaired driving fatality every 50 minutes

Driving Under the Influence
Understand the magnitude of the problem of subjects driving while impaired by drugs and alcohol. The National Survey on Drug Use and Health (NSDUH) report provides a thorough overview of drug and alcohol use in the general population. The survey tells us:
• Males are twice as likely as females to drive under the influence of alcohol

• Overall, 8.23%, or more than 20 million people, reported they had driven at least once in the last year under the influence of alcohol

• That further translated into approximately 9.4% of people 16-25 years of age and 13.5% of those between the ages of 21 and 25 years

• In 2016, 11.8 million people reported they drove under the influence of illicit drugs during the past year.
65 deaths and injuries each hour!

- Approximately __________ people now live in __________
- About __________ of these people will die in vehicle crashes
- About __________ will die in DWI crashes
D. Impaired Driving Enforcement System

The National Highway Traffic Safety Administration (NHTSA) and the International Association of Chiefs of Police (IACP) support:
• Training
• Enforcement
• Prosecution
• Adjudication
• Selective Traffic Enforcement Program (STEP) Grants
• Crackdown support
• Traffic Safety Resource Prosecutors (TSRP)
• Saturation Patrols
• Sobriety Checkpoints
• Judicial Education

One of the most critical support activities NHTSA/IACP provides is TRAINING. Some examples of law enforcement and justice professional training NHTSA/IACP provides and supports are:
• SFST
• Advanced Roadside Impaired Driving Enforcement (ARIDE)
• DEC Program
• Drug Impairment Training for Education Professionals (DITEP)
• Prosecuting the Drugged Driver
• Lethal Weapon
• Protecting Lives, Saving Futures
E. **DWI Detection and Standardized Field Sobriety Testing Program**

The SFST Practitioner course provides:

- The cornerstone for a system of impaired driving detection training and enforcement
- Proficiency in the SFST skills provides a foundation for ARIDE and the DEC Program

The SFST program should be part of all alcohol- and drug-impaired driving enforcement initiatives.

F. **Drugs and Highway Safety**

**Alcohol and Drug Use**
Social drinking is considered acceptable in many societies.

It is important to understand the use of alcohol in the context of society, since it is related to the enforcement and adjudication of DWI offenses.
- 136 million (52%) people consider themselves drinkers

- 6.3% of this group (16.5 million people) describe themselves as heavy drinkers

**Binge Alcohol Use** is defined as drinking 5 or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days.

**Heavy Alcohol Use** is defined as drinking 5 or more drinks on the same occasion on each of 5 or more days in the past 30 days; all heavy alcohol users are also binge alcohol users.
In 2017, 28.6 million Americans were current (within the past 30 days) illicit drugs users

Although these statistics are significant, it is reasonable to assume the problem is even larger when you consider legal or prescription drugs used in a manner other than for what they have been prescribed or produced.

When we look at drug use specifically, it is helpful to see the trends based on specific types of drugs. The following summarizes the usage information as reported by the 2016 NSDUH Survey:

• 24.0 million people consider themselves current marijuana users
• 6.5% of 12-17 year old adolescents consider themselves current marijuana users
• 20.8% of 18-25 year old adults consider themselves current marijuana users
• 7.2% of adults 26 years and older consider themselves current marijuana users
• 9.7 million people age 12 or older reported driving under the influence of illicit drugs during the past year (2015) according to the survey

• 27.9 million people age 12 or older reported driving under the influence of illicit drugs or alcohol during the past year
NSDUH provides additional details on drugs used within the past 30 days in a manner other than prescription:

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Users</th>
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<tbody>
<tr>
<td>Cocaine</td>
<td>1.9 Million</td>
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<tr>
<td>Hallucinogens</td>
<td>1.4 Million</td>
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<tr>
<td>Psychotherapeutics</td>
<td>6.2 Million</td>
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<tr>
<td>Pain Relievers</td>
<td>3.3 Million</td>
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<tr>
<td>Tranquilizers</td>
<td>2.0 Million</td>
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<tr>
<td>Stimulants</td>
<td>1.7 Million</td>
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<tr>
<td>Sedatives</td>
<td>0.5 Million</td>
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</tbody>
</table>
**Advanced Roadside Impaired Driving Enforcement (ARIDE)**

ARIDE provides officers the ability to build on the knowledge gained through their training and experience related to the SFSTs.

Many law enforcement officers have encountered subjects who appear to be impaired by a substance other than alcohol or seem to be displaying signs and symptoms which are inconsistent with their BAC test results.

ARIDE delivers the knowledge and information that will help officers better assess impaired drivers at roadside. It also demonstrates the value of having a DRE on staff in an agency and serves as a motivation for officers to attend a DRE course in the future.

A subsequent goal of ARIDE is it will facilitate better utilization of DREs in the field.
The desired outcome of the training is:

• The participant will better understand the role of the DRE and will be able to use their expertise more effectively

• For those law enforcement agencies with no DREs or limited access to their services, this course will help officers make informed decisions related to testing, documentation, and reporting drugged driving arrests

ARIDE is intended to bridge the gap between the SFST and DRE course and to provide a level of awareness to both law enforcement and other criminal justice professionals in the area of drug impairment in the context of traffic safety.

ARIDE trains law enforcement officers to observe, identify, and articulate the signs of impairment related to drugs, alcohol, or a combination of both in order to reduce the number of impaired driving incidents, serious injury, and fatal crashes.

Often times officers come in contact with the drug-impaired driver. There are many things that could be happening:

• The officer is unfamiliar with the indicators of drug impairment, therefore does nothing with the subject

• Recognizes there is something wrong with the driver but does not know how to address the issue

• Allows subject to continue on their way

• Drives the subject home or allows the subject to ride home with another individual

• Not familiar with the resources available to them
**Drug Evaluation and Classification Program**

The ultimate goal of the DEC Program is to train officers to be DREs to help prevent crashes and avoid deaths and injuries by improving enforcement of drug-impaired driving investigations.

The DRE officer is trained to conduct a detailed evaluation, consisting of twelve (12) steps and obtain other evidence that can be articulated as an opinion.

An officer who successfully completes all phases of the DEC Program is known as a DRE. They can reach reasonably accurate conclusions concerning the category or categories of drug(s) or medical conditions causing the impairment observed in the subject. Based on these informed conclusions, the DRE officer can request the collection and analysis of an appropriate biological sample (blood, urine, or saliva) to obtain corroborative, scientific evidence of the subject's drug use.

The progression between each of the impaired driving enforcement programs is:
- The foundation is SFST
- The intermediate level is ARIDE
- The final stage is the DEC Program
Drug Recognition Expert Training
To obtain a DRE Certification the law enforcement officer must complete:

- 72 hours of classroom training
- Field certifications
- Certification Knowledge Examination
In order to retain their certification, the DRE must:

• Participate in continuing education courses

• Complete a recertification training course every two years

• Maintain a log of all evaluations completed in training and as part of any enforcement activities

• Meet other administrative requirements as established in the IACP International Standards governing the DEC Program

The State DEC Program Coordinators may place other standards on each DRE specific to that State.
**DWI Detection and Standardized Field Sobriety Testing Program**

The DWI detection process includes three phases:

1. Vehicle in motion
2. Personal contact
3. Pre-arrest screening

Throughout this training we will be discussing concepts related to these three phases.

The SFSTs are a set of tests that include the following:

- Horizontal Gaze Nystagmus (HGN)
- Walk and Turn (WAT)
- One Leg Stand (OLS)

These tests are designed to be administered and evaluated in a standardized manner to obtain validated indicators of impairment based on NHTSA/IACP-supported research.
G. Pre-Test

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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.

BREATHE 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.
At the conclusion of this session, participants will be able to:
• Identify typical cues of Detection Phase One
• Describe 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. (Vehicle In Motion) Overview: Tasks and Decision
B. (Vehicle In Motion) Initial Observations: Visual Cues of Impaired Operation (Automobiles)
C. (Vehicle In Motion) Initial Observations: Visual Cues of Impaired Operation (Motorcycles)
D. (Vehicle In Motion) Recognition and Description of Initial Cues
E. (Vehicle In Motion) Typical Reinforcing Cues of the Stopping Sequence
F. (Vehicle In Motion) Recognition and Description of Initial and Reinforcing Cues
G. (Personal Contact) Overview: Tasks and Decision
H. (Personal Contact) Typical Investigation Clues of the Driver Interview
I. (Personal Contact) Recognition and Description of Investigation Clues
J. (Personal Contact) Interview/Questioning Techniques
K. (Personal Contact) Recognition and Description of Clues Associated with the Exit Sequence

LEARNING ACTIVITIES
Instructor-Led Presentations
Video Presentation
Instructor-Led Demonstrations
Participant Presentations
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
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 driving behaviors are presented in four categories:
• Problems in maintaining proper lane position
• Speed and braking problems
• Vigilance problems
• Judgment problems
There is a brochure published by the National Highway Traffic Safety Administration (NHTSA) that contains these cues. The title is “The Visual Detection of DWI Motorists” DOT HS 808 677 (see end of this session).

The first category is:
Problems in maintaining proper lane position. [p=.50-.75]
  • Weaving
  • Weaving across lane line
  • Drifting
  • Straddling a lane line
  • Swerving
  • Almost striking object or vehicle
  • Turning with a wide radius
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
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
- Driving wrong way
- Slow response to traffic/officer’s signals
- Stopping in lane for no apparent reason

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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
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
• 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)

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
Research has identified driving impairment cues for motorcyclists (see 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
- Inattentive to surroundings
- Inappropriate or unusual behavior
- 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
• Traveling wrong way
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

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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.
D. Recognition and Description of Initial Cues
What do you see?
• Moving violation
• Equipment violation
• Other violation
• Unusual operation
• Anything else

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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.
Procedures for Practicing Cue Recognition and Description

- View DWI violation videos
- Take notes
- Testify
  - Choose words carefully
  - Provide as much detail as possible
  - Construct accurate image of observations
- Critique testimony
**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 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

F. Recognition and Description of Initial and Reinforcing Cues

Procedures for practicing cue recognition and description.
G. 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.
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.
H. 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:

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What do you see?
• Bloodshot eyes
• Soiled clothing
• Fumbling fingers
• Alcohol containers
• Drug and drug paraphernalia
• Bruises, bumps, scratches
• Unusual actions
Hearing
Among the things you might **hear** during the interview that would be describable clues or evidence of alcohol and/or other drug influence are these:

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What do you hear?
• Slurred speech
• Admission of drinking
• Inconsistent responses
• Unusual statements
• Abusive language
• Anything else

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Smell
There are things you might smell during the interview that would be describable clues or evidence of alcohol and/or other drug influence. Typically these include:
What do you smell?
• Alcoholic beverages
• Marijuana
• "Cover-up" odors
• Other unusual odors
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.

I. **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.
Procedures for Practicing Clue Recognition and Description
You will have to base your description of the driver's possible impairment strictly on what you see and hear during the face-to-face contact. Both senses provide some critically important evidence, not only in this video segment but in all face-to-face contacts.
Testimony on Video Segment “The Busy Businessman”

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J. 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 (SFSTs) 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. Be alert for the driver who:

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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
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.
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

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.
**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.
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.
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.
The Visual Detection of DWI Motorists
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**  \( p = .50 \ldots .75 \)
- 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**  \( p = .45 \ldots .70 \)
- 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**  \( p = .55 \ldots .65 \)
- 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**  \( p = .35 \ldots .90 \)
- 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.

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.
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.
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.
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

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.

![Image of a car signaling inconsistent with driving actions.]  
**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.

![Image of a car driving into opposing or crossing traffic.]  
**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.

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.
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.
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
The Detection of DWI Motorcyclists
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
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 gyrosopic 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.
- **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.”
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.
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Session 3

Standardized Field Sobriety Testing Review
SESSION 3: STANDARDIZED FIELD SOBRIETY TESTING REVIEW

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

- Understand the results of selected Standardized Field Sobriety Testing (SFST) validation studies
- Define and describe the SFSTs
- Define nystagmus and distinguish between the different types
• Recognize, document and articulate the indicators and clues of the three SFSTs
• Identify the limitations of the three SFSTs

CONTENT SEGMENTS
A. SFST Validation Studies
B. Overview of Selected Types of Nystagmus
C. Psychophysical Field Sobriety Tests
A. SFST Validation Studies

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 standardized valid tests.

The National Highway Traffic Safety Administration (NHTSA) analyzed the original Southern California Research Institute (SCRI) research laboratory test data and found:

- Horizontal Gaze Nystagmus (HGN), by itself, was 77% accurate
- Walk and Turn (WAT), by itself, was 68% accurate
- One Leg Stand (OLS), by itself, was 65% accurate
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.
“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). 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 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
“Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 %”
• The San Diego SFST Field Validation Study was undertaken because of the nationwide trend towards lowering the BAC limits to 0.08
  o 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
- 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 SFSTs 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 % 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.
B. Overview of Selected Types 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 our field sobriety tests.

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

- Vestibular
- Neural
- Pathological Disorders and Diseases

**Vestibular Nystagmus**
Caused by movement or action to the vestibular system that can occur when an individual is spun around and the fluid in the inner ear is disturbed or there is a change in the fluid (temperature, foreign substance, etc.).

**Neural Nystagmus**
Caused by some disturbance to the neural system. In this course we will only be concerned with gaze-evoked Neural Nystagmus.

Alcohol and/or specific types of drugs can cause the following three types of nystagmus. These examples of gaze-evoked Neural Nystagmus can be visible to the officer during the proper administration of the HGN and VGN tests.

**Pathological Nystagmus**
Caused by the presence of specific pathological disorders, which include brain tumors, other brain damage, or some diseases of the inner ear.
For our purposes, gaze nystagmus is separated into three types:
• Horizontal
• Vertical
• Resting
Horizontal Gaze Nystagmus is an involuntary jerking of the eyes, occurring as the eyes gaze toward the side.

It is the observation of the eyes for HGN that provides the first and most accurate test in the SFSTs. Although this type of nystagmus is useful in determining alcohol influence, its presence may also indicate use of Dissociative Anesthetics, Inhalants, and other Central Nervous System (CNS) Depressants (DID Drugs).
Vertical Gaze Nystagmus (VGN) 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 drug categories. 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 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.)
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.
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.

The 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. 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 he or she is blind in one eye or has an artificial eye, the officer should make note of that and may 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.
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 pen, eraser on a pencil, the tip of a penlight, the tip of your finger, or any similar small object. 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 from the subject’s 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
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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Administrative Procedures for Horizontal Gaze Nystagmus

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. Begin by instructing the subject to remove eyeglasses, if worn. (Note if subject wears contacts, especially colored contacts, because some colored contacts may affect the ability to compare pupil size.)

It does not matter whether the subject can see the stimulus with perfect clarity. They just need to be able to see and 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

Step 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.

Step 5: Equal Tracking. Check for Equal Tracking. Move the stimulus rapidly from center to far right, to far left, and back to center. There should be a clear, distinguishable break between the check for Equal Tracking and Lack of Smooth Pursuit.

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.
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.
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 Gaze 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.
Vertical Gaze Nystagmus

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
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.
Three Clues of Horizontal Gaze Nystagmus
When we administer the HGN test, we look for three specific clues as evidence of alcohol influence or influence caused by CNS depressants, inhalants, or Dissociative Anesthetics.

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 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.
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.

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.
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.
**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 side (subject's right eye).
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.
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.
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.

At 45 degrees, some white usually will still be visible in the corner of the eye (for most people).
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.
Verify some white is still showing in the corner of the eye.

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. (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.)
C. **Psychophysical Field Sobriety Tests**

A good, structured field sobriety test is simple and divides the subject’s attention. Examples of divided attention tests include WAT and OLS.

**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.

*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.
Procedures for Walk and Turn Testing

- 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

Safety Precautions
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.)
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.
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 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 for balance but maintains the heel-to-toe position.
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 one foot is entirely off the line.

Uses arms for balance. The subject uses one or both arms more than 6 inches from the sides for 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.
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.*
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.
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?
**One Leg Stand**

*Test Stages*

Like all divided attention tests, OLS has two stages. They are:

- Instruction stage
- Balance and counting stage

Both stages are important because they can affect the subject's overall performance on the test.
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.
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 one leg stand position.

Slight tremors of the foot or body should not be interpreted as swaying.

Uses arms for balance. Subject uses arms six or more inches from the side of the body for balance.
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 one leg stand 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.

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

- Demonstrate knowledge and proficiency in administering the Standardized Field Sobriety Tests (SFSTs)
- Complete a written examination with a passing grade
- Provide comments and suggestions for improving the course

**CONTENT SEGMENTS**
A. Proficiency Examination  
B. Post Test  
C. Critique  
D. Review of Post Test  
E. Concluding Remarks  
F. Certificates and Dismissal

**LEARNING ACTIVITIES**
Written Participant Examination  
Written Participant Critique  
Instructor-Led Presentation

**A. Proficiency Examination**
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? _____________

• During Phase Two? ______________________________________________________________

• During Phase Three? ______________________________________________________________
Field Sobriety Testing

• What does "nystagmus" mean? __________________________________________________________

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• Walk and Turn is an example of a _________________________________ attention test

• Name the eight distinct clues of Walk and Turn ________________________________

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Field Sobriety Testing

• Name the four distinct clues of One Leg Stand

• Name the three distinct clues of Horizontal Gaze Nystagmus

• What is the critical angle for determining whether the third clue of HGN is present?
Field Sobriety Testing

- How many steps in each direction must the subject take in the Walk and Turn test? ______
- How long must the subject stand on one foot in the One Leg Stand test? ________________

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• 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).

• How reliable is each test using the San Diego study? __________________________

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Revised: 02/2018
Standardized Field Sobriety Testing
Written Examination and Program Conclusion
B. Post Test

Purpose of Post Test: to compare with pretest, and determine extent of knowledge gained by participants.
C. Critique

Purpose of the critique form: To identify possible improvements that can and should be made to this program.
D. Review of Post Test

If passing score is not achieved, participant(s) will be allowed to take “make up” exam.
E. Concluding Remarks
F. Certificates and Dismissal

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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.

Revised: 02/2018
Standardized Field Sobriety Testing
Written Examination and Program Conclusion
Session 4
Page 15 of 19
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.
## DWI Detection and SFST Refresher Course – Course and Instructor Evaluation

For items 1-4, please select your level of agreement with the following statements. Include any additional information in the space provided.

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. This course enabled me to recognize and interpret evidence of DWI.</td>
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<tr>
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<td>2. This course enabled me to administer and interpret the scientifically validated sobriety tests.</td>
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<td>3. This course enabled me to describe DWI evidence clearly and convincingly</td>
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<td>4. This course enabled me to review information regarding recent case law and research studies.</td>
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</table>
Please rate how helpful each workshop session was for you personally.

<table>
<thead>
<tr>
<th>Item</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle in Motion and Personal Contact</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Standardized Field Sobriety Testing Review</td>
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<tr>
<td>Processing the Arrested Subject and Preparation for Trial (Optional Session)</td>
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<tr>
<td>Overcoming Impaired Driving Defenses and Legal Issues (Optional Session)</td>
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<td>Live Alcohol Workshop (Optional Session)</td>
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<td>Video Alcohol Workshop (Optional Session)</td>
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<tr>
<td>Introduction to Drugged Driving (Optional Session)</td>
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</table>

Please mark the appropriate word to indicate your agreement or disagreement with each of the following statements.

<table>
<thead>
<tr>
<th>Item</th>
<th>Agree</th>
<th>Disagree</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>The program contains some information that is not needed and that should be deleted.</td>
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<tr>
<td>There are some important topics missing from the program that should be added.</td>
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<tr>
<td>The program is too short.</td>
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<tr>
<td>I feel this program has improved my own ability to enforce DWI laws.</td>
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<tr>
<td>The instructors did a good job.</td>
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<tr>
<td>I am very glad I attended the program.</td>
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<tr>
<td>The program is too long.</td>
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<tr>
<td>The instructors should have been better prepared.</td>
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<tr>
<td>I feel fully qualified to use the nystagmus test now.</td>
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<tr>
<td>I feel fully qualified to use the two divided attention tests now.</td>
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<td>Too much time was spent practicing with drinking volunteers.</td>
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<tr>
<td>These three new tests definitely will improve our ability to identify impaired drivers.</td>
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<tr>
<td>I wish we had more practice with drinking volunteers.</td>
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</table>
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?

<table>
<thead>
<tr>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Very Good</th>
<th>Excellent</th>
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Please rate the overall quality of the course.

Please rate your instructors for this course. Rate the instructor(s) by selecting the appropriate response:

<table>
<thead>
<tr>
<th>Instructor Name</th>
<th>Poor</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
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Name (optional): __________________________________________________________