Participant Manual

DWI Detection and Standardized Field Sobriety Testing (SFST) Refresher

Revised: 10/2015

NHTSA
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TSI
Transportation Safety Institute

INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE
SINCE 1893
Preface

The Standardized Field Sobriety Testing (SFST) training curriculum collectively prepares police officers and other qualified persons to conduct the SFST’s for use in DWI investigations. This training, developed under the auspices and direction of the National Highway Traffic Safety Administration (NHTSA), and the International Association of Chiefs of Police (IACP), has experienced remarkable success since its inception in the early 1980s.

As in any educational training program, an instruction manual or guide is considered a “living document” that is subject to updates and changes based on advances in technology and science. A thorough review is made of information by the IACP Technical Advisory Panel (TAP) of the Highway Safety Committee of the IACP with contributions from many sources in health care science, toxicology, jurisprudence, and law enforcement. Based on this information, any appropriate revisions and modifications in background theory, facts, examination and decision making methods are made to improve the quality of the instruction as well as the standardization of guidelines for the implementation of the SFST curriculum. The reorganized manuals are then prepared and disseminated, both domestically and internationally, to the states. Changes will normally take effect 90 days after approval by the TAP, unless otherwise specified or when so designated.

The procedures outlined in this manual describe how the Standardized Field Sobriety Tests (SFSTs) are to be administered under ideal conditions. We recognize that the SFST’s will not always be administered under ideal conditions in the field, because such conditions do not always exist. Even when administered under less than ideal conditions, they will generally serve as valid and useful indicators of impairment. Slight variations from the ideal, i.e., the inability to find a perfectly smooth surface at roadside, may have some effect on the evidentiary weight given to the results. However, this does not necessarily make the SFSTs invalid.
Participant Manual

DWI Detection and SFST Refresher

Session 1
Introduction and Overview
SESSION I: 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 Program (DECP).
- Define the term drug in the context of traffic safety and impaired driving enforcement as referenced in the DECP.

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
Welcoming Remarks

Welcome to the Standardized Field Sobriety Testing Refresher Course.

Instructor Introductions

- Principal instructor (name, relevant background, etc.)
- Instructor aides and other relevant individuals (names, assignments, etc.)

Administrative Details

- Training schedule (breaks, etc.)
- Facilities (restrooms, lunchroom, etc.)
- Logistics (travel vouchers, etc.)
Session Objectives

- 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 Program (DECP)
Course Goal

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

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

• In 2013, 10,076 people were killed in alcohol-impaired crashes.
• These fatalities accounted for 31 percent of the total motor vehicle traffic fatalities in the United States.
• The 10,076 fatalities represent an average of one alcohol-impaired-driving fatality every 51 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 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, 10.9% or more than 29 million people reported that they had driven at least once in the last year under the influence of alcohol.
• That further translated into approximately 10.8% of people 18-20 years of age and 19.7% of those between the ages of 21 and 25 years.
• In 2013, 9.9 million people reported that they drove under the influence of illicit drugs during the last year.

Source: 2013 National Survey of Drug Use and Health (NSDUH)
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.

**Impaired Driving Enforcement System**

NHTSA and IACP support:

- Training
- Enforcement
- Prosecution
- Adjudication

What NHTSA/IACP Supports:

Selective Traffic Enforcement Program (STEP) Grants, Crackdown support, Traffic Safety Resource Prosecutors (TSRP), Saturation Patrols, Sobriety Checkpoints, and Judicial Education.

One of the most critical support activities NHTSA/IACP provides is TRAINING.

Some examples of law enforcement and justice professional training that NHTSA/IACP provides and supports are:

- Standardized Field Sobriety Testing
- Advanced Roadside Impaired Driving Enforcement (ARIDE)
- Drug Evaluation and Classification (DEC) Program
- Drug Impairment Training for Education Professionals (DITEP)
- Prosecuting the Drugged Driver
- Lethal Weapon
- Protecting Lives, Saving Futures
The Standardized Field Sobriety Testing (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 Drug Evaluation and Classification (DEC) program.
- The SFST program should be part of all alcohol and drug impaired driving enforcement initiatives.
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 five 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 five 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 2013, 24.6 million Americans were current illicit drugs users.

Although these statistics are significant, it is reasonable to assume that 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 NSDUH Survey conducted in 2012:

- 19.8 million people consider themselves current marijuana users
- 62.8% only use marijuana
- 16.2% use marijuana in combination with other drugs
- 80.6% of current illicit drug users also use marijuana.
Alcohol and Drug Use

- 6.8 million (2.6 percent) persons aged 12 or older used prescription-type psychotherapeutic drugs non-medically in the past month. Of those, 4.9 million used pain relievers.
- An estimated 440,000 people age 12 or older (0.2% of population) are current users of methamphetamine.
- 9.9 million persons age 12 or older reported driving under the influence of illicit drugs during the past year (2013) according to the survey.

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocaine</td>
<td>1.5 Million</td>
</tr>
<tr>
<td>Hallucinogens</td>
<td>1.3 Million</td>
</tr>
<tr>
<td>Psychotherapeutics</td>
<td>6.8 Million</td>
</tr>
<tr>
<td>Pain Relievers</td>
<td>4.5 Million</td>
</tr>
<tr>
<td>Tranquilizers</td>
<td>1.7 Million</td>
</tr>
<tr>
<td>Stimulants</td>
<td>1.4 Million</td>
</tr>
<tr>
<td>Sedatives</td>
<td>0.3 Million</td>
</tr>
</tbody>
</table>

NSDUH provides additional details on drugs used in a manner other than prescription:

<table>
<thead>
<tr>
<th>Type</th>
<th>Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>19.8 million</td>
</tr>
</tbody>
</table>

Revised: 10/2015
**ARIDE**

- Delivers knowledge and information that will help better assess impaired drivers at roadside
- The training and subsequent field experience demonstrates the value of having a DRE on staff in an agency

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**The ARIDE Course**

The ARIDE program 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 Drug Recognition Expert (DRE) course in the future.

A subsequent goal of ARIDE is that 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.
DRE Training

• 72 hours of classroom training
• Field certifications
• Comprehensive final knowledge examination
• Participate in continuing education courses

Drug Evaluation and Classification Program

The ultimate goal of the DEC Program is to train officers to be Drug Recognition Experts (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 steps (12), 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
Roles and Responsibilities of a Drug Recognition Expert

To obtain a DRE Certification the law enforcement officer must complete:

- 72 hours of classroom training
- Field certifications
- Comprehensive final 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 International Association of Chiefs of Police (IACP) International Standards governing the DEC program.

The State DEC program state coordinators may place other standards on each DRE that is 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 SFST battery is a set of tests that include the following:

- Horizontal Gaze Nystagmus
- Walk and Turn
- One Leg Stand

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.
C. Pre-Test
GLOSSARY OF TERMS

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

ALVEOLAR BREATH
Breath from the deepest part of the lung.

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

BREATH ALCOHOL CONCENTRATION (BrAC)
The percentage of alcohol in a person’s breath, as measured by a breath testing device.

CLUE
Something that leads to the solution of a problem.

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

DIVIDED ATTENTION
Concentrating on more than one thing at a time.

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

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.”

HORIZONTAL GAZE NYSTAGMUS (HGN)

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

NYSTAGMUS

An involuntary jerking of the eyes.

ONE LEG STAND (OLS)

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

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 TEST BATTERY

Standardized Field Sobriety Testing. There are three SFSTs, namely Horizontal Gaze Nystagmus (HGN), Walk and Turn, and One Leg Stand. 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.

TIDAL BREATH

Breath from the upper part of the lungs and mouth.
TRAFFIC SAFETY RESOURCE PROSECUTOR (TSRP)

Is 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 SFST battery.
Participant Manual

DWI Detection and SFST Refresher

Session 2

Vehicle in Motion and Personal Contact
SESSION II: VEHICLE IN MOTION AND PERSONAL CONTACT

CONTENT SEGMENTS

A. Phase One: Vehicle in Motion
B. Phase Two: Personal Contact

Session Objectives

• Identify typical cues of Vehicle in Motion
• Identify typical observations made during Personal Contact.
• Describe the observed cues clearly and convincingly.
• Understand the significance of the problem of impaired motorcycle riders.
• Obtain the skills necessary to detect, arrest, and prosecute alcohol and drug impaired motorcyclists.
A. Overview: Tasks and Decision

Your first task in Phase One: Vehicle in Motion is to observe the vehicle in operation 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 should rather 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 that 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.
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 NHTSA that contains these cues. The title is “The Visual Detection of DWI Motorists” DOT HS 808 677.

The first category is:

Problems in maintaining proper lane position. \( p=.50\text{-}.75 \)

- Weaving
- Weaving across lane lines
- Drifting
- Straddling a lane line
- Swerving
- Almost striking object or vehicle
- Turning with a wide radius
Speed and Braking Problems

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

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

- Stopping problems (too far, too short, or too jerky)
- Unnecessary acceleration or deceleration
- Varying speed
- 10 mph or more under the speed limit
The third problem is vigilance problems. [P=.55-.65]. This category includes, but is not limited to:

- Driving without headlights at night
- Failure to signal or signal inconsistent with action
- Driving in opposing lanes or wrong way on one way
- Slow response to traffic signals
- Slow or failure to respond to officer’s signals
- Stopping in lane for no apparent reason
Judgment problems. \( [P=.35-.90] \).
- 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

**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. For example, emergency flashing lights, siren, etc., 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.

It is the officer's responsibility to capture and convey the additional evidence of impairment that may be exhibited during the stopping sequence.
Requires ability to recognize evidence of alcohol and/or other drug influence and to describe that evidence clearly and convincingly.
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

Explanation and illustration of the 24 detection cues.
Initial Observations: Visual Cues of Impaired Vehicle Operation (Motorcycles)

The National Highway Traffic Safety Administration (NHTSA) estimated that in 2012, about 27 percent of motorcycle operators involved in fatal crashes had a BAC of 0.08 or higher.

In 2012, NHTSA also estimated that 34 percent of the motorcycle operators involved in crashes had a BAC of .01 or higher.


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**

*(ANACAPA Sciences, DOT HS 807 839, 1993.)*

Excellent cues (50% or greater probability).

- **Drifting During Turn or Curve**
  - The most common cause of single vehicle, fatal motorcycle crashes is “Failure to Negotiate Curves”.
  - This type of collision is usually caused by impaired balance and coordination.
  - If you see a motorcycle drifting during a turn or curve, do the rider a favor and pull him or her over.
• **Trouble with Dismount**
  - Parking and dismounting a motorcycle can be a useful field sobriety test.
  - The operator must decide on a safe place to stop the motorcycle.
  - The operator must then balance their weight on one foot while swinging their other foot over the seat to dismount.
  - Operators having problems dismounting are impaired 50 percent of the time.

• **Trouble with Balance at Stop**
  - Riders whose balance has been impaired by alcohol and/or drugs often can not maintain control of the motorcycle while stopped.
  - Riders may be observed noticeably shifting their weight from side to side while stopped at a red light or stop sign for any length of time.

• **Turning Problems**
  - Unsteady during turn of curve
  - As a result of impairment an officer might observe a motorcycle’s front wheel or handle bars wobbling as the rider attempts to maintain balance at slow speeds.
  - Late Braking During Turn- An impaired motorcyclist might misjudge the speed or distance to the corner or curve, requiring an application of brakes during the maneuver.
  - Improper Lean Angle During Turn- When a rider’s balance or speed decision making is impaired, the rider frequently attempts to sit upright through the maneuver.
  - Erratic Movement During Turn- Unsteady during a turn or curve, brake late, assumes an improper lean angle, or makes erratic movements during a turn or curve

• **Inattentive to surroundings**
  - Inappropriate or unusual behavior (e.g., carrying or dropping object, urinating at roadside, disorderly conduct, etc.)
  - Weaving
Motorcycle DUI Detection Guide
Good cues (30 to 50% probability)

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

Good Cues (30 to 50% probability)

- Erratic movements while going straight

Motorcyclists making erratic movements or sudden corrections while attempting to ride in a straight line.

- Operating without lights at night
- Recklessness
- Following too closely
- Running stop light or sign

Failure to stop at a red light or stop sign can indicate either vigilance capabilities, or impaired judgment.

- Evasion
- Traveling wrong way
B. Personal Contact

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 that all drivers stopped on suspicion of DWI be instructed to exit. It is important to note that 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 that 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 that 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 that 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.

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**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:
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:
What do you hear?

- Slurred speech?
- Admission of drinking?
- Inconsistent responses?
- Unusual statements?
- Abusive language?
- Anything else?
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.

**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.
Interview/Questioning Techniques

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

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

**Questioning Techniques**

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

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

An example of the first technique, **asking for two things simultaneously**, is requesting the driver to produce both the driver’s license and the vehicle registration. Possible evidence of impairment may be observed as the driver responds to this dual request. Be alert for the driver who:
License and Registration

- Forgets to produce both documents
- Produces wrong documents
- Fails to see the license, registration or both while searching for them
- Fumbles or drops wallet, purse, license or registration
- Unable to retrieve documents using fingertips
Questions that Divide Attention

- What day is it?
- Where are you coming from?
- 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 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?"

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.
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Participant Manual

DWI Detection and SFST Refresher

Session 3

Standardized Field Sobriety Testing Review

2 Hours
SESSION III: STANDARDIZED FIELD SOBRIETY TESTING UPDATE AND REVIEW

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

- Understand the results of selected SFST validation studies.
- Define and describe the SFSTs.
- Define nystagmus and distinguish between the different types.
- Describe and properly administer the three SFSTs.
- 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. Overview: Development and Validation

For many years law enforcement officers have utilized field sobriety tests to determine a driver’s impairment due to alcohol influence.

The performance of the driver on those field sobriety tests was used by the officer to develop probable cause for arrest and as evidence in court.

A wide variety of field sobriety tests existed and there was a need to develop a battery of standardized valid tests.

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

- HGN, by itself, was 77% accurate
- WAT, by itself, was 68% accurate
- OLS, by itself, was 65% accurate
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.
**Colorado Field Validation Study of SFST**

- First full field validation study using SFST experienced law enforcement personnel
- 86% correct arrest/release decision based on three test battery (HGN, WAT, OLS)
- 93% of those arrested had a BAC of 0.05 or higher

**Florida Field Validation Study of SFST**

- 95% correct arrest decision based on three test battery (HGN, WAT, OLS)
- Validated SFSTs at 0.08 BAC and above

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**“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 test battery (HGN, WAT, OLS). 93% of arrested drivers had a BAC of 0.05 or higher. These results, by officers who were trained in the Standardized Field Sobriety Testing 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 test battery (HGN, WAT, OLS).

This was the second SFST field validation study that was undertaken.

This study was the first study conducted at the lower BAC limit of 0.08.
San Diego Field Validation Study of SFST

- 91% correct arrest decision for 0.08 BAC and above using three test battery (HGN, WAT, OLS)
- HGN is still most reliable of three-test battery and supports arrest decisions at 0.08 BAC

Based on this study:
- HGN was 88% accurate
- WAT was 79% accurate
- OLS was 83% accurate

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

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

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

This is the study that should be referenced in court whenever possible.

- 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 test battery to support arrest decisions at above or below 0.08. It strongly suggests that 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
California ................................. 91% Arrest Decisions
Categories of Nystagmus

Horizontal Gaze Nystagmus 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, 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, as they gaze toward the side. It is the observation of the eyes for Horizontal Gaze Nystagmus that provides the first and most accurate test in the Standardized Field Sobriety Test battery. Although this type of nystagmus is useful in determining alcohol influence, its presence may also indicate use of Dissociative Anesthetics, Inhalants, and other CNS Depressants (DID Drugs).

Vertical Gaze Nystagmus is an involuntary jerking of the eyes (up and down) which occurs when the eyes gaze upward at maximum elevation. The presence of this type of nystagmus is associated with high doses of alcohol for that individual and certain other drugs.

The drugs that cause Vertical Gaze Nystagmus are the same ones that cause Horizontal Gaze Nystagmus. There is no drug that will cause Vertical Gaze Nystagmus that may not cause Horizontal Gaze Nystagmus.

If Vertical Gaze Nystagmus is present and Horizontal Gaze Nystagmus is not, it could be a medical condition.

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

Procedures of Horizontal Gaze Nystagmus Testing: The Three Clues

The test you will use at roadside is "Horizontal Gaze Nystagmus" -- 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 that 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 that 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 that 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.

Source: “Eye Tests on a Suspect with a Blind Eye” Karl Citek, OD, PhD, FAAO, Pacific University College of Optometry, Sept. 2014.
Horizontal and Vertical Gaze Nystagmus can be observed directly and does not require special equipment. You will need a contrasting stimulus for the subject to follow with their eyes. This can be a penlight or pen. The stimulus used should be held slightly above eye level, so that 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**

- Check for eyeglasses
- Verbal instructions
- Position stimulus (12-15 inches and slightly above eye level)
- Check for equal pupil size and resting nystagmus
- Check for equal tracking
- Lack of smooth pursuit
- Distinct and sustained nystagmus at maximum deviation
- Onset of nystagmus prior to 45 degrees
- Total the clues
- Check for vertical nystagmus
Administrative Procedures for Horizontal Gaze Nystagmus

It is important to administer the HGN test systematically using the following steps to ensure that 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:

Point out that officers’ should note whether subject sways, wobbles, etc. while trying to balance.

- 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 4: Equal Pupil Size and Resting Nystagmus. Check for equal pupil size and resting nystagmus.

Step 5: Equal Tracking.

Check for equal tracking. Move the stimulus rapidly from center to far right, to far left and back to center.

The speed of the stimulus should be approximately the same speed used as checking for the lack of smooth pursuit.
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 Nystagmus

It is possible that 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 that 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.
D. Vertical Gaze Nystagmus

The Vertical Gaze Nystagmus test is simple to administer. During the Vertical Gaze Nystagmus 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
- Distinct and sustained Nystagmus at maximum deviation
- Onset of Nystagmus prior to 45 degrees

Based on recent research, if you observe four or more clues it is likely that 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 Standardized Field Sobriety Tests in this battery 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 that no step is overlooked.
Clue No. 1: Lack of Smooth Pursuit

The first clue requires that 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 side (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 side (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 side 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 side (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 that 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. Two other important indicators can be used to determine if the eye is within 45 degrees.

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 side (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 that 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 that 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 that 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 that some white is still showing in the corner of the eye.
Psychophysical Field Sobriety Tests

**Walk and Turn**

*Test Stages*

Like all divided attention tests, Walk and Turn has two stages.

They are:

- Instructions stage
- Walking stage

Both stages are important, because they can affect the subject's overall performance on the test.

*Test Conditions*

Whenever possible, the Walk and Turn 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 that varying environmental conditions have not affected a subject’s ability to perform this test.

The original SCRI studies suggested that 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 that individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes. Officers should consider all factors when conducting SFSTs.
Safety Precautions

- Keep subject to your left when starting demonstration
- Be aware of surroundings
- Officer should not turn his/her back to the subject for safety reasons

Procedures for Walk and Turn Testing
Walk and Turn Test Clues

• Cannot keep balance while listening to instructions

Test Interpretation

You may observe a number of different behaviors when a subject performs this test. Original research demonstrated that the behaviors listed below are likely to be observed in someone with a BAC at or above 0.08. Look for the following clues each time this test is given:

Cannot keep balance while listening to the instructions. Two tasks are required at the beginning of this test. The subject must balance heel-to-toe on the line, and at the same time, listen carefully to the instructions. Typically, the person who is impaired can do only one of these things. The subject may listen to the instructions, but not keep balance.

Record this clue if the subject does not maintain the heel-to-toe position throughout the instructions. (Feet must actually break apart or step off the line.) Do not record this clue if the subject sways or uses the arms to balance but maintains the heel-to-toe position.
Walk and Turn Test Clues

- Starts too soon
- Stops while walking
- Does not touch heel-to-toe

Starts too soon. The impaired person may also keep balance, but not listen to the instructions. Since you specifically instructed the subject not to start walking "until I tell you to begin," record this clue if the subject does not wait.

Stops while walking. The subject stops while walking. Do not record this clue if the subject is merely walking slowly.

Does not touch heel-to-toe. The subject leaves a space of more than one half inch between the heel and toe on any step.
Walk and Turn Test Clues

- Steps off line
- Uses arms to balance
- Improper turn
- Incorrect number of steps

Steps off the line. The subject steps so that one foot is entirely off the line.

Uses arms to balance. The subject raises one or both arms more than 6 inches from the sides in order to maintain balance.

Improper turn. The subject removes the front foot from the line while turning. Also record this clue if the subject has not followed directions as instructed, i.e., spins or pivots around or loses balance while turning.

Incorrect number of steps. Record this clue if the subject takes more or fewer than nine steps in either direction.
Walk and Turn Test Clues
Summary

SFSTs are a tool to assist you in seeing visible signs of impairment and are not a pass/fail test

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 that 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**

Walk and Turn 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.
F. One Leg Stand

*Test Stages*

Like all divided attention tests, One Leg Stand has two stages.

They are:

- Instructions stage
- Balance and counting stage

Both stages are important, because they can affect the subject's overall performance on the test.
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 One Leg Stand 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 One leg Stand test is administered.

The subject sways while balancing. This refers to side to side or back and forth motion while the subject maintains the one leg stand position.

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

Uses arms to balance. Subject moves arms 6 or more inches from the side of the body in order to keep 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 that 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.
Based on recent research, if an individual shows two or more clues or fails to complete the One Leg Stand, 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*

One Leg Stand 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.
Session 4

Written Examination and Program Conclusion
Upon successfully completing this session the participant will be able to:

- Complete a written examination with a passing grade.
- Provide comments and suggestions for improving the course.

CONTENT SEGMENTS ................................................................. LEARNING ACTIVITIES
A. Post Test ................................................................. Written Participant Examination
B. Critique ................................................................. Written Participant Critique
C. Review of Post Test ........................................... Instructor-Led Presentation
D. Concluding Remarks
E. Certificates and Dismissal
Detection Phases

• What are the three phases of detection?
• What is the definition of “detection”?
• What is the police officer’s principal decision during Detection Phase One?
• During Phase Two? During Phase Three?
• Suppose you are on night time patrol and you see a vehicle following another too closely. What are the odds that the driver of the following vehicle is DWI?
Field Sobriety Testing

- What does "nystagmus" mean?
- Walk and Turn is an example of a ______________ attention test.
- Name the eight distinct clues of Walk and Turn.
- 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?
- Suppose a subject produces three clues on the HGN test and one clue on the Walk and Turn test. Should you classify the subject's BAC as above or below 0.08?
- How reliable is each test using the San Diego field validation study?
A. Post Test

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