

SESSION I
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

I. INTRODUCTION AND OVERVIEW

A. Welcoming Remarks and Objectives

Welcome to the DWI Detection and Standardized Field Sobriety Testing Refresher Training Program.

Instructor Introductions

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

Session Objectives

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Ultimate Goal

Increase DWI deterrence and decrease alcohol-related crashes, deaths, and injuries.

Overview of the DWI Problem

- In 2006, 13,470 people were killed in alcohol-impaired crashes.
- These fatalities accounted for 32 percent of the total motor vehicle traffic fatalities in the United States.
- The 13,470 fatalities represent an average of one alcohol-impaired-driving fatality every 39 minutes.

B. Administrative Details

- Training schedule (breaks, etc.)
- Facilities (rest rooms, lunchroom, etc.)
- Logistics (travel vouchers, etc.)
- Refer to Glossary Located At End of Session I

C. 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, 13.6% or more than 32 million people reported that they had driven at least once in the last year under the influence of alcohol.
- That further translated into approximately 30% of minors (16-20 years of age) and 29% of those between the ages of 21 and 25 years.
- 5% (11m) of people reported that they drove under the influence of illicit drugs during the last year.

D. 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 is:

- Standardized Field Sobriety Testing
- Advanced Roadside Impaired Driving Enforcement (ARIDE)
- Drug Evaluation and Classification program
- Drug Impairment Training for Education Professionals
- 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.

E. 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.

The SFST test battery serves as the foundation for impaired driving enforcement. It is critical that these tests be performed and interpreted properly.

F. Drugs and Highway Safety

Many law enforcement officers are trained in Standardized Field Sobriety Testing (SFST) and use the skills gained in the course as part of their overall enforcement of DWI laws.

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.

- 119 million (50.1%) people consider themselves drinkers
- 14% of this group describe themselves as heavy drinkers.
- 19.5 million people or 8.2% of the population have used illicit drugs in the past month.

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 2003:

- 14.6 million people consider themselves current marijuana users
- 54.2% only use marijuana
- 20.6% use marijuana in combination with other drugs
- 75% of current illicit drug users also use marijuana.

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

<u>Type</u>	<u>Number of Users</u>
Cocaine	2.3 Million
Hallucinogens	1.0 Million
Psychotherapeutics	6.3 Million
Pain Relievers	4.7 Million
Tranquilizers	1.8 Million
Stimulants	1.2 Million
Sedatives	.3 Million

The ARIDE Course

The ARIDE course was designed with a dual purpose:

The ARIDE program will allow the participant 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.
- This course will provide additional information which can assist the officer in effective observation and interview techniques related to driving while impaired by alcohol, drugs, or a combination of both, and make an informed decision to arrest or not arrest a subject for impaired driving.

This sums up the responsibilities and duties of the ARIDE trained officer at the conclusion of this training course.

- This course will deliver knowledge and information that will help them better assess impaired drivers at roadside.
- This training and subsequent field experience will demonstrate the value of having a DRE on staff in an agency and may serve as motivation for the individual officers to attend a DEC course in the future.

A subsequent result of this course 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 communities with no DREs or limited access to their services, this course will help officers make informed decisions related to testing, documentation, and reporting.

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

Based on that premise, the ARIDE course was developed with the following goals in mind.

Segment Goal

The ARIDE course will train 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

The ultimate goal of the DEC program is to help prevent crashes and avoid deaths and injuries by improving enforcement of drug impaired driving violations.

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.

A participant 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.

Drug Impairment Training for Education Professionals

The purpose of the DITEP training is to provide school administrators, teachers, and nurses with a systematic approach to recognizing and evaluating subjects in the academic environment who are using, abusing, and/or impaired by drugs, in order to provide early intervention.

This training is not intended to qualify participants as DREs, but is intended to aid in the evaluation and documentation of those suspected of being impaired by drugs.

SESSION II
VEHICLE IN MOTION AND PERSONAL CONTACT

SESSION II: VEHICLE IN MOTION AND PERSONAL CONTACT

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

- 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.

CONTENT SEGMENTS

A. Phase One: Vehicle in Motion

B. Phase Two: Personal Contact

II. VEHICLE IN MOTION AND 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. Phase One: Vehicle in Motion

Overview: Tasks and Decision

DWI Detection Phase One, Vehicle in Motion, consists of the initial observation of vehicular operation, the stop decision and the observation of the stop.

The initial observation of vehicular operation begins when the officer first notices the vehicle and/or the driver.

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.

Initial Observations: Visual Cues of Impaired Operation (Automobiles)

Drivers impaired by alcohol and/or other drugs may respond in unexpected and dangerous ways to the stop command.

The National Highway Traffic Safety Administration sponsored research to identify the most common and reliable initial indicators of DWI.

Research identified 100 cues, each providing a high probability indication that the driver is under the influence.

The cues presented in these categories predict a driver is DWI at least 35 percent of the time.

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

Generally, the probability of DWI increases substantially when a driver exhibits more than one of the cues.

The driving behaviors are presented in four categories:

- Problems in maintaining proper lane position. [P=.50-.75]
 - Weaving
 - Weaving across lane lines
 - Straddling a lane line
 - Swerving
 - Turning with a wide radius
 - Drifting
 - Almost striking a vehicle or other object
- Speed and braking problems. [P=.45-.70]
 - Stopping problems (too far, too short, or too jerky)
 - Accelerating or decelerating for no apparent reason
 - Varying speed
 - Slow speed (10+ mph under limit)
- Vigilance problems. [P=.55-.65]
 - Driving in opposing lanes or wrong way on one way
 - Slow response to traffic signals
 - Slow or failure to respond to officer's signals
 - Stopping in lane for no apparent reason
 - Driving without headlights at night
 - Failure to signal or signal inconsistent with action

- Judgment problems. [P=.35-.90]
 - Following too closely
 - Improper or unsafe lane change
 - Illegal or improper turn
 - Driving on other than designated roadway
 - Stopping inappropriately in response to officer
 - Inappropriate or unusual behavior (throwing objects, arguing, etc.)
 - Appearing to be impaired

Initial Observations: Visual Cues of Impaired Vehicle Operation (Motorcycles)

The National Highway Traffic Safety Administration (NHTSA) estimated that in 2005, about 27 percent of motorcycle operators involved in fatal crashes had a BAC of 0.08 or higher.

In 2005, 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.

8 clues best discriminate between DWI and unimpaired motorcycle operation. These cues have been labeled as:

- Excellent Predictors
- Good Predictors

The excellent cues predicted impaired motorcycle operation at least 50 percent of the time.

The good cues predicted impaired motorcycle operation at least 30 to 49 percent of the time.

Cases that involve speeding require additional clarification. Motorcyclists stopped for excessive speed are likely to be driving while impaired only about 10 percent of the time.

Excellent Predictors

- 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
 - Open containers
 - Dropping objects from motorcycle
 - Urinating at roadside
 - Arguing with other motorists
 - Disorderly conduct
- Weaving – involves excessive movement within a lane or across lane lines.

Good Predictors

- Erratic Movements While Traveling 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
- Wrong Way

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.

Emphasize that turning on the patrol vehicle's emergency lights creates a simple test of the subject's driving impairment.

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.

B. Phase Two: Personal Contact

DWI Detection Phase Two, Personal Contact, consists of:

- The face-to-face observation and interview of the driver while still in the vehicle.
- The decision to instruct the driver to exit the vehicle.
- The observation of the driver's exit from the vehicle.

Typical Investigation Clues of the Driver Interview

The interview and face-to-face observation of the driver allow the officer to use three senses to gather evidence of alcohol and/or other drug influence.

Sense of Sight

Sense of Hearing

Sense of Smell

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

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

Recognition and Description of Investigation Clues

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

- Difficulty with motor vehicle controls
- Difficulty exiting the vehicle
- Fumbling with driver 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/ officer must repeat
- Provides incorrect information, changes answers
- Odor of alcoholic beverage from the driver

Interview/Questioning Techniques

The questions an officer asks of a subject, and the way in which they are asked, can provide simple, divided attention tasks.

Sample Divided Attention Question: ask subject to produce their driver's license and vehicle registration.

Things to watch for in the subject's response to your instruction to produce driver's license and vehicle registration:

- Forgets to produce both documents (divided attention).
- Produces inappropriate or other documents.
- Passes over the license and/or registration while searching through the wallet.
- Fumbles or drops wallet, license or registration.
- Unable to retrieve documents, using fingertips.

Variation on the request for license and registration: the interrupting or distracting question.

The interrupting or distracting question forces the subject to divide attention between the license/registration search and the new question.

Things to watch for in subject's response to the interrupting of distracting question:

- Subject ignores question, because subject is concentrating on the license/registration search.
- Subject forgets to resume search for license and registration after answering the question.
- Subject supplies incorrect answer to the question.

After obtaining the license and registration: verifying information through unusual questions.

There are probably dozens of questions which the subject should be able to answer very easily, but which might be very difficult to handle while impaired, simply because they are unusual.

Unusual questions require the subject to process information; this can be especially difficult to do when the subject doesn't expect to have to process information.

Example: subject may respond to the question about the middle name by giving first name.

In this case, subject ignores the unusual question and instead answers an unspoken usual question.

Sample tests that can be administered while the subject is still inside the vehicle.

Alphabet Recital

- Recite the alphabet, beginning with the letter E as in Edward, and stopping after the letter P as in Paul.

Count-down Tests

- Count out loud backwards, starting with the number 67 and ending at the number 54.

Finger Count Test

- Touch the tip of right thumb, in turn, to tips of the fingers of the right hand, simultaneously counting "one, two, three, four"; then reverse direction on fingers, simultaneously counting down "four, three, two, one".

Recognition and Description of Clues Associated With the Exit Sequence

The decision to instruct the subject to exit the vehicle may be based on suspicion that the subject may be impaired.

Even though that suspicion may be strong, the subject usually is not yet under arrest at this point.

How the subject exits the vehicle, and the actions and behavior of the subject during the exit sequence, may provide important additional evidence of alcohol and/or other drug influence.

Usual kinds of evidence obtained during observation of the exit sequence.

SESSION III
STANDARDIZED FIELD SOBRIETY TESTING REVIEW

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 Standardized Field Sobriety Tests (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. Standardized Field Sobriety Tests

III. STANDARDIZED FIELD SOBRIETY TESTING REVIEW

Session Objectives

- Understand the results of selected SFST validation studies.
- Define and describe the Standardized Field Sobriety Tests (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.

A. Overview of the SFST Validation Studies

For many years law enforcement officers have utilized field sobriety tests to determine a subject's impairment due to alcohol.

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

This may not seem important, but officers are seeing this in court as a defense strategy.

A wide variety of field sobriety tests being used by officers throughout the country.

There was a need to develop a battery of standardized, validated tests.

SCRI conducted several research projects and published the following three reports:

1. California; 1977 (Lab)
2. California; 1981 (Lab and Field)
3. Maryland, DC, VA, NC; 1983 (Field)

The recommended battery included the following SFSTs:

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

SCRI analyzed the laboratory test data and determined that:

- HGN, alone, was 77% accurate
- WAT, alone, was 68% accurate
- OLS, alone, was 65% accurate
- Combination of HGN and WAT yield an accuracy rate of 80%

Additional research studies were conducted to validate the 3-test battery.

Three SFST validation studies were:

1. Colorado (1995)
2. Florida (1997)
3. San Diego (1998)

The Colorado SFST validation study was the first full field study that utilized law enforcement personnel experienced in the administration of SFSTs.

The results of this study indicated that correct arrests decisions were made 93% of the time based on the 3-test battery (HGN, WAT, OLS)

Colorado was the first full field study that utilized law enforcement personnel experienced in the use of SFSTs.

Correct arrest decisions were made 93% of the time based on the three-test battery (HGN, WAT, OLS). Substantially higher than the initial study results.

The Florida SFST field validation study examined whether SFSTs are valid and reliable indices of the presence of alcohol when used under present day traffic and law enforcement conditions.

Florida was the first study to evaluate the 3-test battery at a 0.08 BAC.

Correct decisions to arrest were made 95% of the time based on the 3-test battery (HGN, WAT, OLS).

The San Diego SFST validation field study was undertaken because of the nationwide trend towards lowering the BAC limits to 0.08.

The research was done to investigate how well the SFSTs discriminate at BACs below 0.10. Based on the revised arrest and release criteria, the officers in the study made correct decisions 91% of the time based on the 3-test battery (HGN, WAT, OLS) at the 0.08 BAC level and above.

B. Overview of Selected Types of Nystagmus

Nystagmus

The involuntary jerking of the eyes and is normal and occurs naturally.

This nystagmus can not be seen without the aid of specialized instrumentation.

Horizontal Gaze Nystagmus is defined as the involuntary jerky of the eyes, as the eyes gaze to the side.

There are over 40 different types of nystagmus, but during this course we will focus on two types of nystagmus:

- Horizontal gaze nystagmus (HGN)
- Vertical gaze nystagmus (VGN)

The ability to recognize horizontal and vertical gaze nystagmus are important tools in impaired driving enforcement.

Alcohol and certain other drugs have been shown, through research, to cause horizontal and vertical gaze nystagmus, which is visible without the aide of specialized instrumentation.

Categories of Nystagmus

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.).

Pathological Nystagmus

Caused by the presence of specific pathological disorder, which include brain tumors, other brain damage, or some diseases of the inner ear.

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.

Gaze Nystagmus

Horizontal Gaze Nystagmus

Defined as the involuntary jerking of the eyes as they gaze toward the side.

Although this type of nystagmus is useful in determining alcohol influence, its presence may also indicate use of CNS Depressants, Inhalants, and Dissociative Anesthetics. These are known as DID drugs.

Vertical Gaze Nystagmus

Defined as the 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 usually associated with a Dissociative Anesthetic, high dose of a CNS Depressant (including alcohol), or an Inhalant for a particular subject.

VGN will not be present without HGN.

If VGN is present and HGN is not, it could indicate a medical condition.

Resting Nystagmus

Defined as the involuntary jerking of the eyes as they gaze straight ahead.

This condition is not frequently seen. Its presence usually indicates a pathology or high doses of a drug such as a Dissociative Anesthetic like PCP.

If detected, take precautions. As always, exercise sound officer safety techniques and consider calling for medical aid.

C. Standardized Field Sobriety Tests

Horizontal Gaze Nystagmus

HGN may be observable when a subject is impaired by alcohol.

As the subject's BAC increases, jerking will appear sooner.

HGN is also visible when an individual is impaired by certain drugs. Examples include CNS Depressants, Inhalants, Dissociative Anesthetics.

In administering the HGN test:

- Subject must focus on stimulus

- You will need a contrasting stimulus for the subject to follow with their eyes. This can be the tip of your index finger, penlight, or pen.

Initiating the HGN Test

Ask the subject to:

1. Put their feet together,
2. Hands at their side,
3. Look straight ahead and keep head still

Begin the test by positioning the subject in a manner that is deemed safe by the officer and safe for the subject being tested.

When practical, subject should be turned away from emergency lights.

The subject should not be wearing glasses during the test.

Give the subject the following verbal instructions:

1. "I am going to check your eyes."
2. "Keep your head still and follow the stimulus with your eyes only."
3. "Keep your eyes on the stimulus until I tell you to stop."

Position the stimulus approximately 12 to 15 inches from the face in front of the subject's nose and hold it slightly above eye level.

Check both eyes for equal pupil size and resting nystagmus.

- Both pupils should be of equal size.
- If the pupils are noticeably unequal in size or there is noticeable nystagmus at rest, this could indicate a medical condition or a head injury.

Check both eyes for equal tracking.

This is done by making a horizontal pass across both eyes. The movement should go from center, across the left eye, across the face to the person's right eye, and back to center.

Both eyes should track the stimulus together. If the eyes fail to track together, discontinue the test. This could be the indication of a possible medical disorder, injury or blindness.

Administration of the HGN

Lack of Smooth Pursuit

When the eyes jerk or bounce as they follow a smoothly moving stimulus.

1. Check the subject's left eye by moving the stimulus to your right. Move the stimulus smoothly, at a speed that requires approximately two seconds to bring the subject's eye as far to the side as it can go. While moving the stimulus, look at the subject's eye and determine whether it is able to pursue smoothly.
2. Move the stimulus all the way to the left, back across subject's face checking if the right eye pursues smoothly. Movement of the stimulus should take approximately two seconds out and two seconds back for each eye.
3. Repeat the procedure.

The stimulus should be moved in a smooth manner to best observe the eyes in motion.

The two-second timing is provided based on how the eye should follow the stimulus if the individual is not impaired by alcohol and/or other drugs.

Distinct and Sustained Nystagmus at Maximum Deviation

At extreme lateral gaze, also known as the endpoint or maximum deviation, the nystagmus is obvious and sustained when the stimulus is held for a minimum of 4 seconds.

1. Start again with the subject's left eye.
2. Move the stimulus to the subject's left side until there is no more white of the eye visible.
3. The eye should not be able to move any further on the horizontal plane.
4. Hold the left eye in that position for a minimum of four (4) seconds.
5. Observe the eye for distinct and sustained nystagmus while being held in this position.
6. Move the stimulus all the way to the left, back across the subject's face and check the right eye.
7. Repeat the procedure until each eye has been checked twice.

Onset of Nystagmus Prior to 45 Degrees

1. Start again with the subject's left eye
2. Move the stimulus at a speed that would take at least four seconds to reach the 45 degree angle.
3. Watch the eye carefully for any sign of jerking.
4. If jerking is observed, hold the stimulus at that position and verify the jerking continues.
5. Move the stimulus all the way to the left, back across the subject's face and check the right eye.
6. Repeat the procedure until each eye has been checked twice.

HGN Test Criterion

Vertical Nystagmus

1. Start with the stimulus approximately 12-15 inches from the face in front of the nose.
2. Elevate the stimulus up until the eyes can not elevate further.
3. Hold the stimulus in that position for a minimum 4 seconds.
4. If vertical nystagmus is present it must be distinct and sustained.

Test Interpretation

There are three clues in each eye and six total clues.

Lack of Smooth Pursuit

- Present
- Not Present
- If present, it accounts for 2 clues, one in each eye.

Distinct and sustained Nystagmus at Maximum Deviation

It is important to hold the eye in this position for at minimum of four (4) seconds.

This jerking must be distinct and sustained.

- Present
- Not present
- If present, it accounts for 2 clues, one in each eye.

Onset of Nystagmus Prior to 45 Degrees

The earlier the onset the more impaired a subject may be.

Documenting the HGN Clues

The HGN test has been researched and found to be a reliable indicator of impairment with subjects at or above 0.08 BAC.

Based on the 1998 San Diego field validation study, if four or more clues are observed, it is likely that the subject's BAC is at or above 0.08.

If two or three clues are observed, it is likely that the subject's BAC is at or above 0.04 but under 0.08.

When applicable you should always document the clues of impairment as you are conducting the roadside tests.

Make sure that you keep officer safety in mind when documenting these clues.

Each jurisdiction has come up with methods and forms to record the results. As long as these forms follow the NHTSA/IACP manuals, they may be used. Listed in your manual is only one example that could be used.

Walk and Turn Test

The Walk and Turn (WAT) test is divided into two stages:

1. Instruction Stage
2. Walking Stage

Instruction Stage

Stand heel-to-toe with arms at their sides.

Walking Stage

Balancing, walking heel-to-toe, and turning.

Officer safety precautions:

- Keep subject on your left when starting demonstration
- Never turn your back on a subject
- Be aware of surroundings

Instruction Stage

1. "Place your left foot on the line" (real or imaginary).

Demonstrate.

2. "Place your right foot on the line ahead of the left foot, with heel of right foot against toe of left foot".

Demonstrate.

3. "Place your arms down at your sides".

Demonstrate

4. "Maintain this position until I have completed the instructions. Do not start to walk until told to do so."

5. "Do you understand the instructions so far?"

Make sure subject verbally acknowledges understanding.

Walking Stage

1. "When I tell you to start, take nine heel-to-toe steps, turn, and take nine heel-to-toe steps back."

Demonstrate 3 heel-to-toe steps.

2. "When you turn, keep the front foot on the line, and turn by taking a series of small steps with the other foot, like this."

Demonstrate

3. "While you are walking, keep your arms at your sides, watch your feet at all times, and count your steps out loud."
4. "Once you start walking, don't stop until you have completed the test."
5. "Do you understand the instructions?" (Make sure the subject understands.)

Make sure subject verbally acknowledges understanding.

6. "Begin, and count your first step from the heel-to-toe position as 'one'."

Clues for Walk and Turn Test

Look for the following clues each time the Walk-and-Turn test is administered.

1. Cannot keep balance while listening to the instructions.
 - Record this clue if the subject does not maintain the heel-to-toe position throughout the instructions.
 - Feet must actually break apart or leave the line.
2. Starts before the instructions are finished.
 - 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.
3. Stops while walking.
4. 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.
5. Steps off the line. The subject steps so that one foot is entirely off the line.

6. Uses arms to balance. The subject raises one or both arms more than 6 inches from the sides in order to maintain balance.
7. 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 demonstrated, i.e., spins or pivots around.
8. Incorrect number of steps. Record if the subject takes more or fewer than nine steps in either direction.

**If a subject is unable to complete the test he/she will
be held accountable for only the clues that were observed.**

Documenting the Walk and Turn Clues

Each clue is noted by placing a slash in the appropriate place on the assessment form.

For example, if the subject raised their arms twice and stepped off the line three times, they would be considered to have demonstrated “two” clues.

It is a good practice to use an assessment form that documents the administrative procedures.

Considerations

Walk-and-Turn test requires a real or imaginary line, and 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.

However, recent field validation studies have indicated that varying environmental conditions have not affected a subject’s ability to perform this test.

This exercise has not been researched with individuals over 65 years of age.

Subjects wearing heels more than 2 inches high should be given the opportunity to remove their shoes.

Walk-and-Turn Test Criterion

- 2 or more clues indicates a BAC at or above .08

One Leg Stand

The One Leg Stand (OLS) test is divided into two stages:

1. Instruction stage
2. Balancing and counting

Instruction Stage

- Balancing
- Listening to instructions

The Balancing and Counting Stage

- Balancing and counting
- Short-term memory

Administrative Procedures

Initial Positioning and Verbal Instructions

1. “Stand with your feet together and your arms by your side.”
2. “Do not start to perform the test until I tell you to do so.”
3. “Do you understand the instructions so far?”

Make sure subject verbally acknowledges understanding.

Instructions for the Balancing and Counting Stage

1. "When I tell you to start, raise one leg, either leg, with the foot approximately six inches off the ground, keeping your raised foot parallel to the ground."
2. "Keep both legs straight, and your arms by your side."
3. "While holding that position, count out loud in the following manner: "one thousand and one, one thousand and two, one thousand and three, and so on until told to stop."
4. "Keep your arms at your sides at all times and keep watching the raised foot."
5. "Do you understand?"

Make sure subject verbally acknowledges understanding.

6. "Go ahead and begin the test."

You should always time for 30 seconds, at which time discontinue the test.

If the subject puts their foot down, instruct the subject to pick the foot up again and continue counting from the point at which the foot touched the ground.

Clues for One Leg Stand Test

Look for the following clues each time the One-Leg Stand test is administered:

1. Puts foot down.
2. Uses arms to balance.

Subject raises arms more than 6 inches from their side to balance.

3. Sways while balancing.

Side to side, back to front.

4. Hopping

Documenting the One Leg Stand Clues

Each clue is noted by placing a slash in the appropriate place on the assessment form.

For example, if the subject used their arms twice and swayed three times, they would be considered to have demonstrated “two” clues. It is a good practice to use an assessment form that documents the administrative procedures.

Considerations

Some people may have difficulty with the one leg stand test even when not impaired. Persons over 50 pounds overweight and /or with injuries to their legs and/or hips or inner ear disorders may have difficulty with this test.

This exercise has not been researched with individuals over 65 years of age.

Subjects wearing shoes more than 2 inches high should be given the opportunity to remove them.

One Leg Stand Test Criterion

- 2 or more clues indicates a BAC at or above .08