



DWI Detection and Standardized Field Sobriety Testing

# INSTRUCTOR GUIDE

---







# SFST

---

## ADMINISTRATOR GUIDE

# DWI Detection and Standardized Field Sobriety Testing Course

## Instructor Guide

### Table of Contents

#### 2/2023 Curriculum

#### Acknowledgements

#### Preface

#### Administrator Guide

Session 1	Introduction and Overview
Session 2	Detection and General Deterrence
Session 3	The Legal Environment
Session 4	Overview of Detection, Note Taking, and Testimony
Session 5	Phase One: Vehicle In Motion
Session 6	Phase Two: Personal Contact
Session 7	Phase Three: Pre-Arrest Screening
Session 8	Concepts and Principles of the SFSTs
Session 9	SFST Demonstrations and Practice
Session 10	Alcohol Workshop: First Session
Session 10-A	Dry Lab: First Session
Session 11	Processing the Arrested Subject, Report Writing, and Preparation for Trial
Session 12	Moot Court (Optional)
Session 13	Alcohol Workshop: Second Session
Session 13-A	Dry Lab: Second Session
Session 14	Review and Proficiency Examinations
Session 15	Written Examination and Program Conclusion
Session 16	Introduction to Drugged Driving (Optional)

## A. ACKNOWLEDGEMENTS

The National Highway Traffic Safety Administration (NHTSA) and the International Association of Chiefs of Police (IACP) would like to thank the following individuals for their contributions in updating and revising the 2023 Impaired Driving Enforcement Programs (DRE, SFST, ARIDE) curricula.

*Kyle Clark*, International Association of Chiefs of Police

*Don Decker*, Nahant MA Police Department

*Chuck Hayes*, International Association of Chiefs of Police

*Jim Maisano*, International Association of Chiefs of Police

*Don Marose*, Minnesota Highway Patrol (Retired)

*Matthew Payne*, Kansas Highway Patrol

*Timothy Plummer*, Oregon State Police

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

*Pam McCaskill*, U.S. Department of Transportation, Transportation Safety Institute

*Lance McWhorter*, U.S. Department of Transportation, Transportation Safety Institute

*Rocky Wehling*, U.S. Department of Transportation, Transportation Safety Institute

*Amy Ziegler*, U.S. Department of Transportation, Transportation Safety Institute

The National Highway Traffic Safety Administration (NHTSA) and the International Association of Chiefs of Police (IACP) would also like to thank the following individuals for their contributions towards the 2025 edits and revisions to the 2023 Impaired Driving Enforcement Programs (DRE, SFST, ARIDE) curricula.

*Joe Abrusci*, International Association of Chiefs of Police

*Paul Batcheller*, International Association of Chiefs of Police

*Robert Hayes*, International Association of Chiefs of Police

## B. PREFACE

The DWI Detection and Standardized Field Sobriety Testing (SFST) training curriculum prepares police officers and other qualified persons to conduct the SFSTs for use in driving while impaired (DWI) investigations. This training, developed under the auspices and direction of NHTSA and the IACP, has experienced remarkable success since its inception in the early 1980s.

As in any educational training program, an instructor 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) with contributions from sources in health care science, toxicology, jurisprudence, optometry, 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. Changes will take effect after approval by TAP, unless otherwise specified or when so designated.

The procedures outlined in this manual describe how the SFSTs are to be administered under ideal conditions. We recognize the SFSTs 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.

## C. TABLE OF CONTENTS

A. ACKNOWLEDGEMENTS .....	3
B. PREFACE.....	4
C. TABLE OF CONTENTS .....	5
D. APPENDICES.....	6
E. SESSION ATTACHMENTS .....	6
F. ADDITIONAL RESOURCES .....	6
G. PURPOSE OF THIS DOCUMENT .....	7
H. OVERVIEW OF THE COURSE .....	9
I. OVERVIEW OF THE CURRICULUM PACKAGE .....	17
J. GENERAL ADMINISTRATIVE REQUIREMENTS .....	19
K. GUIDELINES FOR CONTROLLED DRINKING PRACTICE SESSIONS.....	20
L. COURSE PLANNING AND PREPARATION REQUIREMENTS.....	22
M. STANDARDS FOR COURSE COMPLETION .....	23
N. GUIDELINES FOR PREPARING POST COURSE EVALUATION .....	23
O. REQUESTS FOR INFORMATION, ASSISTANCE OR MATERIALS .....	24

## D. APPENDICES

- A. Synopsis of the SFST Curriculum
- B. Overview of SFST Refresher Training
- C. Instructor/Participant Roster
- D. Resources
- E. NPSRI Technical Report “The Use of Video in Training for SFSTs” – Summary (for Sessions 10-A and 13-A)
- F. Overcoming Impaired Driving Defenses

## E. SESSION ATTACHMENTS

- Glossary of Terms (Session 1)
- Field Note-Taking Guide (Session 4)
- 45 Degree Template (Session 8)
- Participant Proficiency Examination (Sessions 9 and 14)
- Sample Dry Erase Board Array for Tabulating Results (Session 10, 10-A, 13, and 13-A)
- SFST Field Arrest Log (Session 10, 10-A, 13, and 13-A)
- Video Score Sheet (Session 10-A and 13-A)
- Alcohol Workshop Participant Statement of Informed Consent (Sessions 10 and 13)
- Volunteer Drinker Questionnaire and Dosing Chart (Sessions 10 and 13)
- SFST Option Video Subject Results – CD/Video Day 1 (Session 10-A)
- Trial Tips and Techniques – Courtroom Decorum (Session 11)
- Sample DWI Incident Report (Session 11)
- SFST Option Video Subject Results – CD/Video Day 2 (Session 13-A)
- Course and Instructor Evaluation (Session 15)

## F. ADDITIONAL RESOURCES

- HGN Case Law Summary (Session 3)
- The Visual Detection of DWI Motorists (Session 5)
- The Detection of DWI Motorcyclists (Session 5)
- San Diego Field Validation Study (Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent) (Session 8)
- Video Score Sheet (Session 10-A and 13-A)

## G. PURPOSE OF THIS DOCUMENT

The Administrator Guide provides an introduction and overview of the SFST training program. The acronym "DWI" means driving while impaired and **is synonymous with the acronym "DUI," "driving under the influence."** These terms refer to any and all offenses involving the operation of vehicles by persons under the influence of alcohol and/or other drugs. However, the focus of this curriculum is on the alcohol-impaired driver.

**The procedures outlined in this guide describe how the SFSTs are to be administered under ideal conditions. We recognize the SFSTs will not always be administered under ideal conditions in the field because such conditions will not always exist. Even when administered under less than ideal conditions, they will serve as useful indicators of impairment. Slight variations from the ideal, i.e., the inability to find a perfectly smooth surface at roadside, do not necessarily make the SFSTs invalid.**

Enforcement of alcohol-impaired driving is a complex and demanding law enforcement responsibility sufficient to warrant a separate curriculum. This is not to deny or minimize the importance of detecting and arresting drivers impaired by drugs other than alcohol. Indeed, other materials (as referenced in this document) are available from NHTSA to improve police officers' skills in detecting and apprehending drug-impaired drivers.

In this regard, NHTSA and IACP have developed three trainings that address drug-impaired driving:

- *Introduction to Drugged Driving* is a four-hour overview of drugs other than alcohol that impair. This session contains information to improve the participant's ability to recognize subjects who may be medically impaired or impaired by drugs other than alcohol and, when encountering such subjects, to take appropriate action.
- *Advanced Roadside Impaired Driving Enforcement (ARIDE)* is a 16-hour course which offers additional information to law enforcement officers on detecting impairment caused by more than just alcohol. Oftentimes law enforcement officers who have not received training regarding drug impairment tend to not be able to identify these characteristics; therefore, they may unknowingly release an impaired driver. The law enforcement officer will also be more familiar with the Drug Evaluation and Classification (DEC) Program and its function. This will facilitate better communication and transfer of critical roadside indicators of impairment to the evaluating Drug Recognition Expert (DRE) for a more complete and accurate assessment of the impairment.

The *Introduction to Drugged Driving* session is an option for the SFST training. The *ARIDE* course is a stand-alone training for experienced SFST practitioners. **BOTH ARE HIGHLY RECOMMENDED, HOWEVER, NEITHER WILL CERTIFY AN OFFICER AS A DRE.**

- *Drug Recognition Expert (DRE) School* is a course consisting of three training phases that, collectively, prepare police officers and other qualified persons to serve as DREs. The phases include the Preliminary School (16 hours), the Main School (56 hours) and certification training which involve evaluating actual impaired individuals. Law enforcement officers who have arrested a drug-impaired driver should utilize the assistance of a DRE to assist in gathering important evidence for the impaired driving investigation. As part of the investigation, the DRE will be able to: 1) Determine if the subject is impaired; 2) Determine if the impairment is resulting from an injury, medical condition, or drugs; and 3) Determine, if drug-related, what category (or categories) of drugs is (or are) the likely cause of the subject's impairment.

These impaired driving courses have been approved by NHTSA and IACP. International Standards have been established by IACP to ensure consistency in the content, delivery, and application of the SFST and drugged driving detection training. The SFST International Standards are provided in this link:

<https://www.theiacp.org/sites/default/files/all/c/Combined%20Standards%20DRE%20SFST%20ARIDE.pdf>).

For more information regarding these impaired driver detection programs, contact your State Highway Safety Office (SHSO) or NHTSA Regional Office (Appendix D).

**Note: Neither NHTSA nor IACP are certifying agencies for impaired driving courses, i.e., SFST, ARIDE, DRE, etc. This includes both practitioners and instructors.**

The Administrator Guide is intended to facilitate planning and implementation of the SFST course. The core course consists of 15 sessions with two alcohol workshops.

The guide outlines acceptable options to the core training procedures (see *Course Flexibility* below). It overviews the sequence of instruction, documents the materials and the teaching aids that make up the instructional package, describes course administrative requirements, and provides guidelines for discharging those requirements satisfactorily. The guide sets forth the fundamental tasks that make up the job of DWI enforcement and identifies knowledge, skills, and attitudes police officers need to perform those tasks well. The guide also outlines the preparatory work that must be accomplished (primarily at the departmental or academy level) before the course can be conducted and outlines the follow-up work that should be undertaken, subsequent to training, to ensure that the desired outcomes of the training are realized.



## H. OVERVIEW OF THE COURSE

### Intended Audience

Participants should be persons employed and under the direct control of public criminal justice agencies or institutions involved in providing training services to law enforcement agencies. Ideally, officers responsible for DWI enforcement will actually use all aspects of the training, especially the three SFSTs. Officers selected to attend this training should be aware of the hazards caused by impaired drivers and be motivated to arrest those drivers. Their duty assignments should enable them to spend the time required to process DWI offenders. Refer to the International Standards for Impaired Driving Programs for more information on qualification to attend the SFST training.

Some law enforcement agencies have concluded the subject matter should be offered only to officers who have amassed substantial on-the-job experience in detecting and arresting impaired drivers. Other agencies have advanced equally strong arguments to support the position the training is appropriate for recruit-level officers. Either assessment is left up to the individual agencies using this curriculum. However, all user agencies should note the ability to maintain the skills learned in this course will rapidly diminish if they are not reinforced by frequent application and regular in-service training. This is not to imply this training is so complex or confusing that it can only be mastered by exceptionally skilled officers. The techniques of the SFSTs can readily be grasped by anyone of average competence, provided they are willing to devote the appropriate time and effort to study and practice.

### Purpose of the Course

The fundamental purpose of this training course is to foster DWI deterrence, i.e., to dissuade people from driving while impaired by increasing the odds that they will be arrested and convicted. This course is based on the assumption that a principal reason for enforcing DWI laws is to deter those who might otherwise be tempted to drive while impaired. If potential DWI violators believe that there is a real risk of being caught, it is reasonable to believe most will refrain from driving while impaired.

Police officers can't possibly detect and arrest all DWI violators. Not all who are arrested will be convicted and punished. However, officers can improve the skills that increase the chances of detecting, arresting, recording, articulating, and gathering sufficient evidence to sustain a conviction.

The training is based on the premise that officers perform two fundamental tasks which affect the likelihood of apprehending and convicting impaired drivers. The first of those tasks is detection. In this course, "detection" is defined as "the entire process of identifying and gathering evidence to determine whether a suspect should be arrested for DWI." DWI detection begins when an officer's attention is drawn to a particular vehicle or its operator. The

precipitating events are unlimited. The initial "spark" that causes the officer to focus attention on the particular vehicle may carry with it an immediate, strong suspicion of the possibility of impairment; or, only a slight suspicion of the possibility of impairment; or, depending on the circumstances, no suspicion at all at that time. Regardless, it sets in motion a process in which the officer focuses on the particular individual and has the opportunity to observe and elicit additional evidence.

The detection process ends only when the officer formulates the decision either to arrest or not arrest the individual for DWI. That decision is based on all of the accumulated evidence. Effective DWI enforcers do not leap immediately to the arrest/no arrest decision. Rather, they proceed carefully through a series of intermediate decisions, each of which can elicit evidence. The course clearly outlines each decision step.

Successful DWI detectors are those officers who know what to look and listen for, who have the skills to ask the right questions, and choose and use the right tests. They are highly motivated and apply their knowledge and skill whenever they contact someone who may be under the influence. In this way, they tend to make more DWI arrests and gather the best possible evidence to support their charges.

The second basic task of effective DWI enforcement is description. Just as detection is the process of collecting evidence, description is the process of articulating evidence. Successful description demands the ability to verbally convey evidence clearly and convincingly. The officer's challenge is to communicate observational evidence to people who weren't there to see, hear, or smell the evidence themselves. The officer's tools are words. These words make up the written report and verbal testimony which the officer uses to "paint a word picture" when communicating with the prosecutor, the judge, the members of the jury, and the defense attorney. This skill allows these people to develop a sharp mental image that allows them to "see," "hear," and "smell" the evidence. Successful DWI describers have the verbal skills needed to use descriptive words and phrases to communicate their evidence clearly and convincingly.

This training will help officers become more skillful at detection and description, make more DWI arrests, and obtain more convictions. These actions will lead to greater DWI deterrence through less impaired driving and fewer crashes, injuries, and deaths.

### Benefits of the Training

Participants will learn to:

- Recognize driving behaviors and other indicators commonly exhibited by impaired drivers
- Become better detectors and better describers by improving their knowledge, attitudes, and skills in detecting the impaired driver and articulating their observations

- Develop a better understanding of the tasks and decisions involved in the DWI detection process
- Recognize the magnitude and scope of DWI-related crashes, injuries, deaths, property loss, and other social aspects of the DWI problem
- Understand the deterrent effects of DWI enforcement
- Have a better understanding of the legal environment relevant to DWI enforcement and use of the three SFSTs
- Know and recognize typical clues of alcohol impairment that may be detected during face-to-face contact with DWI suspects
- Know and perform the appropriate administrative procedures for the divided attention psychophysical tests
- Know and perform appropriate administrative procedures for the HGN test
- Know and recognize typical clues of alcohol impairment that may be seen during administration of the SFSTs
- Understand the DWI prosecution requirements and their relevance to DWI arrest reporting

## Course Content

The course presents a substantial body of information relevant to the entire DWI detection process, including the organization, presentation, and articulation of the evidence gleaned from that process. It also presents supportive information to bolster the participants' awareness of the importance of effective DWI enforcement.

Key elements of the subject matter include:

- Involvement of impaired driving in traffic crashes, deaths, and injuries, both nationally and within the participants' State(s)
- Concept of general deterrence of DWI and evidence of the effectiveness of deterrence in reducing impaired driving
- Laws governing DWI and its enforcement within the participants' State(s)
- Concept of detection as a three-phase process, with specific evidence-gathering and decision-making tasks in each phase
- Kinds of evidence of alcohol impairment typically associated with each phase of detection
- Concepts and principles of divided attention (psychophysical) testing
- Concepts and principles of HGN testing
- Guidelines for processing suspects arrested for DWI, preparing arrest reports, and delivering testimony in DWI trials

## Training Activities

The principal activity of this course is hands-on practice by the participants. In a variety of ways, they spend approximately three quarters of the total training time actually doing various elements of the detection and description tasks.

They observe video presentations of vehicles and operators and gather evidence of impairment. They form decisions, i.e., to stop suspected impaired drivers, to request them to exit their vehicles, to administer SFSTs, and to decide to arrest or not arrest them. They write narrative and other reports to document that evidence. They organize and testify to the evidence they have observed. Most significantly, they practice administering and interpreting the SFSTs.

Even though significant time is spent in lectures and demonstrations by instructors, the participants are actively engaged, never passive listeners.

The following are among the most important learning activities of the course:

- Video presentations of vehicles and operators exhibiting indicators associated with the various phases of DWI detection
  - Participants view the videos, then identify and record the clues of possible impairment
- Brief testimony sessions are conducted where selected participants attempt to give clear, convincing verbal descriptions of the clues observed in the video presentation
- "Dry run" practice in administering SFSTs, in which participants work in small groups, taking turns administering HGN, WAT, and OLS to each other
- Controlled drinking practice(s), in which participants administer the SFSTs to volunteers (not members of the class) who have consumed various amounts of alcohol
  - Participants also practice observing, recording, and interpreting test results during these sessions
- NHTSA/IACP-approved videos of the three SFSTs being performed by volunteer drinkers are available for options one and two only
  - Videos allow participants to practice observing, interpreting, and recording the tests

**NOTE: NHTSA/IACP strongly believe that conducting live alcohol workshops is the optimal way of achieving the learning objectives of this training.**

- Report writing exercise, in which participants view a video of a simulated DWI detection/arrest sequence and prepare a detailed narrative report

- Moot court, in which selected participants "testify" based on the contents of their narrative reports
- Written tests, in which participants demonstrate their knowledge of the content subject matter
- A field sobriety proficiency examination, in which participants demonstrate their ability to administer HGN, WAT, and OLS tests

## Length of Training

The core curriculum consists of 15 sessions and requires three full training days. There is no need to conduct the training for three consecutive days, or to adhere to a traditional 8:00am - 5:00pm class-day schedule. For example, scheduling the alcohol workshops at night makes it easier to recruit volunteer drinkers. Also, evening and nighttime training sessions are less susceptible to interruption. A court appearance could cause a participant to be absent from a daytime class for several hours. Such absences cannot be tolerated in this course: there is simply no way that a participant can achieve the training objectives if several hours of instruction or practice are missed. SESSIONS MISSED DURING EXCUSED ABSENCES MUST BE MADE UP.

## SFST Schedule

The sequence and duration of the 15 core sessions and 2 optional sessions are listed below. (The times listed are based upon a class of 20 participants. Actual times may vary.)

<b>1</b>	Introduction and Overview	30 Minutes
<b>2</b>	Detection and General Deterrence	50 Minutes
<b>3</b>	The Legal Environment	1 Hour, 10 Minutes
<b>4</b>	Overview of Detection, Note Taking, and Testimony	50 Minutes
<b>5</b>	Phase One: Vehicle in Motion	1 Hour, 30 Minutes
<b>6</b>	Phase Two: Personal Contact	1 Hour, 30 Minutes
<b>7</b>	Phase Three: Pre-Arrest Screening	40 Minutes
<b>8</b>	Concepts and Principles of the SFSTs	3 Hours, 20 Minutes
<b>9</b>	SFST Demonstrations and Practice	1 Hour, 30 Minutes
<b>10 (or 10A)</b>	Alcohol Workshop (or Dry Lab): First Session	2 Hours
<b>11</b>	Processing the Arrested Subject, Report Writing, and Preparation for Trial	3 Hours
<b>12 OPT</b>	Moot Court (Optional)	2 Hours
<b>13</b>	Alcohol Workshop (or Dry Lab) Second Session	2 Hours

<b>(or 13A)</b>		
<b>14</b>	Review and Proficiency Examinations	1 Hour, 50 Minutes
<b>15</b>	Written Examination and Program Conclusion	50 Minutes
<b>16 OPT</b>	Introduction to Drugged Driving (Optional)	4 Hours

## Course Flexibility

All of the training objectives are applicable and essential for police officers who wish to become proficient at detecting evidence of DWI and at describing that evidence in written reports and verbal testimony. All subject matter is necessary to achieve those objectives and all learning activities are needed to ensure the participants master the subject matter.

This curriculum should take a minimum of 24 hours to teach. The participant must have met all of the listed learning goals and performance objectives included. This course is flexible in that it can easily be expanded since it does not cover all dimensions of DWI enforcement.

In recognizing the limitation, some agencies have in conducting live alcohol workshops, NHTSA sponsored research involving the use of videos as an alternative training procedure (NOTE: See Appendix B). As a result of this research, NHTSA/IACP allow two options to the core curriculum:

- OPTION ONE: To substitute NHTSA/IACP-approved videos of "dosed" subjects for one alcohol workshop (See Session 10-A or 13-A) and to conduct the other alcohol workshop "live" as indicated in Session 10 or 13.
- OPTION TWO: To substitute NHTSA/IACP-approved videos of "dosed" subjects for both live alcohol workshops (See Sessions 10-A and 13-A).

It is critical to note that the purpose of this training is to ensure participants become proficient in administering and interpreting the SFSTs. **Regardless, if the workshop was a live workshop or video workshop, it is strongly recommended each participant maintain a log of every SFST administered.**

Note: During training, the SFSTs must be administered each time exactly as outlined in this course. For field conditions, refer to the Preface.

## Limitations for Virtual Delivery of Content

The International Association of Chiefs of Police (IACP) Technical Advisory Panel (TAP) understands that restrictions in place in response to pandemic outbreaks present unique challenges to agencies and academies regarding training and certification. Where possible, and reasonable, the IACP supports video two-way virtual training for non-skill-based components for Standardized Field Sobriety Testing (SFST) conducted in strict accordance with International Association of Directors of Law Enforcement Standards and Training (IADLEST) or equivalent. Sessions should be delivered in the same sequence as listed in the curriculum. Instructors are encouraged to contact their state SFST and/or DEC Program coordinator for further assistance with this requirement.

However, realizing that the coaching and practical elements are critical parts of the training environment, it will be necessary for elements of skill-based components to be completed in-person before being issued a certificate of completion or an in-state certification for SFST.

**NOTE: The IACP strongly believes that conducting in-person training is the optimal way of achieving the learning objectives of these courses.**

TAP has identified the below sessions in the SFST course as containing physical, skill-based components to be completed in-person:

Session 7 – Phase Three: Pre-Arrest Screening

Session 8 – Concepts and Principles of the SFSTs

Session 9 – Test Battery Demonstrations

Session 10 & Session 10-A – Testing Subjects Practice: First Session

Session 11– Processing the Arrested Subject, Report Writing and Preparation for Trial

Session 12 – Moot Court

Session 13 & Session 13-A – Testing Subjects Practice: Second Session

Session 14– Review and Examinations

Session 15 – Program Conclusion



## I. Overview of the Curriculum Package

In addition to this Administrator Guide, the curriculum package for the SFST course consists of the following documents and materials:

- Instructor Guide
- Visual Aids
- Participant Guide

### Instructor Guide

The Instructor Guide is a complete and detailed blueprint of what the course covers and how it is to be taught. It is organized into 14 core sessions and two optional sessions. One of the two optional sessions must be taught with the 14 core sessions for a total of 15 sessions.

Each session consists of a cover page, an outline page, and the lesson plans, which include images of the PowerPoint slides referenced in the lesson plans.

The cover page presents the session's title and the total instructional time required to complete the session.

The outline page lists the specific learning objectives of the session, i.e., what the participants will be able to do once they have successfully completed the session's learning activities. The outline page also lists the session's major content segments and the principal types of learning activities that take place during the session.

The Instructor Guide serves as a means of preparing the instructor to teach the course. Every instructor should review the entire set of lesson plans to become familiar with the content and learning activities and develop a clear understanding of how the course fits together.

Instructors are expected to become thoroughly familiar with every session they are assigned to teach, to assemble all props and other instructional equipment referenced in the lesson plans, and to augment the instructional notes as necessary to ensure that individual teaching styles and experiences are applied to the content and learning activities.

The Instructor Guide serves as an in-class reference document for helping to maintain the sequence and pace of presentations and other learning activities. **The information contained in the outlines is not to be read verbatim to the participants.**

### Visual Aids

Four types of audio/visual aids are used in this course:

- Wall charts
- Dry-erase board and/or easel/easel pad presentations
- Slides (PowerPoint slides)
- Videos

Video presentations are provided and referenced in the instructor lesson plans. For example, a presentation entitled "Visual Detection of DWI Motorists" and a video entitled "Motorcycle Visual Detection Cues" are used in Session 5.

Other video presentations consist of brief encounters with impaired motorists. These segments cover vehicle in motion observations, personal contact, and pre-arrest screening. Each video provides the participants an opportunity to practice recognizing and documenting observational evidence of DWI. Subsequent to each video, selected participants are called upon to practice "testifying" about their observations.

The remainder of the video presentations are classroom lectures and demonstrations covering the three SFSTs and the NHTSA/IACP-approved videos used as options to the controlled drinking workshops in Sessions 10-A and 13-A.

### Participant Guide

The participant guide is a reference manual for the course. It provides a summary of the contents of each session and is intended to be used during the entire training.

## J. General Administrative Requirements

### Facility Requirements

The presentation/demonstration sessions of the SFST training require a classroom with ample table/desk space for each participant, a computer, a multimedia projector and screen, and a dry erase board and/or easel pad. The classroom must have sufficient open space to permit clearly visible demonstrations of the SFSTs. When possible, the participants' tables/desks should be arranged to maximize the learning environment.

The hands-on practice sessions and the proficiency examinations require additional space consisting of a large open area (free of any obstructions such as tables, chairs, etc.) in which teams of participants can work without interfering with each other. It must be possible to mark straight lines 12 to 15 feet long on the floor to facilitate practicing the WAT test (i.e., strips of easily removable tape). If weather permits, these practice sessions can be held outdoors to enhance realism.

The Alcohol Workshop Sessions (10 and 13) require a separate room for the volunteer drinkers and use of one or more accurate breath testing instrument devices for monitoring their blood alcohol concentrations (BACs).

### Instructor Qualifications

SFST instructors MUST have successfully completed the NHTSA/IACP-approved SFST training, NHTSA/IACP SFST Instructor Development Course (IDC), have experience in administering the SFSTs, and have experience providing DWI testimony in court. Dedicated, qualified instructors are critical to the continued success of the SFST program.

SFST instructors are responsible for observing, evaluating, and verifying the performance of SFST candidates throughout the training process. Therefore, only persons experienced in the administration of the SFSTs should become SFST instructors.

Instructors planning and managing a live alcohol workshop should have experience in this area. **A ratio of at least one instructor for every six participants is recommended.** Their responsibilities include coaching participants during the various hands-on practice sessions and conducting the proficiency examinations during Session 14.

All instructors must be fully proficient in administering the SFSTs. It is beneficial to recruit a Traffic Safety Resource Prosecutor (TSRP) or an experienced DWI prosecutor to assist in conducting certain segments in Session 3: The Legal Environment, Session 11: Processing the Arrested Subject, Report Writing, and Preparation for Trial, and Session 12: Moot Court.

It is preferred SFST instructors delivering the four-hour "Introduction to Drugged Driving" session also be DREs.

## Class Size Considerations

This course is a highly interactive learning experience. Participants need ample opportunities to practice applying the skills they are learning (i.e., observing, testifying, reporting, and administration of the SFSTs). Participants need individual attention during practice sessions.

The recommended maximum class size is 24 participants. It is recommended that a minimum of two instructors teach the classroom portion of the SFST curriculum. Each instructor should be proficient in the administration and interpretation of the SFSTs and be fully conversant with the SFST curriculum.

## K. Guidelines for Controlled Drinking Practice Sessions

**NHTSA/IACP strongly recommends the use of live alcohol workshops during this training.**

If used, volunteers will consume carefully-measured quantities of alcohol and submit to SFSTs administered by the participants. Drinking volunteers are an essential resource for the core curriculum. Therefore, careful steps must be taken to ensure the volunteers' safety as well as their contribution to the overall learning experience. **IT IS IMPORTANT FOR THE MANAGERS OF THE ALCOHOL WORKSHOP TO ENSURE THE SAFETY OF ALL PARTICIPANTS.**

At least one instructor should be experienced in conducting an alcohol workshop. A ratio of at least one instructor for every six participants is recommended. Their responsibilities include coaching participants during the practical portion of this session.

**NOTE: WEAPONS ARE NOT PERMITTED IN THE VICINITY OF ANY DRINKING VOLUNTEER.**

Criteria to be considered when selecting volunteer drinkers:

- They cannot be members of the class
- They should not be law enforcement officers
- They must be verified to be at least of legal drinking age and in reasonably good health
- They cannot have any known history of alcoholism
- They cannot have any known medical condition that may be exacerbated by alcohol (such as hypertension or diabetes)
- They cannot be taking any known medication (prescription or otherwise) that might adversely interact with alcohol

## Managing the Volunteer Drinkers

Transportation should be provided for the volunteers to the training session and **must** be provided from the training session. Under no circumstances may volunteers be permitted to drive from the training session, regardless of their BAC at the time of departure. Volunteers should be released only into the custody of responsible, sober persons.

It is recommended there be a minimum of one drinking volunteer for every three to five participants.

From the time of their arrival until they are properly released, volunteers must be kept under constant supervision. It is suggested that at least one monitor be present for every four volunteers. Whenever possible, volunteers should be paired with a monitor of the same gender. The monitors must supervise the volunteers, serve their drinks, make sure they comply with the schedule, and keep them under close observation.

It is imperative that all volunteers' safety and well-being be a primary concern throughout the exercise, transportation, and release to the appropriate persons. At no time shall they be subject to any threatening, harmful, or inappropriate situation. Instructors and monitors shall maintain a professional demeanor at all times.

**THE EFFECTIVENESS OF THE VOLUNTEERS AS TRAINING RESOURCES DEPENDS ON THEIR BACs. IDEALLY, VOLUNTEERS AT ANY SESSION SHOULD ACHIEVE PEAK BACS BETWEEN 0.06 AND 0.14.**

Volunteers should be instructed to refrain from eating two hours prior to their arrival at the training facility. Food in their stomachs may affect the absorption of alcohol into their bloodstreams and impede your ability to control their BACs.

Volunteers should be brought to the training facility a minimum of three hours before the practice session is scheduled to begin. Each volunteer shall read and sign the "Alcohol Workshop Participant Statement of Informed Consent" form. Each volunteer should be breath tested and have their pulse, blood pressure, and HGN checked and recorded.

NOTE: Additional time may be needed for administrative procedures.

## Guidelines for Achieving Target BACs

The table below indicates the ounces of 80-proof distilled alcoholic beverage that volunteers should consume in relation to their weight and the "target" peak BAC during a three-hour interval.

Weight (Pounds)	MEN	WOMEN
110	5	4
120	6	5
130	6	5
140	7	5
150	7	6
160	8	6
170	8	6
180	9	7
190	9	7
200	10	8
210	10	8
220	10	8
230	11	9
240	11	9
250	12	10

It is suggested that volunteers consume half of the total allocated amount of alcoholic beverage during the first hour. They should refrain from drinking or smoking within 15 minutes prior to any breath test.

NOTE: A volunteer may cease drinking at any time.

## L. Course Planning and Preparation Requirements

Course administrative planning and preparation tasks are to:

- Select officers whom you expect to devote substantial amounts of time to DWI enforcement
- Identify the learning objectives that are appropriate for your participants
- Tailor the instructional material, as appropriate, to conform to your learning objectives
- Select instructors and assign them to teach specific sessions of the course
  - Review the lesson plans and visual aids with the instructors. Give them sufficient time to prepare.
- Prepare the instructional facilities by arranging the classroom seating format. Secure the necessary audio/visual equipment and materials
- If the core curriculum or option one (1) is selected, recruit volunteer drinkers
  - Arrange for their supervision and transportation and secure the necessary supplies needed for the alcohol workshop(s).

## M. Standards for Course Completion

In order to successfully complete this training, participants must pass the written examination and demonstrate proficiency in administering and interpreting the SFSTs.

### The Written Examination

A written knowledge examination focuses on the administrative and interpretation procedures for the SFSTs. To obtain a copy of the final examination, contact the State SFST Coordinator or DRE Coordinator. **Participants must achieve a minimum grade of 80% to successfully complete this training.** For retesting requirements refer to the International Standards for Impaired Driving Programs, SFST-Section 1.4—

(<https://www.theiacp.org/sites/default/files/all/c/Combined%20Standards%20DRE%20SFST%20ARIDE.pdf>).

### Assessing Participant Proficiency

Instructors must decide whether individual participants are proficient with the SFSTs. This is accomplished by the following:

- The lesson plans for Session 14 (Review and Proficiency Examinations) set forth a procedure for testing each participant's ability to administer the three SFSTs properly
- Passing this proficiency requires participants to administer the complete SFSTs without deleting or erroneously performing any of the administrative elements of the tests

## N. Guidelines for Preparing Post Course Evaluation

### Participant Critiques

A participant critique form is provided to document their ratings of course content and activities at the conclusion of the training. Evaluation of these critiques by the instructors and/or course coordinator is critical for maintaining a high degree of achievement in learning and delivery.

### SFST Field Evaluations

It is encouraged that DWI enforcement officers completing this training be assessed on a regular basis. This assessment could examine such factors as:

- The number of DWI arrests
- The average BAC of those arrests
- The percentage of arrests resulting in DWI conviction

This information could help document the utility of the course, identify officers who may need refresher training, and secure continuing command-level support for the training.

NHTSA/IACP encourages officers to document all administrations of SFSTs. At a minimum, this documentation should include subject's name, date, results of each test, and officer's classification of subject's BAC and measured BAC, if available. A sample log is included in Session 8.

NOTE: If options utilizing video subjects have been used, maintaining the SFST Field Arrest Log is strongly recommended. Officers utilize an SFST log for the following reasons:

- Records training proficiency
- Records field proficiency
- Documents the officer's experience

All these combined help to establish the officer's credibility in administering the SFSTs and may be used as evidence in court.

## O. Requests for Information, Assistance or Materials

Please contact your SHSO and/or your NHTSA Regional Office for help in planning and conducting this training. Information can be found at <https://www.nhtsa.gov/about-nhtsa>.



## APPENDIX A

### SYNOPSIS OF THE SFST CURRICULUM

#### Session 1 - Introduction and Overview

This session has three segments: "Welcoming Remarks and Objectives," "Administrative Details," and "Pretest." Slide 1-1 will require the instructor to insert the city and dates of this course each time it is offered.

Give a brief welcome and introduction. Describe your credentials for providing SFST training and carefully state the goals and objectives of the course. During this segment have the participants introduce themselves and print their names clearly on name tent cards so that you will be able to call on them by name.

Next, you must attend to some essential "housekeeping duties" by notifying participants of the schedule that will be followed, pointing out the locations of restrooms, lunch rooms, etc.

In the final segment, you will have participants complete a pre-test that will allow you to assess how much they already know about the SFSTs.

#### Session 2 - Detection and General Deterrence

This session has five segments: "The DWI Problem," "Concept of General Deterrence," "Relating Detection to Deterrence Potential," "Evidence of Effective Detection and Effective Deterrence," and "Physiology of Alcohol." Instructors will need to add information to slide 2-4 containing figures for the participant's State and/or community from traffic records data. In most of these segments, you will present and discuss with your participants some statistical information. The second segment, Physiology of Alcohol, is a presentation step in the cognitive domain. It gives participants a brief overview of the nature and effects of alcohol. In this session you will help your participants reach some very important conclusions at the outcome of the course:

- First, they will realize that impaired driving is responsible for the deaths and serious injuries of thousands of people in their own States
  - They have to believe that it is a serious problem that must be solved
- Second, they have to believe that many of the people who drive while impaired will stop doing that, at least some of the time, if they fear getting caught
  - Your participants must see that we can create the fear of being caught
- Finally, they have to believe that this notion of deterrence through fear of arrest really does work
  - You can show them evidence that it has worked in the past and you can show them how to make it work in the future

In this session, participants must realize why it is important for them to improve their skills at DWI detection. But if they don't see the value of what you want them to learn, their learning efficiency will be low.

### Session 3 - The Legal Environment

This session has five segments: "DWI Statute," "Implied Consent Law," "DWI Per Se Statute," "Preliminary Breath Testing," and "Case Law Review." Instructors will need to insert participant's State information on the following slides:

- Slide 3-3 DWI Statute
- Slide 3-11 DWI Per Se Statute
- Slide 3-14 Implied Consent Law
- Slide 3-16 State Legal Presumptions
- Slide 3-19 PBT Statute Information (if applicable)
- Slide 3-21 SFST Case Law
- Slide 3-22 HGN Case Law
- Slide 3-23 Search and Seizure Case Law
- Slide 3-24 Other Relevant Case Law

In addition to the above slides, instructors should research and document, in instructional notes (below the slide), the legal definitions regarding the following slides:

- Slide 3-4 "Driving"
- Slide 3-5 "Actual Physical Control"
- Slide 3-6 "Vehicle/Motor Vehicle"
- Slide 3-7 "Location"
- Slide 3-8 "Impaired/Under the Influence"
- Slide 3-10 "DWI Jury Instructions"
- Slide 3-14 and 3-15 "Implied Consent Law"

The entire session is designed to satisfy the well-recognized fact that "you can't enforce the law unless you know the law." The first four segments cover specific types of legislation that either define impaired driving offenses or that regulate the enforcement and prosecution of those offenses. It is the instructor's job to clarify those laws for the participants so they will understand what they have to prove and how they have to prove it when they arrest someone for impaired driving. Because these laws vary from State-to-State, **you may have to modify the content of the first four segments to ensure that the information presented accurately reflects the statutes of your participants' jurisdictions.**

The final segment, "Case Law Review" focuses on how courts in various States have treated HGN. You will need to clarify these decisions for your participants so that they understand how they must introduce HGN evidence to ensure its admissibility.

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

This session has three segments. In the first segment, "Three Phases of Detection," you will define an important concept of DWI Detection for your participants. This concept views detection as a continual process of evidence gathering that ends in the arrest decision. The concept forms the basis for nearly all of the sessions that follow. In the second segment, "DWI Investigation Field Notes," you will introduce the participants to a field note-taking guide that they will use in several subsequent hands-on practice sessions. In the final segment, "Courtroom Testimony," you will review requirements and procedures for presenting observed evidence of DWI violations.

## **Session 5 - Phase One: Vehicle in Motion**

This session is the first of several sessions in which you will explain and demonstrate techniques of detection and testimony and subsequently coach your participants while they practice using those techniques.

Session 5 has six segments. The first, "Overview: Tasks and Decisions," defines what the patrol officer is supposed to do during the first phase of DWI Detection. In the second segment, "Initial Observation: Visual Cues of Impaired Operation (Automobiles)," you will explain and give concrete examples of the most reliable initial indicators of impaired driving. You will introduce fundamental concepts of alcohol impairment in this segment and you will show two videos that portray what research has shown to be the most common visual clues of DWI. The third segment, "Initial Observation: Visual Cues of Impaired Operation (Motorcycles)," will introduce the similar concepts as it relates to motorcycle operation.

In the fourth segment, "Recognition and Description of Initial Cues," your participants will watch video segments of vehicles exhibiting possible indicators of impaired driving and they will attempt to recognize those indicators and to describe them clearly and convincingly in written notes. Following each video segment, you will select a participant who will attempt to give a clear and complete verbal description of the observations in a simulated courtroom setting.

In the fifth segment, "Typical Reinforcing Cues of the Stopping Sequence," you will explain and give examples of the kinds of indicators of impairment that may be observed when an officer signals a driver to stop. This sets the stage for the final segment, "Recognition and Description of Initial and Reinforcing Cues." Here again, participants watch video segments of vehicles exhibiting some initial clues of DWI and subsequently responding to an officer's stop command. The participants attempt to compile accurate and clearly descriptive notes on their observations of the video segments. You choose representative participants to offer verbal descriptions of the observations.

## **Session 6 - Phase Two: Personal Contact**

This session is very similar in structure to Session 5. Our focus now, however, is on the recognition and description of clues of impairment that come to light after the suspect's vehicle has come to a stop and the officer comes into face-to-face contact with the suspect.

The first of the five segments of Session 6 is "Overview: Tasks and Decision." In this segment, you set the stage by explaining what it is that the officer is supposed to do during initial personal contact with a possible DWI violator. In the second segment, "Typical Investigation Clues of the Driver Interview," you explain and give examples of evidence that officers may obtain through their sense of sight, hearing, or smell. In the third segment, "Recognition and Description of Investigation Clues," your participants view a video segment that gives an opportunity to practice recognizing some clues. Subsequently, some members of the class are called upon to "testify" about those observations.

The fourth segment is "Interview/Questioning Techniques." Here, you explain and give demonstrations of simple procedures for questioning suspects that divide their attention in an effort to elicit additional evidence of impairment.

The fifth segment is "Recognition and Description of Clues Associated with the Exit Sequence." In this segment, you explain and give examples of evidence that might be seen or heard when a suspect responds to an officer's request to exit the vehicle and proceed to roadside. Then, your participants view a brief video that portrays a typical exit sequence and they practice recognizing and describing the clues exhibited in that sequence.

## **Session 7 - Phase Three: Pre-Arrest Screening**

It is in this session that you first introduce the participants to the administrative procedures for the three SFSTs.

The first segment, "Overview: Tasks and Decisions," explains what officers should do when employing SFSTs and preliminary breath tests (if applicable) to investigate suspected DWI violators.

The second segment, "Gaze Nystagmus - Definition," will describe the definition of nystagmus and that alcohol and certain other drugs cause HGN.

The third segment, "Horizontal Gaze Nystagmus – Definition, Concept and Demonstration," and the fourth segment, "Vertical Gaze Nystagmus – Definition, Concept and Demonstration," constitute the participants' initial exposure to nystagmus. You explain the phenomenon and relate it to impairment by alcohol. You give initial demonstrations of administrative procedures for HGN and Vertical Gaze Nystagmus (VGN). Note this is a very brief introduction to nystagmus; the instructor is only setting the stage for Session 8.

In the fifth segment, "Divided Attention Tests: Concepts, Examples and Demonstration," you explain the fundamental concept of divided attention and its relationship to alcohol impairment and you give several concrete demonstrations of tests that employ the concept. The two most important of those demonstrations focus on WAT and OLS.

In the sixth segment, "Advantages and Limitations of Preliminary Breath Testing," you will explain the role of Preliminary Breath Testing (PBT) in the DWI Detection process. While you need to do a thorough job in explaining how PBTs can help officers arrive at appropriate arrest/no arrest decisions, it is important that you do not oversell this technology. PBTs need to be presented in their proper context, i.e., something that can help corroborate officers' observations. They must not be viewed by participants as the sole or most important basis for the arrest decision (optional if PBTs are not allowed in your State).

The final segment is "The Arrest Decision." At this time you will briefly review all of the evidentiary concepts covered in Sessions 5, 6, and 7 and you will stress the importance of basing the arrest decision on all of the evidence gathered during all three phases of DWI Detection.

### **Session 8 - Concepts and Principles of the SFSTs**

In this session you fully explain and repeatedly demonstrate the three SFSTs. It is also at this time that participants begin to practice administering these tests. Pocket-sized, laminated cards of the SFST administrative procedures are available to agencies and states. These can be requested through NHTSA's Enforcement and Justice Services Division at [Christine.frank@dot.gov](mailto:Christine.frank@dot.gov).

The goal of the first segment, "Overview: Development and Validation," is to convince your participants that it is worthwhile to learn and use the SFSTs because they have scientific validity, a commodity not shared by any other field sobriety tests.

The second segment is "SFST Field Validation Studies." This segment discusses the three SFSTs as a scientifically-validated and reliable method for discriminating between impaired and unimpaired drivers.

The third segment is "Horizontal Gaze Nystagmus (HGN)." Here, you present each of the three validated clues of HGN in sequence: Lack of Smooth Pursuit; Distinct and Sustained Nystagmus at Maximum Deviation; and, Onset of Nystagmus prior to 45 Degrees. You demonstrate the proper method of checking for each of these clues and monitor brief but productive intervals during which your participants practice checking for each clue. You also explain how to interpret the results of an HGN test, i.e., to evaluate whether or not a suspect is impaired based on the HGN clues and you explain the scientific validity associated with the interpretation of HGN clues.

The fourth segment is "Vertical Gaze Nystagmus (VGN)." You demonstrate the proper method of checking for VGN and monitor brief but productive intervals during which your participants practice. You also explain how to interpret the results of a VGN test.

The fifth segment, "Walk and Turn," is identical in structure to the preceding segment. You explain and repeatedly demonstrate the instructional procedures for administering WAT. You involve participants in these demonstrations and you coach the participants in properly giving the verbal instructions and physical demonstrations that must accompany the administration of this test. You explain the eight validated clues of impairment for WAT and you explain how to interpret those clues in accordance with the findings of the validation research. You will set up and monitor practice intervals in which the participants will administer the WAT.

The sixth segment is "One Leg Stand." It is structured in much the same way as the fourth and fifth segments. You will explain and demonstrate how OLS is administered. You will explain the four validated clues of impairment for OLS and you will explain how to interpret those clues in accordance with the validation research. You will set up and monitor practice intervals during which the participants will practice administering the OLS.

In the final segment, "Taking Field Notes on the Standardized Field Sobriety Tests," you will explain how to record the observed clues.

### **Session 9 - SFST Demonstrations and Practice**

In this session you will conduct several complete and careful demonstrations of how the three SFSTs are administered and interpreted. Then, you will assign participants to work in teams taking turns administering the three tests to one another. You will monitor their work and provide constructive criticism and commendations, as appropriate.

### **Session 10 (or 10A) - Alcohol Workshop (or Dry Lab): First Session**

The core curriculum requires a live drinking session or a dry video workshop. The two-hour live drinking session ends the second day of training. Again, you will assign the participants to work in teams. But, instead of testing each other, they will administer the tests to a group of volunteer drinkers who are not members of the class and who have been recruited especially for this purpose. The participants will carefully record and interpret the volunteers' performance of the tests and will assess each volunteer's impairment. In the final segment of this Session, "Session Wrap-up," participants will report their assessments of the volunteers and will be informed of the volunteers' BACs. (Instructions for "dosing" volunteers are in the Administrator Guide).

For session 10-A, participants will view the NHTSA/IACP-approved videos designated for this session. This two-hour session ends the second day of training. You will assign the participants to work in teams. They will practice administration of the SFST on another participant, view the videos, assess the video subjects' impairment, and record their observations. In the final

segment of this session, Session Wrap-up, participants will report their assessments of the video subjects and will be informed of the subjects' BACs.

NOTE: NHTSA/IACP strongly believe that conducting live alcohol workshops is the optimal way of achieving the learning objectives of this training.

### **Session 11 - Processing the Arrested Subject, Report Writing, and Preparation for Trial**

In the first of its four segments, "The Processing Phase," you will review the tasks officers are supposed to perform when processing persons arrested for DWI. Since these tasks vary somewhat from agency to agency, you may have to modify the content of this first segment.

In the second segment, "Narrative DWI Arrest Report," you will provide the kind of information officers should include in their DWI reports. Participants will view a DWI stop and arrest scenario and will record their observations. A Field Note-Taking Guide form is available if necessary. You will present and explain a model report-writing format. The narrative DWI Arrest Report will be based on the Field Note-Taking Guide Form.

The third segment is "Case Preparation and Pretrial Conference." You will explain the things officers should do in preparing to testify in DWI cases and you will emphasize the role of the pretrial conference with the prosecutor in trial preparation.

The final segment is "Guidelines for Direct Testimony." You will present and explain some "dos and don'ts" of testimony in DWI cases.

### **Session 12 - Moot Court (optional)**

While this session is optional, the experience provided to participants may prove valuable for testifying. It provides a practical application for the session objectives learned in Session 12. If this session is omitted, it does not affect the goals and objectives of the SFST curriculum in developing skills in DWI Investigation.

You will inform the participants they will view a video portrayal of a typical DWI detection-to-arrest sequence. After the video, divide the participants into their groups and assign them one of the topics described in this session. After allowing time to prepare, each group will testify about their topic.

### **Session 13 (or 13-A) - Alcohol Workshop (or Dry Lab): Second Session**

The core curriculum requires a live drinking session or a dry video workshop. The two-hour live drinking session ends the second day of training. Again, you will assign the participants to work in teams. But, instead of testing each other, they will administer the tests to a group of volunteer drinkers who are not members of the class and who have been recruited especially for this purpose. The participants will carefully record and interpret the volunteers' performance of the tests and will assess each volunteer's impairment. In the final segment of

this Session, "Session Wrap-up," participants will report their assessments of the volunteers and will be informed of the volunteers' BACs. (Instructions for "dosing" volunteers are in the Administrator Guide).

For session 13-A, participants will view the NHTSA/IACP-approved videos designated for this session. This two-hour session ends the second day of training. You will assign the participants to work in teams. They will practice administration of the SFST on another participant, view the videos, assess the video subjects' impairment, and record their observations. In the final segment of this session, Session Wrap-up, participants will report their assessments of the video subjects and will be informed of the subjects' BACs.

NOTE: NHTSA/IACP strongly believe that conducting live alcohol workshops is the optimal way of achieving the learning objectives of this training.

### **Session 14 - Review and Proficiency Examinations**

In this session, you will select participants to administer the complete SFSTs; they will also explain and interpret the validated clues for each test. You will constructively critique the participants' demonstrations and explanations, as appropriate. Then, you will show a video segment demonstrating the proper administration of a SFST. Next, you will formally test each participant's ability to administer the three tests properly. Participants should not receive a certificate of completion of this training until they have demonstrated proficiency in the SFSTs.

### **Session 15 - Written Examination and Program Conclusion**

This session is based on a written examination. The passing grade is 80%. The evaluation of the course is based on an anonymous critique form that participants will complete.

### **Session 16 – Introduction to Drugged Driving (optional)**

This session is a four-hour overview of drugs other than alcohol that impair. This session contains information to improve the participant's ability to recognize subjects who may be medically impaired or impaired by drugs other than alcohol and, when encountering such subjects, to take appropriate action.



## APPENDIX B

### Overview of SFST Refresher Training

In support of SFST training, NHTSA and IACP have developed an SFST Refresher Training.

This training is intended for law enforcement officers at the Federal, State, county, and local level who have already taken, **and successfully completed**, the basic SFST classroom training.

These individuals will now be able to refresh their skills at:

- Recognizing and interpreting evidence of DWI
- Administering and interpreting the scientifically validated sobriety tests
- Describing DWI evidence clearly and convincingly

The SFST Refresher Training is designed to be taught in a four-hour format or can be expanded to an eight-hour format.

To obtain a copy of the SFST Refresher Training, please contact your SHSO or NHTSA Regional Office.

# APPENDIX C

## INSTRUCTOR ROSTER

**Course Name:**

**Course Date:**

**Course Location:**

Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____
Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____
Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____
Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____ _____

(COPY THIS FORM FOR ADDITIONAL NAMES)

## PARTICIPANT ROSTER

**Course Name:**

**Course Date:**

**Course Location:**

Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____
Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____
Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____
Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____	Name: _____ Title: _____ Organization: _____ Mailing Address: _____ _____ City, State, ZIP: _____ Phone: _____

(COPY THIS FORM FOR ADDITIONAL NAMES)

## **APPENDIX D**

### **Resources**

List of NHTSA regional offices:

<https://www.nhtsa.gov/about-nhtsa>

List of State and Territorial Highway Safety Offices:

[www.ghsa.org/html/about/shsos.html](http://www.ghsa.org/html/about/shsos.html)

IACP Drug Evaluation and Classification Program:

<http://www.decp.org/>

**APPENDIX E**  
**NPSRI Technical Report “The Use of Video in Training for SFSTs” – Summary**

**The Use of Video in Training for  
Standardized Field Sobriety Tests (SFST)**

**A. James McKnight and Elizabeth A. Langston**

**National Public Services Research Institute  
8201 Corporate Drive, Suite 220  
Landover, MD 20785**

**September 1993**

**TECHNICAL REPORT**

**NHTSA Contract No. DTNH22-92-C-05109**

**Prepared for  
U.S. Department of Transportation  
National Highway Traffic Safety Administration  
400 7th Street, S.W.  
Washington, D.C. 20590**

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
4. Title and Subtitle The Use of Video in Training for SFSTs		5. Report Date September 1993
		6. Performing Organization Code
7. Author(s) A.J. McKnight and E.A. Langston		8. Performing Organization Report No.
9. Performing Organization Name and Address National Public Services Research Institute, 8201 Corporate Drive, Suite 220, Landover, MD 20745		10. Work Unit No. (TRAIS)
		11. Contract or Grant No. DTNH22-91-R-05109
12. Sponsoring Agency Name and address National Highway Traffic Safety Administration, 400 Seventh Street, S.W. Washington, D.C. 20590		13. Type of Report and Period Covered Final Report 6/91-9/93
		14. Sponsoring Agency Code
15. Supplementary Notes Dr. Richard Compton served as Contracting Officer's Technical Representative		

16. Abstract The NHTSA training program to certify law enforcement officers in administration of SFSTs includes two "workshops" in which trainees administer sobriety tests to alcohol-dosed subjects has led to consideration of video as an alternative training method. A preliminary study showed that Certified SFST examiners scoring videotaped performance of alcohol-dosed subjects obtained the same results as examiners scoring the subjects directly. An experiment was therefore undertaken to compare three alternative methods of conducting training during the workshops: live alcohol-dosed subjects (alcohol), video-recorded performances of alcohol-dosed subjects (video), and a combination of the video and alcohol methods (video/alcohol). A total of 133 SFST trainees were randomly assigned to the three training methods. The results disclosed extremely small and statistically nonsignificant differences among the three workshop methods in the proficiency with which trainees administered and scored the SFST with alcohol-dosed subjects in a final performance test. It was
---

concluded that video provides an acceptable alternative to live dosed subjects in training law enforcement officers to administer SFSTs.			
17. Key Words Alcohol, Drinking and Driving, Sobriety Tests	18. Distribution Statement Available to the public through the National Technical Information Service, Springfield, VA 22161		
19. Security Classif. (of this report) Unclassified	20. Security Classif. (of this page) Unclassified	21. No. of Pages	22. Price

## The Role of Video Training

The use of videos in Sessions XA and XIII A is not intended to imply that video can serve as a “substitute” for training with live dosed subjects. However, a combination of practical and moral obstacles to use of alcohol-dosed subjects in training has threatened to prevent the administration of SFST courses in many jurisdictions. Here the choice is not between video and alcohol workshops but between video and no instruction at all. The results of this study clearly resolve that decision.

**REMINDER: Only the NHTSA/IACP options videos are approved for this instruction.**

## The Conclusions of this Study

From the results of this study, the following conclusions may be offered:

1. Video administration of the SFST of alcohol-dosed subjects can be used as an alternative to the use of live alcohol-dosed subjects in either or both of the current training “workshops” without altering the ability of trainees to administer or score the test.
2. Current SFST training leads to significant gains in knowledge of administration procedures and scoring criteria. However, gains in scoring the Walk and Turn and One Leg Stand are minimal owing to the objectivity of the scoring criteria.
3. The only significant differences among approaches to teaching the workshop involve the direction of trainee scoring errors on the Walk and Turn and One Leg Stand, where trainees from the video workshop tend to report slightly fewer impairment clues than certified examiners, while those participating in either or both alcohol workshops tend to report more clues.

## REFERENCES

Burns, M.; Moskowitz, H. Final Report on NHTSA Contract No. DOT-HS-8-01999: Methods for Estimating Expected Blood Alcohol Concentration. Washington, DC: NHTSA; 1980.

Burns, M.; Moskowitz, H. (Southern California Research Institute). Prepared for U.S. Department of Transportation, NHTSA: Psychophysical Tests for DWI Arrest. Springfield, VA: National Technical Information Service; 1977 June; DOT HS 802 424. 126.

McKnight, A. J.; Marques, P. R. Estimating alcohol impairment from behavioral clues. *Journal of Alcohol Studies*. 1991; 52(5): pp 389-397

Russ, N. W.; Geller, E. S. Evaluation of a server intervention program for preventing drunk driving. Final Report No. DD-3 ed.; Blacksburg, VA: Virginia Polytechnic Institute and State University, Department of Psychology; 1986. 56 pages.

Tharp, V.; Burns, M.; Moskowitz, H. Development and field test of psychophysical tests for DWI arrest; 1981; NHTSA Report # DOT-HS-805-864. Available from NTIS, Springfield, VA 22151.



# 1 SFST

---

## Introduction and Overview

### LEARNING OBJECTIVES

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

### CONTENTS

A. Welcoming Remarks and Objectives .....	3
B. Housekeeping .....	4
C. Participant Introductions .....	5
D. Training Goals .....	6
E. Statistics and Data.....	7
F. Training Objectives .....	8
G. Overview of Participant Manual .....	10
H. Training Schedule.....	11
I. Glossary of Terms .....	11
J. Course Pre-Test Administration.....	12

### LEARNING ACTIVITIES

- Instructor-Led Presentation
- Written Examination

### MATERIALS NEEDED FOR THIS SESSION

- Pre-tests
- Participant Manual with current training schedule



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The Participant Manual is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

## A. Welcoming Remarks and Objectives

Session 1 – Introduction and Overview

### Learning Objectives

- State goals and objectives
- Overview schedule and activities
- Describe participant manual contents
- Demonstrate pre-training knowledge of training topics



DWI DETECTION & SFST1-2

Slide 2.



***Instructor needs to put in Location and Date. Before beginning this session fill in the blanks with local statistics on slide 9.***

***Write your names on dry erase board or easel/easel pad. State names, agency, and relevant background information.***

***Introductions - Representatives of Host Agencies and Other Dignitaries.***

***Dignitary introductions and their welcoming remarks must be kept brief; no more than 10 minutes can be devoted to this.***

***Faculty Introductions - The lead-off instructor introduces the instructor faculty. State names, agency affiliations, and experience. Ask each instructor to stand as they are introduced.***

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

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


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

## B. Housekeeping

Session 1 – Introduction and Overview

### Housekeeping

- Paperwork
- Mandatory attendance
- Breaks
- Facility
- Interruptions
- ✓ Electronic devices off



DWI DETECTION & SFST 1-3

**Slide 3.**



***Paperwork - Completion of registration forms, travel vouchers, etc.***

***Attendance - Mandatory attendance at all sessions of this school. If a participant misses any portion of this school, he or she must make up the deficiency via after-hours tutoring before completing the program.***

***Breaks - Time allotted for breaks and reconvening.***

***Facility - Locations of restrooms, lunchrooms, etc.***

***Interruptions - No texting or email monitoring. Turn off all electronic devices.***

***Reading Assignments in Participant Manuals - Develop a list of reading assignments for each day and prepare a handout. Reading assignments at the end of Day One should cover materials presented on day one and day two.***


***Subsequent reading assignments should cover material to be presented on the following day. Point out Sessions 2-8 have review questions at the end of each Session. Refer to the Glossary of Terms located at the end of Session 1.***

## C. Participant Introductions

Session 1 – Introduction and Overview

### Participant Introductions

- Name
- Agency affiliation
- Experience



DWI DETECTION & SFST 1-4

**Slide 4.**



***Participant Introductions - Whenever possible, the instructor should consider using creative and innovative icebreaking techniques.***

***At a minimum, instruct each participant to stand and give their name, agency, duty assignment, and experience.***

Session 1 – Introduction and Overview



DWI DETECTION & SFST 1-5

**Slide 5.**




***Optional: Play impaired Driving Impact video of your choosing.***

## D. Training Goals

Session 1 – Introduction and Overview

### Training Goal

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



DWI DETECTION & SFST 1-6

**Slide 6.**


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

---

Session 1 – Introduction and Overview

### Enforcement Goals

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



DWI DETECTION & SFST 1-7

**Slide 7.**

Enforcement goals are to identify:

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

## E. Statistics and Data

Session 1 – Introduction and Overview

### Alcohol-impaired drivers kill one person every 45 minutes

Alcohol-impaired crashes kill 1 person every <b>45</b> minutes	An average of <b>32</b> people die every day from alcohol-impaired crashes
--	--

DWI DETECTION & SFST 1-8

**Slide 8.**

In 2020 there were 11,654 fatalities in motor vehicle traffic crashes in which at least one driver was alcohol-impaired. This represented 30 percent of all traffic fatalities in the United States for the year. Spread across the year, this amounted to 32 people dying each day in alcohol-impaired crashes, or one person every 45 minutes.



**Source:**

***National Center for Statistics and Analysis. (2022, April). Alcohol-impaired driving: 2020 data (Traffic Safety Facts. Report No. DOT HS 813 294).***

Session 1 – Introduction and Overview

### State and Local Data

- Approximately \_\_\_\_\_ people now live in \_\_\_\_\_
- About \_\_\_\_\_ of these people will die in vehicle crashes
- About \_\_\_\_\_ will die in DWI crashes

DWI DETECTION & SFST 1-9

**Slide 9.**



***This frame is intended to address the local perspective. Fill in appropriate information from agency sources.***

Approximately \_\_\_\_\_ people now live in \_\_\_\_\_. About \_\_\_\_\_ of these people will die in vehicle crashes. About \_\_\_\_\_ will die in DWI crashes.


---

## F. Training Objectives

Session 1 – Introduction and Overview

### Job Performance Objectives

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



DWI DETECTION & SFST 1-10

**Slide 10.**



***Point out success or failure of the program will be judged on the basis of participants' improvements in these key abilities.***


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

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



Session 1 – Introduction and Overview

## Job Performance Enabling Objectives



Refer to your participant manual

DWI DETECTION & SFST 1-11

**Slide 11.**



***Enabling objectives support overall learning objectives and are detailed in the Participant Manual. Some examples are: (Select some enabling objectives from the list below to see as examples.)***

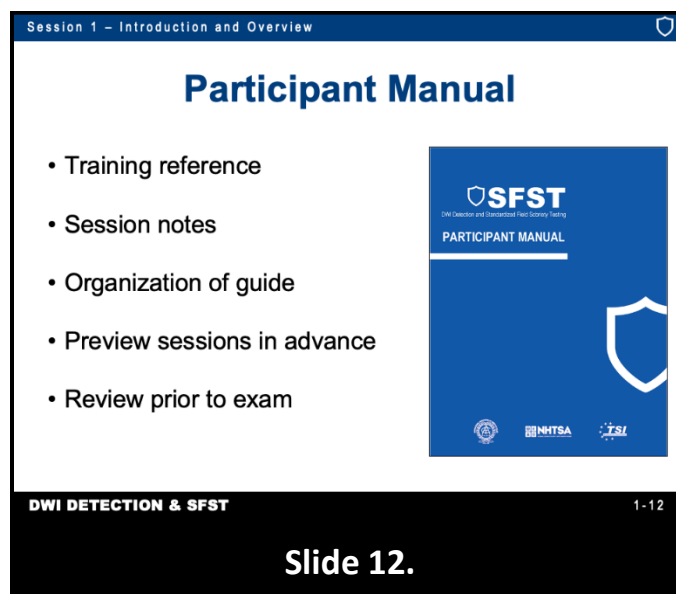
### Job Performance Enabling Objectives

- Understand the tasks and decisions of DWI detection
- Recognize the magnitude and scope of DWI-related crashes, deaths, injuries, property loss, and other social aspects of the DWI problem
- Understand the deterrent effects of DWI enforcement
- Understand the DWI enforcement legal environment
- Know and recognize typical vehicle maneuvers and human indicators symptomatic of DWI that are associated with initial observation of vehicles in operation
- Know and recognize typical reinforcing maneuvers and indicators that come to light during the stopping sequence
- Know and recognize typical sensory and other clues of alcohol and/or other drug impairment that may be seen during face to face contact with DWI subjects
- Know and recognize typical behavioral clues of alcohol and/or other drug impairment that may be seen during the subject's exit from the vehicle.
- Understand the role and relevance of psychophysical testing in pre-arrest screening of DWI subjects
- Understand the role and relevance of preliminary breath testing in pre-arrest screening of DWI subjects
- Know and carry out appropriate administrative procedures for the Horizontal Gaze Nystagmus (HGN) test

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

---

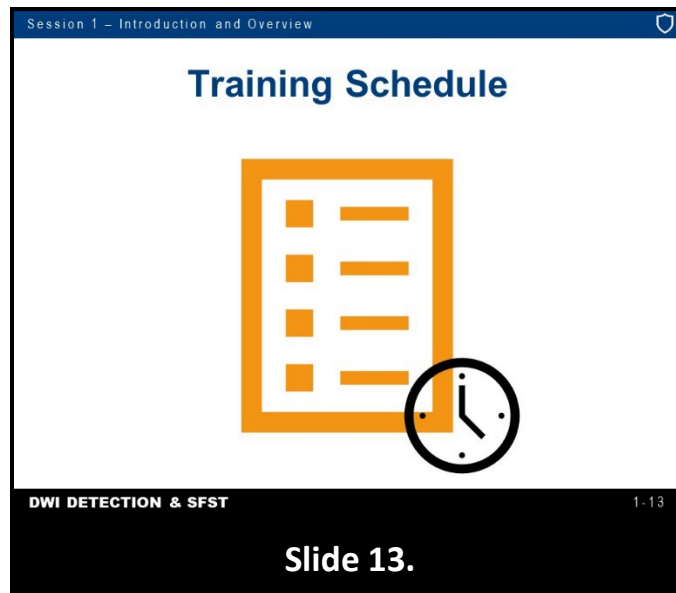
## G. Overview of Participant Manual



The Participant Manual is a reference document for this training. The guide contains slide images for each session. Additional information is included below each slide. To get the most out of the training, read each session prior to class and use the guide to review the material prior to taking the final exam.

---

## H. Training Schedule



*Give a brief overview of the schedule of sessions.*

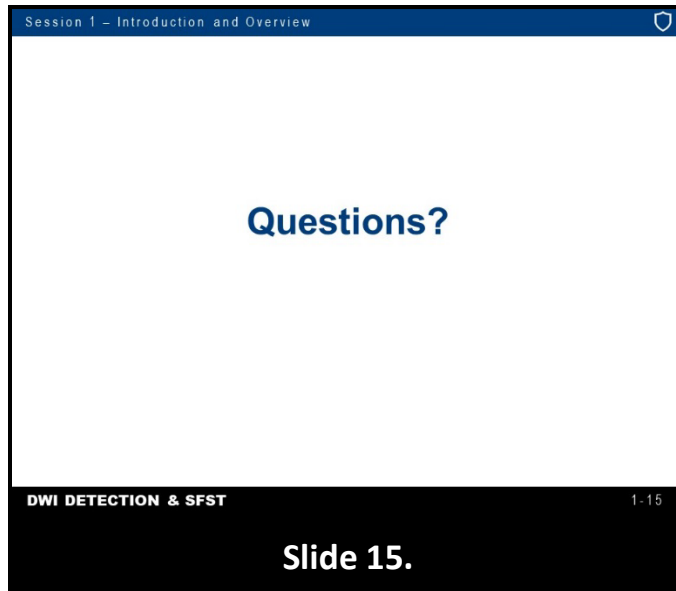
*Ask participants if there are questions about the training schedule?*

## I. Glossary of Terms



The Glossary of Terms used in the training is at the end of this session.

## J. Course Pre-Test Administration



***Address participant questions.***

***Administer the Pre-Test. The purpose of the Pre-Test is to provide a basis for evaluating participant knowledge gained during the class.***

***Allow participants approximately 10 minutes to complete the Pre-Test.***

***Redistribute the Pre-Test to participants after they are graded by the instructors.***

## DWI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING (SFST)

### GLOSSARY OF TERMS

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

**ALVEOLAR BREATH:** Breath from the deepest part of the lung.

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

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

**CLUE:** Something that leads to the solution of a problem.

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

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

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

**DRUG RECOGNITION EXPERT (DRE):** An individual who successfully completed all phases of the DRE training requirements for certification established by the IACP and NHTSA. The word "evaluator," "technician," or similar words may be used as a substitute for "expert," depending upon locale or jurisdiction.

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

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

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

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

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

**EXPERT WITNESS:** A person skilled in some art, trade, science or profession, having knowledge of matters not within the knowledge of persons of average education, learning and experience, who may assist a jury in arriving at a verdict by expressing an opinion on a state of facts shown by the evidence and based upon his or her special knowledge. (NOTE: Only the court can determine whether a witness is qualified to testify as an expert.)

**FIELD SOBRIETY TEST:** Any one of several roadside tests that can be used to determine whether a subject is impaired.

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

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

**HORIZONTAL GAZE NYSTAGMUS (HGN):** Involuntary jerking of the eyes occurring as the eyes gaze to the side. The first test administered in the SFSTs.

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

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

**NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION:** An Administration within the United States Department of Transportation that exercises primary responsibility for coordinating federal efforts to ensure the safe design and operation of motor vehicles.

**NYSTAGMUS:** An involuntary jerking of the eyes.

**ONE LEG STAND (OLS):** A divided attention field sobriety test. One of the tests administered in the SFSTs.

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

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

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

**PRELIMINARY BREATH TEST (PBT):** A pre-arrest breath test administered during investigation of a possible DWI violator to obtain an indication of the person's blood alcohol concentration.

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

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

**PSYCHOPHYSICAL TESTS:** Methods of investigating the mental (psycho-) and physical characteristics of a person suspected of alcohol or drug impairment. Most psychophysical tests employ the concept of divided attention to assess a suspect's impairment.

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

**RESTING NYSTAGMUS:** Jerking of the eyes as they look straight ahead.

**STANDARDIZED FIELD SOBRIETY TESTs:** There are three NHTSA/IACP-approved SFSTs, namely Horizontal Gaze Nystagmus (HGN), Walk and Turn (WAT), and One Leg Stand (OLS). Based on a series of controlled laboratory and field studies, scientifically validated clues of impairment have been identified for each of these three tests. They are the only NHTSA/IACP-approved Standardized Field Sobriety Tests for which validated clues have been identified for DWI investigations.

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

**VALID:** Conforming to accepted principles. Producing accurate and reliable results; effective.

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

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

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

**WALK AND TURN (WAT):** A divided attention field sobriety test. One of the tests administered in SFSTs.



# 2 **SFST**

---

## Detection and General Deterrence

### LEARNING OBJECTIVES

- Describe the frequency of DWI violations and crashes
- Define general deterrence
- Describe the relationship between detection and general deterrence
- Describe a brief overview of alcohol
- Identify common types of alcohol
- Describe the physiological processes of absorption, distribution, and elimination of alcohol in the body

### CONTENTS

A. The DWI Problem (Local, State, and National) .....	3
B. Concept of General Deterrence .....	14
C. Relating Detection to Deterrence Potential .....	21
D. Evidence of Effective Detection and Effective Deterrence.....	27
E. Physiology of Alcohol .....	33

### LEARNING ACTIVITIES

- Instructor-Led Presentation
- Reading Assignments



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***




***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

Session 2 – Detection and General Deterrence

## Learning Objectives

- Describe frequency of DWI violations and crashes
- Define general deterrence
- Describe relationship between detection and general deterrence
- Describe a brief overview of alcohol
- Identify common types of alcohol
- Describe physiological processes of absorption, distribution, and elimination of alcohol in the body



DWI DETECTION & SFST 2-2

Slide 2.




*Briefly review objectives, content, and activities of this session.*

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

Session 2 – Detection and General Deterrence

## The DWI Problem

- Prior to 1994, nearly **50%** of total traffic crashes were alcohol-related
- **10,598** alcohol-related fatalities represented **30%** of all traffic fatalities (2020)



DWI DETECTION & SFST 2-3

Slide 3.

How widespread is DWI? While not all of those who drive after drinking have a Blood Alcohol Concentration (BAC) of 0.08 or higher (the presumptive or illegal per se limit for DWI in all States) some drivers do have BACs in excess of these limits. Prior to 1994, nearly half of the drivers who died in crashes had been drinking. Each year, tens of thousands of people die in traffic crashes. Throughout the nation, alcohol is the major contributor to traffic fatalities. In 2020, there were 10,598 alcohol-related fatalities representing 30% of all traffic fatalities.



**Ask participants to suggest why alcohol-related crashes are more likely to result in death:**

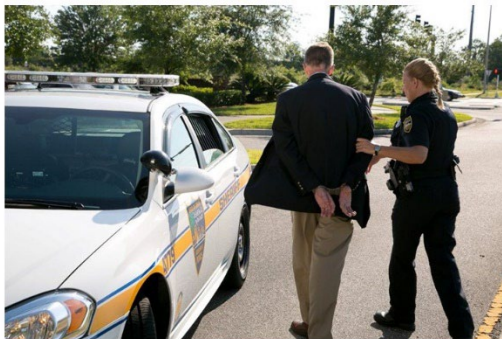
- ***Drinking drivers are more likely to be taking excessive risk such as speeding, turning abruptly, etc.***
- ***Drinking drivers may not react in enough time to slow down prior to crashing***
- ***Drinking drivers are less likely to wear seatbelts***

**Source:**

National Center for Statistics and Analysis. (2022, October). *Traffic Safety Facts 2020: A Compilation of Motor Vehicle Crash Data*. (Report No. DOT HS 813 375). National Highway Traffic Safety Administration.

Session 2 – Detection and General Deterrence

## The Local DWI Problem



DWI DETECTION & SFST 2-4

**Slide 4.**

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



***Provide data for the participant's State and/or community.***

Session 2 – Detection and General Deterrence

## Binge and Heavy Drinking

- An estimated 61.6 million people self-reported binge drinking in the past 12 months
- 17.7 million people classify themselves as heavy drinkers



DWI DETECTION & SFST 2-5

**Slide 5.**

Estimates indicate Nationwide about 61.6 million people the age of 12 and over, self-reported binge drinking in the past 12 months. Additionally, 17.7 million classify themselves as heavy drinkers.



***Binge drinking is defined as drinking 5 or more drinks (4 or more drinks for females) on the same occasion in the past 30 days.***

**Sources:**

Centers for Disease Control and Prevention. (2015). Alcohol-Impaired Driving Among Adults — United States, 2012. Morbidity and Mortality Weekly Report. August 7, 2015 / 64(30);814-817. Retrieved from <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a2.htm>

Substance Abuse and Mental Health Services Administration. (2021). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>

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



**Source:**

U.S. Department of Justice—Federal Bureau of Investigation. (2020). Crime in the United States, 2019. Retrieved April 5, 2022, from FBI: UCR: <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/topic-pages/persons-arrested#:~:text=The%20highest%20number%20of%20arrests,3%2C011.0%20arrests%20per%20100%2C000%20inhabitants>

Session 2 – Detection and General Deterrence

## The DWI Problem

What number of drivers commit this violation?



**Weekend Nights – 10% or More**

DWI DETECTION & SFST 2-6

**Slide 6.**

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

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



## Average DWI Violator

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

DWI DETECTION &amp; SFST

2-7

Slide 7.

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

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



### Sources:

Borkenstein, R. F. (1964, March). *The Role of the Drinking Driver in Traffic Accidents*. Bloomington, IN: Indiana University, Department of Police Administration.


(1980). *Alcohol Highway Safety Workshop: Participant's Workbook Problem Status*. National Highway Traffic Safety Administration.

(1974, August). *DWI Law Enforcement Training: Instructor Guide*. (P. 139). National Highway Traffic Safety Administration.

Session 2 – Detection and General Deterrence

## The DWI Problem

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



DWI DETECTION & SFST 2-8

**Slide 8.**

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

*Society's Problem and the Solution:* The fact is far more than two percent of American drivers actively contribute to the DWI problem. DWI is a crime committed by a substantial segment of Americans. It has been and remains a popular crime; one many people from all walks and areas of life commit. DWI is a crime that can be fought successfully only through a societal approach of comprehensive community-based programs.



Instructor  
Note

***Explain “alcohol-impaired crash” per NHTSA refers to a crash where at least one motor-vehicle operator has a BAC of .08% or higher. In 2019, 29% of all fatally injured motorcycle operators had a BAC of .08 or higher. The 21- to 24-year-old group constituted 27% of all alcohol-impaired driving fatalities in the U.S.***

***Source:***

National Center for Statistics and Analysis. (2021). Alcohol-impaired driving: 2019 data. (Traffic Safety Facts. Report No. DOT HS 813 120). National Highway Traffic Safety Administration.

***Ask participants to suggest reasons why alcohol-impaired crashes are more likely to result in death.***



Session 2 – Detection and General Deterrence

## Alcohol-Related Crash Fatalities

- 26% on weekends were alcohol-impaired
- 3 times higher at night
- 1.02 million DWI arrests in 2019
- Average one fatality every 52 minutes
- Cost society approximately \$44 billion

DWI DETECTION & SFST 2-9

**Slide 9.**

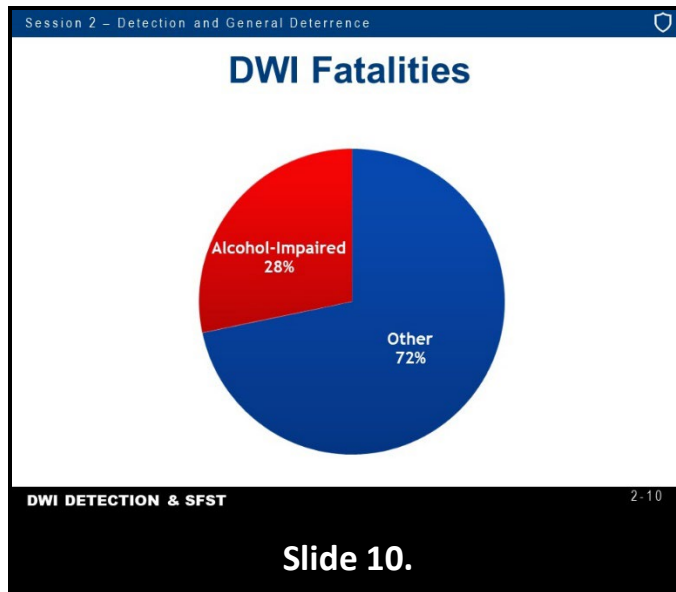
Twenty-six percent of all fatal crashes on weekends were alcohol impaired. Alcohol-impaired drivers involved in fatal crashes were 3 times higher at night. 1.02 million drivers were arrested for DWI in 2019. These alcohol-related fatalities represent an average of one alcohol-related fatality every 52 minutes. Based on the most current cost data available, these alcohol-related fatalities cost society approximately \$44 billion in lost productivity, medical expenses, property damages, and other related expenditures.



### **Sources:**

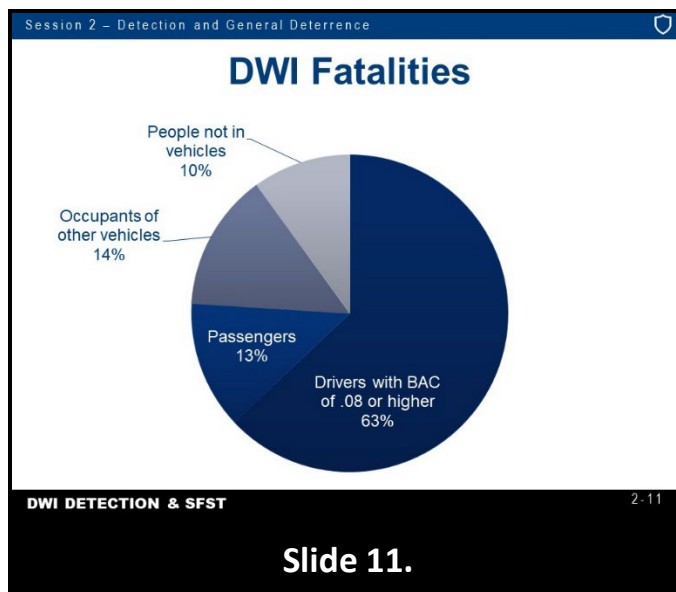
National Center for Statistics and Analysis. (2021). Alcohol-impaired driving: 2019 data. (Traffic Safety Facts. Report No. DOT HS 813 120). National Highway Traffic Safety Administration.

U.S. Department of Justice—Federal Bureau of Investigation. (2020). *Crime in the United States, 2019*. Retrieved April 5, 2022, from FBI: UCR: <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/topic-pages/persons-arrested#:~:text=The%20highest%20number%20of%20arrests,3%2C011.0%20arrests%20per%20100%2C000%20inhabitants>



In 2019, 10,142 lives were lost in alcohol-impaired crashes representing 28% of the total motor vehicle fatalities in the U.S.

---



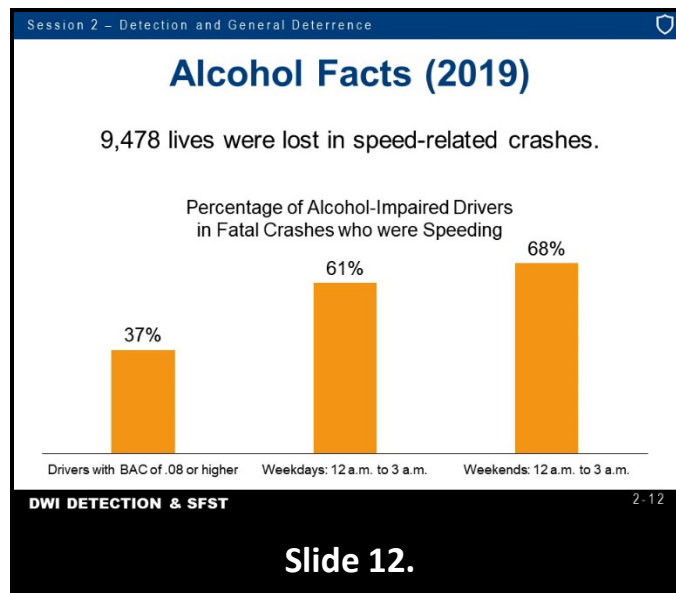
Of the 10,142 people who died in alcohol-impaired-driving crashes in 2019, drivers with a BAC of .08 or higher accounted for 63% of the fatalities. Thirteen percent were passengers riding with a driver with a BAC of .08 or higher. Fourteen percent of these fatalities were occupants of other vehicles. Ten percent were persons not in vehicles.



***Point out 37% of fatalities are not the DWI driver but innocent parties (passengers, other vehicle occupants, pedestrians, etc.).***

**Source:**

National Center for Statistics and Analysis. (2021). Alcohol-impaired driving: 2019 data. (Traffic Safety Facts. Report No. DOT HS 813 120). National Highway Traffic Safety Administration.

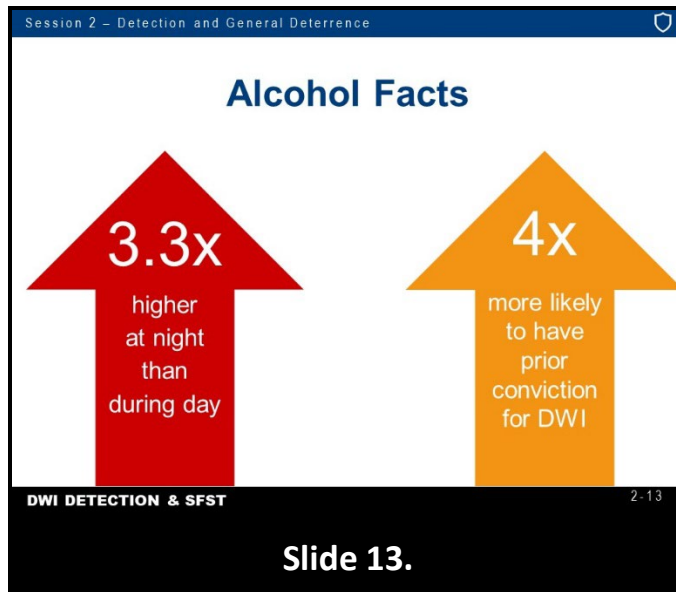


In 2019, 9,478 lives were lost in speed-related crashes. Thirty-seven percent of all drivers with a BAC of .08 or higher involved in fatal crashes were speeding. Between midnight and 3:00 a.m., 61% of speeding drivers involved in fatal crashes on weekdays had a BAC of .08 or higher. On weekends, it was even higher – 68% of speeding drivers involved in fatal crashes had a BAC of .08 or higher.



**Source:**

National Center for Statistics and Analysis. (2021). Alcohol-impaired driving: 2019 data. (Traffic Safety Facts. Report No. DOT HS 813 120). National Highway Traffic Safety Administration.



The rate of alcohol impairment for drivers involved in fatal crashes was 3.3 times higher at night than during the day. Drivers with a BAC of .15 or higher who were involved in fatal crashes were four times more likely to have a prior conviction for driving while impaired as compared to drivers involved in fatal crashes with no alcohol involvement.



***FARS records previous DWI conviction of drivers, which occurred up to three years prior to the date of the crash.***

***Source:***

National Center for Statistics and Analysis. (2021). Alcohol-impaired driving: 2019 data. (Traffic Safety Facts. Report No. DOT HS 813 120). National Highway Traffic Safety Administration.

Session 2 – Detection and General Deterrence

## Alcohol Facts

3 male drivers to 1 female driver involved in fatal crashes

4 male alcohol-impaired drivers to 1 female alcohol-impaired driver involved fatal crashes

DWI DETECTION & SFST 2-14

**Slide 14.**

In 2020, 11,654 alcohol-impaired drivers (67%) involved in fatal crashes had a BAC of .15 or higher. Males account for 80% of all alcohol-impaired traffic fatalities. This means the fatal alcohol-impaired crash involvement rate was four times higher for male drivers than for females.



**Source:**


National Center for Statistics and Analysis. (2020). *Alcohol-Impaired Driving: 2020 Data*. (Traffic Safety Facts. Report No. DOT HS 813 294). Washington, D.C.: National Highway Traffic Safety Administration.

## B. Concept of General Deterrence

Session 2 – Detection and General Deterrence

### General Deterrence

The fear of arrest



DWI DETECTION & SFST 2-15

**Slide 15.**

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

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



***Pose this question: “How do we convince the public there is a good chance of being arrested for DWI?”***

***Guide the discussion to bring out the fact an appreciable number of violators must be arrested if others are to believe there is a real risk they will be arrested.***

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



***Pose this question: “Are we presently arresting enough violators in this State to convince them there is a real risk of being caught?”***

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



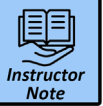
## General Deterrence

There is no reason to fear arrest



DWI DETECTION &amp; SFST

2-16

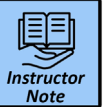
**Slide 16.**

***According to the Center for Disease Control (CDC), US adults admitted to drinking too much and getting behind the wheel 111 million times in 2014.***

***If the chances of being arrested are minimal, do you believe the average DWI offender will fear arrest?***

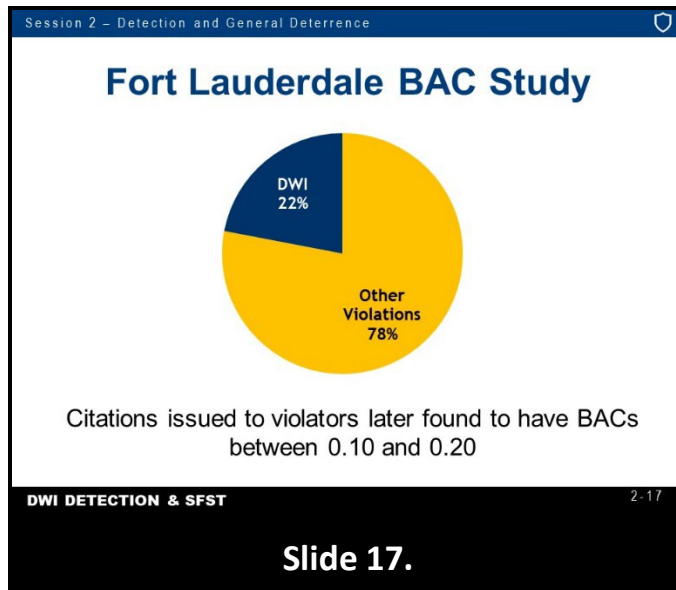
***Draw the analogy – compare with housebreaking a puppy by punishing the puppy once only every 100 times it messes on the carpet.***

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



***Why is the DWI arrest to violations ratio (1:100) so low?***

There are three noteworthy reasons: (1) DWI violators vastly outnumber police officers - It is not possible to arrest every drinking driver each time they commit DWI; (2) Some officers are not highly skilled at DWI detection - They fail to recognize and arrest many DWI violators; and, (3) Some officers are not motivated to detect and arrest DWI violators.



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



**Source:**

(1976, December). *Selective Traffic Enforcement Program – STEP-BAC (Blood Alcohol Content) in Fort Lauderdale, Florida*. (Report No. DOT HS 801 956), Fort Lauderdale, FL.


***In the Fort Lauderdale study, breath tests were administered to traffic violators by research staff members, after police officers had completed their investigations of the violators. Officers failed to detect 78% of the DWI violators they investigated.***



Session 2 – Detection and General Deterrence

## Fort Lauderdale BAC Study

For every DWI violator arrested...



Three others were contacted and released

DWI DETECTION & SFST 2-18

**Slide 18.**

Implication: For every DWI violator actually arrested, three others are contacted by police officers, face to face, but are released without arrest. Significant improvement in arrest rate could be achieved if officers were more skilled at DWI detection.



***Point out this study was the reason for NHTSA developing this course. This study demonstrated the need for SFST training.***

**Source:**

Hause, J., Matheson, D., Hannon, R., & Chavez, E. (1977, January). *Increased D.U.I. Enforcement Program: Stockton, California Project Evaluation*. (Contract No. DOT-HS-5-01194). U.S. Department of Transportation/National Highway Traffic Safety Administration.

Session 2 – Detection and General Deterrence

## The Ultimate Goal: Changing Behavior

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

DWI DETECTION & SFST 2-19

**Slide 19.**

What must the comprehensive community based DWI programs seek to accomplish? Ultimately, nothing less than fundamental behavioral change on a widespread basis. This goal is achieved by encouraging more Americans to avoid committing DWI either by avoiding or controlling drinking prior to driving or by selecting alternative transportation. Ride sharing services (for example, Uber and Lyft) are becoming increasingly popular as an alternative transportation. The goal is also achieved by intervene actively to prevent others from committing DWI (for example, putting into practice the theme "friends don't let friends drive drunk") and avoiding riding with drivers who are impaired.


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

---


Session 2 – Detection and General Deterrence

## Two Approaches

Prevention



Deterrence



DWI DETECTION & SFST 2-20


**Slide 20.**

How can we bring about these changes in behavior? How can we discourage impaired driving, prevent others from drinking and driving, and avoid becoming passive "statistics" by refusing to ride with drinking drivers? Basically, there are two general approaches that must be taken to achieve this goal. One: prevention -- gives promise of the ultimate, lasting solution to the DWI problem; but it will require a substantial amount of time to mature fully. Two: deterrence -- only offers a partial or limited solution, but it is available right now.

Session 2 – Detection and General Deterrence

## Prevention

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



DWI DETECTION & SFST 2-21

**Slide 21.**

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


positive attitudes and by fostering a set of values that reflects individual responsibilities toward drinking and driving.

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

Session 2 – Detection and General Deterrence

## Deterrence

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



DWI DETECTION & SFST2-22

Slide 22.

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



***Pose this question to class: "How do we convince the public there is a good chance of being arrested for DWI?"***

***Gently guide the discussion to bring out the fact an appreciable number of violators must be arrested if others are to believe there is a real risk they will be arrested.***


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

## C. Relating Detection to Deterrence Potential

Session 2 – Detection and General Deterrence

### Deterrence

- Deterrence is negative reinforcement
- Strives to change DWI behavior



DWI DETECTION & SFST2-23

Slide 23.

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

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

---

Session 2 – Detection and General Deterrence

## The Fear of Being Caught and Punished

Long term costs and inconvenience



DWI DETECTION & SFST 2-24

**Slide 24.**

Large scale DWI deterrence programs try to control the DWI behavior of the driving public by appealing to the public's presumed fear of being caught. Most actual or potential DWI violators view the prospect of being arrested with extreme distaste. For some, the arrest, with its attendant handcuffing, booking, publicity, and other stigmatizing and traumatizing features, is the thing most to be feared.

For others, it is the prospective punishment (jail, stiff fine, etc.) that causes most of the concern. Still others fear most the long-term costs and inconvenience of a DWI arrest: the license suspension and increased premiums for automobile insurance. For many violators, the fear probably is a combination of all of these. Regardless, if enough violators are sufficiently fearful of a DWI arrest, some of them will avoid committing the violation at least some of the time. Fear by itself will not change their attitudes; if they do not see anything inherently wrong with drinking and driving in the first place, the prospect of arrest and punishment will not help them come to this realization. However, fear sometimes can be enough to keep them from putting their anti-social attitudes into practice. This type of DWI deterrence, based on the fear of being caught, is commonly called general deterrence. It applies to the driving public generally and presumably affects the behavior of those who have never been caught. There is an element of fear of the unknown at work here.

---



## Specific Deterrence



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

DWI DETECTION &amp; SFST

2-25

### Slide 25.

Another type of DWI deterrence, called specific deterrence, applies to those who have been caught and arrested. The typical specific deterrent involves some type of punishment, perhaps a fine, involuntary community service, a jail term, or action against the driver's license. The punishment is imposed in the hope it will convince the specific violator there is indeed something to fear as a result of being caught and to emphasize if there is a next time, the punishment will be even more severe. It is the fear of the known that comes into play in this case. The concept of DWI deterrence through fear of apprehension or punishment seems sound. But will it work in actual practice? The crux of the problem is this: If the motoring public is to fear arrest and punishment for DWI, they must perceive there is an appreciable risk of being caught and convicted if they commit the crime. If actual and potential DWI violators come to believe the chance of being arrested is minimal, they will quickly lose whatever fear of arrest they may have felt.

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

Session 2 – Detection and General Deterrence

## Specific Deterrence

**Supportive roles:**  
Legislators, Prosecutors, Judiciary, Media



DWI DETECTION & SFST 2-26


**Slide 26.**

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

Session 2 – Detection and General Deterrence

## How Much Deterrence is Enough?

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



DWI DETECTION & SFST 2-27

**Slide 27.**



**Ask the following questions and solicit responses:**

**Question #1: How many DWI violators do we have to arrest in order to convince an appreciable portion of them there is a real risk they will be arrested?**

**Question #2: Are we presently arresting enough violators in this State to convince them there is a real risk of being caught?**




Estimates from around the country vary. For every DWI violator arrested, there are approximately 100 undetected DWI violations. According to the CDC (2014), there were 111 million incidents of DWI per year. According to the FBI UCR, 1.08 million DWI arrests were made in 2015, which means law enforcement arrested approximately one out of every 100 DWI episodes.

---

Session 2 – Detection and General Deterrence

## How Great is the Risk?

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



DWI DETECTION & SFST2-28

Slide 28.



***Question #3: If the chances of being arrested are 1 in 100, do you believe the average DWI violator will fear arrest?***

The question now is, are violators afraid of being caught? More importantly, should they be afraid? Is there really an appreciable risk of being arrested if one commits DWI? The answer to all of these questions unfortunately is probably not. In most jurisdictions, the number of DWI arrests appears to fall short of what would be required to sustain a public perception there is a significant risk of being caught. Sometimes, it is possible to enhance the perceived risk, at least for a while, through intensive publicity. However, media "hype" without intensified enforcement has never been enough to maintain the fear of arrest for very long.

---



## Changing the Odds

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



DWI DETECTION &amp; SFST

2-29

**Slide 29.**

***Question Number 4: Why is the DWI arrest to violation ratio so low?***

***Gently guide the discussion to bring out two possibilities:***


- ***DWI violators vastly outnumber police officers***
- ***Some officers are not well trained in DWI detection***

If an arrest/violation ratio of 1 in 100 is not enough to make deterrence work, is it then reasonable to think we can ever make deterrence work? After all, if we doubled DWI arrests to 1 in 50, we would still be missing 49 violators for every one we managed to catch. If we increased arrests tenfold, to 1 in 10, 9 would escape for everyone arrested. How much deterrence would that produce? Surprisingly, it would probably produce quite a bit. We don't have to arrest every DWI offender every time in order to convince them they have something to fear. We only have to arrest enough of them, enough of the time. As the arrest rate increases, the odds are it will happen to them eventually. The law of averages (or cumulative probability) will catch up with them and sooner than we might at first expect.

## D. Evidence of Effective Detection and Effective Deterrence

Session 2 – Detection and General Deterrence

### Can it be Done? Will it Work?



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

DWI DETECTION & SFST 2-30

**Slide 30.**

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

---

Session 2 – Detection and General Deterrence

### Stockton, California

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

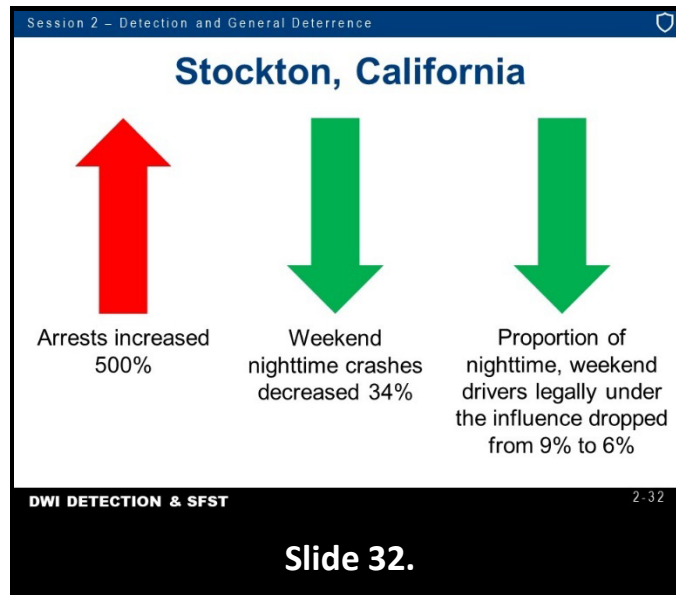
DWI DETECTION & SFST 2-31

**Slide 31.**

Several enforcement programs have succeeded in achieving significant DWI deterrence. Consider, for example, the three-year intensive weekend DWI enforcement program in Stockton, California. As early as 1975, a study showed the city's total number of DWI arrests (700) were considerably less than one percent of the areas licensed number of drivers (130,000). The implication here was Stockton police were only maintaining the arrest/violation ration of 1:2,000, or less. In addition, roadside surveys on Friday and Saturday nights disclosed nine percent of the drivers were operating with BAC's of 0.10 or higher. Then things changed.

Beginning in 1976, and continuing at planned intervals through the first half of 1979, Stockton police conducted intensive DWI enforcement on weekend nights.

The officers involved were extensively trained. The enforcement effort was heavily publicized and additional equipment (PBTs and cassette recorders) was made available. The police effort was closely coordinated with the District Attorney's office, the County Probation office, and other allied criminal justice and safety organizations.



All this paid off. By the time the project came to a close (in 1979), DWI arrests had increased by over 500%, weekend nighttime collisions had decreased by 34%, and the number of operators committing DWI dropped one third.

The implication of the Fort Lauderdale study, and of other similar studies, was for every DWI violator actually arrested for DWI, three others were contacted by police officers but were not arrested for DWI. From the Stockton study, it is clear significant improvement in the arrest rate could be achieved if officers were more skilled at DWI detection.



***What did Stockton do to contribute to their success?***

***Answers: Increase training, targeted enforcement efforts, coordination with other law enforcement agencies, and media blitz***

Session 2 – Detection and General Deterrence

## Improve DWI Detection

**Keys to success:**

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

DWI DETECTION & SFST 2-33

**Slide 33.**

Improved DWI detection can be achieved in virtually every jurisdiction in the country. The keys to success are police officers who are: Skilled at DWI detection; Willing to arrest every DWI violator who is detected; and, Supported by their agencies in all aspects of this program from policy through practical application.

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

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

---

Session 2 – Detection and General Deterrence

## Detection: Key to Deterrence

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

DWI DETECTION & SFST 2-34

**Slide 34.**

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

Session 2 – Detection and General Deterrence

## Example of General Deterrence

**When arrest/violation ratio is 1 in 100:**

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

DWI DETECTION & SFST 2-35

**Slide 35.**



***Point out this level of deterrence was achieved with an arrest/violation ratio of about 1 in 100. Increased skills coupled with increased efforts resulted in more arrests and less crashes.***

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


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

---

Session 2 – Detection and General Deterrence

## Increased DWI Detection Skills

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



DWI DETECTION & SFST

2-36


### Slide 36.

What have the results of these studies shown? Basically, they have shown a community will benefit from their officers' increased skills at DWI detection. Principally, because of their special training, the officers were better able to recognize "cues" of impairment when they observed vehicles in motion, and they were more familiar with the "clues" or human indicators of impairment exhibited by violators during personal contact. The officers also had more confidence in the field sobriety tests they used to investigate their suspects. The most important factor was far fewer of the violators being stopped now avoided detection and arrest. The difficulty in detecting DWI among operators personally contacted by untrained officers has been well documented. Analysis of roadside survey and arrest data suggest for every DWI violator arrested, three others actually have face-to-face contact with police officers but are allowed to go without arrest. Direct support of that inference was found in the Fort Lauderdale BAC study where researchers demonstrated police officers arrested only 22% of the DWI operators they contacted whose BAC levels were subsequently shown to be between 0.10 and 0.20.

---

Session 2 – Detection and General Deterrence

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



DWI DETECTION & SFST 2-37

**Slide 37.**

The ability to detect DWI violators is the key to general deterrence and possibly the greatest impediment to it. If we accept the three to one ratio of failed detections as being reasonably accurate, the implications are rather alarming. Consider the impact on a DWI violator's subsequent behavior when, after being stopped by the police, the operator is allowed to continue driving. Very likely, these DWI violators and their friends will become even more convinced of their ability to handle drinking and driving. Further, they will come to believe they will never be arrested because police officers can't determine when they are "over the limit." Instead of creating general DWI deterrence, this attitude breeds specific reinforcement. This helps to develop a feeling among DWI violators they have nothing more to fear from police than an occasional ticket for a minor traffic offense. On the positive side, the ratio of undetected to detected violations suggests much can be accomplished with existing resources if we use those resources as efficiently as possible. By just being able to improve detection skills of law enforcement officers, we could experience an increase in the arrest/violation ratio without any increase in contacts. This same, or better, degree of effectiveness can happen here.

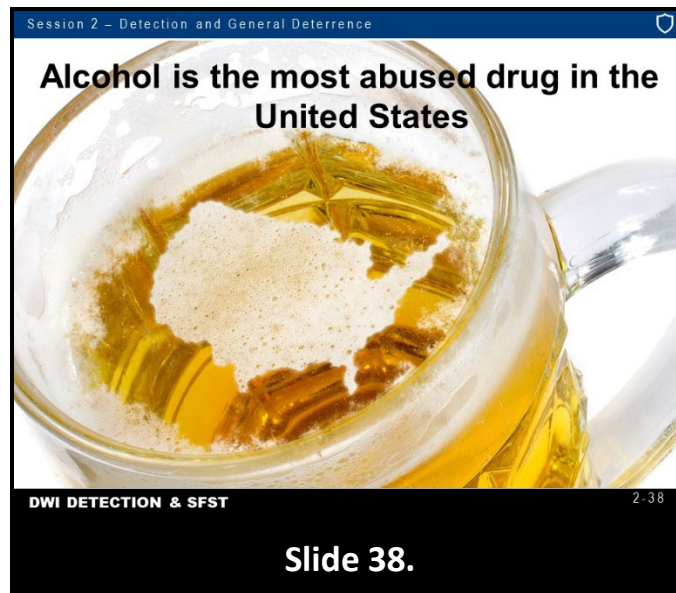


***Point out the keys to success are better training in detection skills and willingness to arrest every DWI violator who is detected.***

***Solicit participants' questions concerning general deterrence.***



## E. Physiology of Alcohol



Alcohol is the most abused drug in the United States. "Alcohol" is the name given to a family of closely related and naturally occurring chemicals. Each of the chemicals called an "alcohol" contain a molecule chemists refer to as a "hydroxy radical." This radical contains one oxygen atom and one hydrogen atom bonded together. The simplest alcohol has only one carbon atom, three hydrogen atoms, and one hydroxy radical.

The next alcohol has two carbon atoms, five hydrogen atoms, and one hydroxy radical. The third alcohol has three carbon atoms, seven hydrogen atoms, and one hydroxy radical. That is how the alcohols differ from one another.

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

---

Session 2 – Detection and General Deterrence

## Types of Alcohol

Methyl Alcohol (Methanol)

Isopropyl Alcohol (Isopropanol)

Ethyl Alcohol (Ethanol)



**Slide 39.**

DWI DETECTION & SFST 2-39



**Ask: What are the names of some of the chemicals that are alcohols?**

Three of the more commonly known alcohols are Methyl, Isopropyl, and Ethyl. Methyl alcohol is also known as Methanol or wood alcohol. Isopropyl Alcohol (Isopropanol) is also known as rubbing alcohol. Ethyl alcohol is also known as Ethanol or beverage alcohol.

Session 2 – Detection and General Deterrence

## Ethyl Alcohol (Ethanol) Intended for Human Consumption

Chemical Symbols

- ETOH
- C<sub>2</sub>H<sub>5</sub>OH

$$\begin{array}{c}
 \text{H} \quad \text{H} \\
 | \quad | \\
 \text{H}-\text{C}-\text{C}-\text{OH} \\
 | \quad | \\
 \text{H} \quad \text{H}
 \end{array}$$

**Slide 40.**

DWI DETECTION & SFST 2-40

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



The "ET" represents "ethyl" and the "OH" represents an oxygen atom and hydrogen atom, bonded together in what the chemists refer to as the "hydroxy radical". All alcohols have a hydroxy radical in their molecules.

Session 2 – Detection and General Deterrence

### Fermentation

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

Sugar + Yeast - Oxygen = Carbon dioxide + Alcohol

DWI DETECTION & SFST 2-41

Slide 41.

Ethanol is what interests us because it is the kind of alcohol that features prominently in impaired driving. Ethanol is beverage alcohol, the active ingredient in beer, wine, whiskey, liquors, etc. Ethanol production starts with fermentation. That is a kind of decomposition in which the sugars in fruit, grains, and other organic materials combine with yeast to produce the chemical we call ethanol. This can occur naturally, as yeast spores in the air come into contact with decomposing fruit and grains. However, most of the ethanol in the world didn't ferment naturally but was produced under human supervision. When an alcoholic beverage is produced by fermentation, the maximum ethanol content that can typically be reached is about 14%. There have been reports that some enhanced components and processes yield higher ETOH concentrations.



**Source:**

Watanabe, D., Wu, H., Noguchi, C., Zhou, Y., Akao, T., & Shimoi, H. (2011, February). Enhancement of the Initial Rate of Ethanol Fermentation Due to Dysfunction of Yeast Stress Response Components Msn2p and/or Msn4p. *American Society of Microbiology (ASM): Applied and Environmental Microbiology*, 77(3). doi:<https://doi.org/10.1128/AEM.01869-10>

At some point, the yeast dies, so the fermentation stops. Obtaining a higher ethanol content requires a process called distillation.




**Ask: "Why is fermentation limited to the amount of ethanol concentration it can produce?"**

**Point out the yeast dies at higher ethanol concentrations and fermentation stops.**

Session 2 – Detection and General Deterrence

## Distillation

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



DWI DETECTION & SFST 2-42

**Slide 42.**



**Ask participants to name some distilled spirits (whiskey, vodka, gin, rum).**

“Distilled spirits” is the name we give to high ethanol concentration beverages produced by distillation. This involves heating the beverage until the ethanol “boils off,” then collecting the ethanol vapor. It is possible to do this because ethanol boils at a lower temperature than does water. These distilled spirits include rum, whiskey, gin, vodka, etc. The ethanol concentration of distilled spirits usually is expressed in terms of proof, which is a number corresponding to twice the ethanol percentage. For example, an 80-proof beverage has an ethanol concentration of 40%.


Session 2 – Detection and General Deterrence

## Common Drink Sizes (0.60 ounces of pure ethanol)

Bottle of beer:  
12 ounces of fluid - 5% alcohol

Glass of wine:  
5 ounces of fluid - 12% alcohol

Shot of whiskey (80 proof):  
1 and 1/2 ounces - 40% alcohol



DWI DETECTION & SFST 2-43

**Slide 43.**

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

Beer is normally dispensed in 12-ounce servings. Since beer has an ethanol concentration of about five percent, the typical bottle or can of beer contains a little less than one half ounce of pure ethanol (craft, microbrewery, and imported beverages may contain a higher ethanol concentration).

A standard glass of wine has about five ounces of liquid. Wine is about 12% alcohol, so the glass of wine also has a bit less than one half ounce of ethanol in it.

Whiskey and other distilled spirits are dispensed by the "shot glass," usually containing about one- and one-half ounces of fluid. At a typical concentration of 40% ethanol (80 proof), the standard shot of whiskey has approximately one-half ounce of ethanol.

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



**Source:**

National Institute on Alcohol Abuse and Alcoholism. (2017, April 19). *What Is A Standard Drink?* Retrieved from National Institute of Health:  
<https://www.niaaa.nih.gov/alcohols-effects-health/overview-alcohol-consumption/what-standard-drink>

***Point out the proof of a distilled spirit is equal to twice the ethanol concentration.***

***Point out alcohol concentration may vary greatly depending on type/brand.***

***Solicit participant comments and questions on this overview of alcohol.***



## Alcohol is a CNS Depressant



DWI DETECTION &amp; SFST

2-44

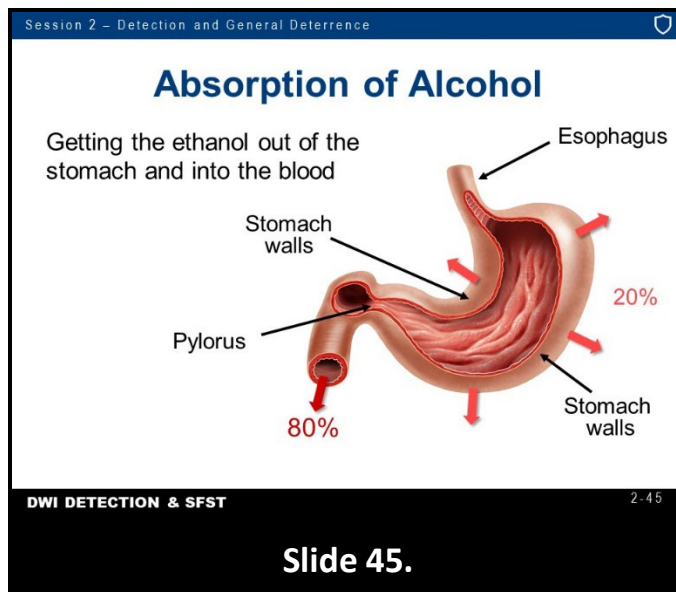
### Slide 44.

Ethanol is a Central Nervous System Depressant. It doesn't affect a person until it gets into their Central Nervous System, i.e., the brain, brain stem and spinal cord. Ethanol gets to the brain by getting into the blood. In order to get into the blood, it has to get into the body. There are actually a number of different ways in which ethanol can get into the body.

It can be inhaled: Ethanol fumes, when taken into the lungs, will pass into the bloodstream and a positive BAC will develop. However, prolonged breathing of fairly concentrated fumes would be required to produce a significantly high BAC.

Ethanol could also be injected, directly into a vein; it would then flow with the blood back to the heart, where it would be pumped first to the lungs and then to the brain.

And, it could be inserted as an enema and pass quickly from the large intestine into the blood. Alcohol is almost always introduced into the body orally, i.e., by drinking. Regardless of the method of administration, chemical tests will still reveal the presence of alcohol in blood, breath, or urine.



Once the ethanol gets into the stomach it has to move into the blood. The process by which this happens is known as absorption. One very important fact pertaining to alcohol absorption is it doesn't have to be digested in order to move from the stomach to the blood. Another very important fact is alcohol can pass directly through the walls of the stomach. These two facts, taken together, mean under the right circumstances absorption of alcohol can be accomplished fairly quickly. The ideal circumstance for rapid absorption is to drink on an empty stomach. When the alcohol enters the empty stomach, about 20% of it will make its way directly through the stomach walls. The remaining 80% will pass through the stomach and enter the small intestine, from which it is readily absorbed into the blood. Because the body doesn't need to digest the alcohol before admitting it into the bloodstream, the small intestine will be open to the alcohol as soon as it hits the stomach. But what if there is food in the stomach? Suppose the person has had something to eat shortly before drinking or eats food while drinking; will that affect the absorption of alcohol? Yes, it will. Food has to be at least partially digested in the stomach before it can pass to the small intestine. When the brain senses food is in the stomach, it commands a muscle at the base of the stomach to constrict and cut off the passage to the small intestine. The muscle is called the pylorus, or pyloric valve. As long as it remains constricted, little or nothing will move out of the stomach and into the small intestine. If alcohol is in the stomach along with the food, the alcohol will also remain trapped behind the pylorus. Some of the alcohol trapped in the stomach will begin to break down chemically before it ever gets into the blood.

In time, as the digestive process continues, the pylorus will begin to relax and some of the alcohol and food will pass through. But the overall effect will be to slow the absorption significantly. Because the alcohol only slowly gets into the blood, and because the body will continue to process and eliminate the alcohol that does manage to get in there, the drinker's BAC will not climb as high as it would have if he or she had drunk on an empty stomach.





***When food is in the stomach, the pylorus will close. If alcohol is in the stomach along with food alcohol begins to break down. In time, the pylorus relaxes and allows some alcohol into small intestine. This slows absorption and reduces peak BAC.***

***Solicit participants' comments and questions about the absorption of alcohol into the blood.***

Session 2 – Detection and General Deterrence

## Distribution of Alcohol

Getting the ethanol into the body's tissues and organs

**Basic Principle**  
Ethanol goes wherever it finds water

DWI DETECTION & SFST 2-46

**Slide 46.**

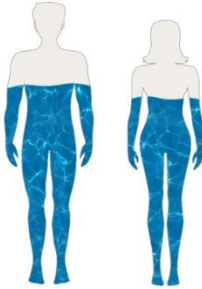
Once the alcohol moves into the blood, it will be distributed throughout the body. Alcohol has an affinity for water. The blood will carry the alcohol to the various tissues and organs of the body and will deposit the alcohol in them in proportion to their water contents. Brain tissue has a fairly high-water content, so the brain receives a substantial share of the distributed alcohol. Muscle tissue also has a reasonably high-water content, but fat tissue contains very little water. Thus, very little alcohol will be deposited in the drinker's body fat. This is one factor that differentiates alcohol from certain other drugs, notably PCP and THC, which are very soluble in fat.



Session 2 – Detection and General Deterrence

## Distribution of Alcohol

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



DWI DETECTION & SFST 2-47

**Slide 47.**



***Ask participants to suggest why this significant difference exists.***

The affinity of alcohol for water, and its lack of affinity for fat, helps explain an important difference in the way alcohol affects women and men. Pound for pound, the typical female's body contains a good deal less water than does the typical man's. This is because women have additional adipose (fatty) tissue designed in part to protect a child in the womb.

A Swedish pioneer in alcohol research, E.M.P. Widmark, determined the typical male body is about 68% water, the typical female only about 55%. Thus, when a woman drinks, she has less fluid -- pound for pound -- in which to distribute the alcohol.



***Ask: Suppose a woman and a man who weigh exactly the same drink exactly the same amount of alcohol under exactly the same conditions. Who will reach the higher BAC?***

***Answer: If a woman and a man who weighed exactly the same drank exactly the same amount of alcohol under the same circumstances, her BAC would climb higher than his. When we couple this to the fact the average woman is smaller than the average man, it becomes apparent a given amount of alcohol will cause a higher BAC in a woman than it usually will in a man.***

***Solicit participant comments and questions about the distribution of alcohol in the body.***

Session 2 – Detection and General Deterrence

## Dose Response Relationships

- Time
- Sex
- Weight
- Drinking on empty stomach

DWI DETECTION & SFST2.48

Slide 48.

People sometimes ask, "how 'high' is 'drunk'?" What is the "legal limit" for "drunk driving"? How much can a person drink before becoming "impaired"? Depends... Time? Sex? Weight? Drinking on an empty stomach? A couple of beers can do it. There is no simple answer to these or similar questions except to say any amount of alcohol may affect a person's ability to drive to some degree. States establish a BAC limit at which it is explicitly unlawful to operate a vehicle. In most cases, that "limit" is 0.08 BAC. But every State also makes it unlawful to drive when "under the influence" of alcohol and the law admits the possibility a particular person may be under the influence at much lower BACs.

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

---

Session 2 – Detection and General Deterrence

## Elimination of Alcohol

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

DWI DETECTION & SFST2-49

Slide 49.

As soon as the alcohol enters the blood stream, the body starts trying to get rid of it. Some of the alcohol will be directly expelled from the body chemically unchanged. For example, some alcohol will leave the body in the breath, urine, sweat, tears, etc. However, only a small portion (about 2-10%) of the ingested alcohol will be directly eliminated. Most of the alcohol a person drinks is eliminated by metabolism. Metabolism is a process of chemical change. In this case, alcohol reacts with oxygen in the body and changes through a series of intermediate steps into carbon dioxide and water, both of which are directly expelled from the body.



***Ask: What organ in the body is primarily responsible for chemically breaking the alcohol down?***

***Click to reveal answer to question on next slide.***

Session 2 – Detection and General Deterrence

## Metabolism in the Liver

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

DWI DETECTION & SFST 2-50

**Slide 50.**

Most of the metabolism of alcohol in the body takes place in the liver. An enzyme known as alcohol dehydrogenase acts to speed up the reaction of alcohol with oxygen.

The speed of the reaction varies somewhat from person to person and even from time to time for any given person. On the average, however, a person's blood alcohol concentration -- after reaching peak value -- will drop by about 0.015 per hour. For example, if the person reaches a maximum BAC of 0.15, it will take about ten hours for the person to eliminate all of the alcohol.



***Some metabolism of alcohol also takes place in other parts of the body including the brain. But the liver does the vast majority of the job.***

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



***Pose this problem to the class: Suppose a person reaches a peak BAC of 0.15. How long will it take for his or her body to eliminate all of the alcohol?***

***Answer: # hours = BAC/Elimination rate***

***Example:      $X = 0.15 / 0.015$   
                   $X = 10 \text{ hours}$***

Session 2 – Detection and General Deterrence

## Metabolism

How can we speed up the metabolism of alcohol?

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

DWI DETECTION & SFST 2-51

Slide 51.



***Ask: How can we speed up the metabolism of alcohol? We can't speed it up. Drinking coffee won't help. A cold shower won't help. Exercise won't help. The liver takes its time burning up the alcohol.***

***Reveal answers to the question after soliciting participant answers.***


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



***Solicit the participants for comments and questions about the elimination of alcohol from the body.***

Session 2 – Detection and General Deterrence

## Mellanby Effect



DWI DETECTION & SFST 2-52

Slide 52.



***This is a scientific effect studied and brought to us by Sir Edward Mellanby in the early 1900s.***

A person feels more impaired while his/her BAC is still rising, than at the same level while his/her BAC is declining. The person is not less impaired, but they “feel better;” (the “Mellanby Effect”) which makes them more likely to drive while impaired. Even though a person may feel better on the declining curve, their impairment may be worse. Sample analogy: Imagine driving on a feeder road to the freeway. The speed limit on that feeder road is 45 mph. 45 mph feels like a good speed. You then merge onto the freeway and drive at speeds of 65-70mph. You reach your exit, exit back onto a feeder road. You decrease your speed to 45 mph; however, now 45 mph feels painstakingly slow. This is the Mellanby Effect in a nutshell; you felt the 45 mph was faster before you went faster. You felt you were more impaired before you were more intoxicated.



### **Sources:**

Mellanby, E. (1919). *Alcohol: Its Absorption Into and Disappearance from Blood Under Different Conditions*. London, HMSO: British Medical Research Committee: Special Report Series No. 31.

Holland, M., & Ferner, R. (2017, July). A Systematic Review of the Evidence for Acute Tolerance to Alcohol - the "Mellanby Effect". *Clinical Toxicology (Philadelphia)*, 55(6), 545-556. doi:10.1080/15563650.2017.1296576

Alcohol and the Driver. Council on Scientific Affairs. (1986, January 24-31). *JAMA*, 255(4), 522-527. doi:10.1001/jama.1986.03370040096031

Session 2 – Detection and General Deterrence

## Blood Alcohol Concentration

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

DWI DETECTION & SFST 2-53

**Slide 53.**



***It actually takes 454 grams (g) to make a pound.***

But in another respect, when we contrast alcohol with virtually any other drug, we find impairment by alcohol requires a vastly larger dose than does impairment by the others. Consider exactly what a BAC of 0.08 means. BAC is expressed in terms of the "number of grams of ethanol in every 100 milliliters of blood". Therefore, 0.08 means there is 0.08g of ethanol in every 100 milliliters (mL) of blood. You will find BAC results are reported in a variety of units. Two common variations are milligrams/milliliters and percent. There are 1000 milligrams (mg) in one gram; therefore, 0.08g equals 80mg and a BAC of 0.08 would be reported as 80mg of ethanol/100mL of blood. Percent means parts per one hundred. In this example 0.08g/100mL of blood is equivalent to 0.08% BAC. Note: The term BAC is used in the manual. However, it should be understood to refer to either Blood Alcohol Concentration (BAC) or Breath Alcohol Concentration (BrAC) depending on the legal requirements of the jurisdiction.



***Ask: How much alcohol does a person have to drink to reach a BAC of 0.08?***

- ***Take an average male weighing 175 pounds and in reasonably good physical shape***
- ***Assume he does his drinking on an empty stomach***
- ***It is estimated a person would have to consume four cans of beer, four glasses of wine, or four shots of 80-proof whiskey in a fairly short period of time to reach a BAC of 0.08***

***Explain there are numerous physiological variables that can affect BAC such as gender, weight, stomach contents, medical/health, metabolic rate, etc.***

***Review questions are located at end of Session 2 (Test Your Knowledge).***

Session 2 – Detection and General Deterrence

Questions?

DWI DETECTION & SFST 2-54

Slide 54.



Session 2 – Detection and General Deterrence

## Test Your Knowledge

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

DWI DETECTION & SFST 2-55

**Slide 55.**

### Test Your Knowledge

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



1. **100**
2. **22%**
3. **Methyl, Ethyl and Isopropyl (or, Methanol, Ethanol and Isopropanol) (or, Wood Alcohol, Beverage Alcohol, and Rubbing Alcohol)**

Session 2 – Detection and General Deterrence

## Test Your Knowledge

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

DWI DETECTION & SFST 2-56

**Slide 56.**

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



4. ***Ethanol is the beverage alcohol, intended for human consumption.***
5. ***The four-letter chemical symbol is ETOH.***
6. ***Fermentation***

Session 2 – Detection and General Deterrence

## Test Your Knowledge

7. What is the name of the process used to produce high concentration beverage alcohol?
8. True or false: Pound for pound, the average woman contains more water than does the average man
9. What do we mean by the “proof” of an alcoholic beverage?

DWI DETECTION & SFST 2-57

**Slide 57.**

7. What is the name of the process used to produce high concentration beverage alcohol?
8. True or false: Pound for pound, the average woman contains more water than does the average man.
9. What do we mean by the "proof" of an alcoholic beverage?



**7. Distillation**

**8. False. The average woman actually has a good deal less water, pound for pound, than does the average man. She is about 55% water; he is about 68%.**

**9. "Proof" means twice the ethanol percent of the beverage. For example, 80 proof vodka is 40% ethanol.**

Session 2 – Detection and General Deterrence

## Test Your Knowledge

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

DWI DETECTION & SFST 2-58

**Slide 58.**

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



- 10. True. Under normal conditions, about 80% of the ethanol in the stomach will pass through the pyloric valve into the small intestine, from which it will quickly move into the bloodstream.**
- 11. The muscle is called the pylorus, or pyloric valve.**
- 12. True. Usually, about 20% of the ethanol a person drinks diffuses through the stomach walls to enter the blood.**

Session 2 – Detection and General Deterrence

## Test Your Knowledge

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

14. Once a person reaches his or her peak BAC, it will drop at a rate of about \_\_\_\_\_ per hour.

- a) 0.025
- b) 0.015
- c) 0.010

15. True or false: It takes about 30 minutes for the average 175-pound man to "burn off" the alcohol in one 12 ounce can of beer.

DWI DETECTION & SFST 2-59

**Slide 59.**

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

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

- a) 0.025
- b) 0.015
- c) 0.010

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



**13. The liver is where most metabolism takes place.**

**14. B "0.015" (But remember: This is an average value, with wide variations among individuals.)**

**15. False. The average 175-pound man will need 90 minutes to metabolize the alcohol.**



# 3 **SFST**

---

## The Legal Environment

### LEARNING OBJECTIVES

Be familiar with:

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

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

### CONTENTS

A. DWI Statute: Driving While Under the Influence .....	5
B. Per Se Statute: Driving with a Prohibited Blood Alcohol Concentration (BAC) .....	9
C. Implied Consent .....	12
D. Preliminary Breath Testing (PBT) .....	16
E. Case Law Reviews.....	17

### LEARNING ACTIVITIES

- Instructor-Led Presentation
- Reading Assignments



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***





*(Time varies with the complexity and variation of your State's laws relating to drinking and driving and DWI enforcement.) \*\*\*The lesson plans for this session are based on a generic set of drinking and driving laws, patterned after the Uniform Vehicle Code.\*\*\* Significant modification should be made to adapt this session to the current statutes of your State. Instructors will need to insert participant's State information on the following slides:*

*Slide 3-3 DWI Statute*

*Slide 3-7 DWI Per Se Statute*

*Slide 3-11 Implied Consent Law*

*Slide 3-12 State Legal Presumptions*

*Slide 3-15 PBT Statute Information (if applicable)*

*Slide 3-17 SFST Case Law*

*Slide 3-18 HGN Case Law*

*Slide 3-19 Search and Seizure Case Law*

*Slide 3-20 Other Relevant Case Law*

*In addition to the above slides, instructors should research and document, in instructor notes (below the slide), the legal definitions regarding the following slides:*

*Slide 3-4 "Driving"; "Actual Physical Control"; "Vehicle/Motor Vehicle"; "Location"; "Impaired/Under the Influence"*

*Slide 3-6 "DWI Jury Instructions"*

*Slide 3-11 "Implied Consent Law"*

An understanding of impaired driving laws that apply in your jurisdiction is critical to successful DWI enforcement. All States (and many local jurisdictions) have their own impaired driving laws. While the specific language of these laws may vary significantly, most include the following provisions:

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



## Learning Objectives

Be familiar with:

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



DWI DETECTION & SFST

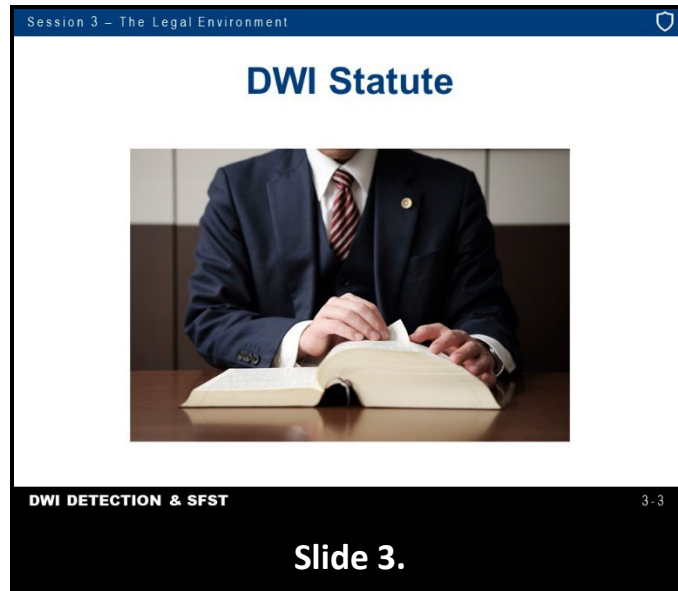
3-2

Slide 2.



***Briefly review the objectives, content, and activities of this session.***

## A. DWI Statute: Driving While Under the Influence



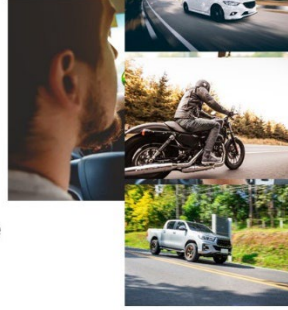
*Insert State-specific statute here.*

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

---

## Legal Definitions

- Driving
- Actual Physical Control
- Vehicle
- Location
- Impaired/Under the Influence



DWI DETECTION &amp; SFST

3-4

**Slide 4.**

### ***Discuss State-specific definitions:***

- ***“Driving” means...***
- ***“Actual Physical Control” means...***
- ***“Vehicle” means...***
- ***“Location” means... (discuss locations where the DWI law applies in your State, i.e., public highways, parking lots, off-road, gated communities, etc.***
  - ***In some States, it is unlawful to operate a vehicle while impaired anywhere in the State: on or off roadways, on private property, and so on. In other States, the law applies only on publicly accessible roadways. i.e., public or private property anywhere in the State.***
- ***“Impaired/Under the Influence” means...***
  - ***One of the several terms used to describe the degradation of mental and/or physical abilities necessary for safely operating a vehicle.***

Session 3 – The Legal Environment

## Probable Cause for DWI Arrest

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

- \* All elements of crime need to be present

DWI DETECTION & SFST 3-5

**Slide 5.**

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

That is, the officer must believe:

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




***Discuss “totality of the circumstances” to establish elements of the crime of DWI.***

Session 3 – The Legal Environment

## Conviction

Criminal offense – establish facts  
“beyond a reasonable doubt”



DWI DETECTION & SFST 3-6

**Slide 6.**

In order to convict a person of DWI, it is necessary to establish all elements were present: Operation, Control, Vehicle, and Impairment. If DWI is a criminal offense, the facts must be established "beyond a reasonable doubt." If DWI is a violation, the standard of proof may be less. In either case, it is the officer's responsibility to collect and thoroughly document all evidence for use at trial.



***Insert or discuss State jury instructions for DWI.***

***Insert or discuss State pattern jury instructions for “beyond a reasonable doubt.”***

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




***Insert or discuss State standard of proof for a violation.***

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

Session 3 – The Legal Environment

### Per Se Statute

Refer to local State information



DWI DETECTION & SFST 3-7

**Slide 7.**



***Insert State-specific statute for Per Se.***

All States include in their DWI statutes a provision making it illegal to drive with a statutorily prohibited BAC. This provision, often called a Per Se law, creates another mechanism by which a suspect can be prosecuted for a DWI offense. Following is a typical Per Se provision. It is unlawful for any person to: *Operate or be in physical control; Of any vehicle; Within this State; While having a BAC at or above State's level.* These elements may vary from State to State.



***Compare and contrast these elements with the elements of DWI.***

***Remind participants law enforcement officers must have probable cause prior to Per Se Statute coming into play.***

Session 3 – The Legal Environment

## DWI and DWI Per Se

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

DWI DETECTION & SFST 3-8

**Slide 8.**

The DWI and DWI Per Se can work simultaneously to prosecute a suspect for DWI. The DWI law makes it an offense to drive while under the influence of alcohol and/or any drug and the DWI Per Se law makes it an offense to drive while having more than a statutorily prohibited BAC.

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



***Pose this question to the class: "Since there is a Per Se law, why is it necessary to retain the old DWI law?" Probe for responses until at least the following points have emerged:***

- ***Some subjects refuse to submit to chemical testing***
- ***Some violators are under the influence of drugs other than alcohol***
- ***Some are under the influence of alcohol at BACs below State's level***

***Instructors should be familiar with the legal processes in their State regarding disposition DWI/DWI Per Se convictions.***

The principal purpose of the Per Se law is to aid in prosecution of DWI offenders. It is not necessary for the prosecutor to show the driver was "under the influence." It is sufficient for the State to show the driver's BAC was at or above the State's level. Important to remember, an officer must still have probable cause to believe the driver is impaired before making an arrest. Implied consent usually requires the driver be arrested before the request of a chemical test.

The law also requires the arrest be made for "acts alleged to have been committed while operating a vehicle while under the influence." Therefore, the officer usually must establish probable cause the offense has been committed and make a valid arrest before the chemical test can be requested.





***You may remind participants of lower State levels for underage and commercial motor vehicle operators.***

Session 3 – The Legal Environment

### Per Se Summary

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

DWI DETECTION & SFST 3-9

**Slide 9.**

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



***Stress the importance of thorough documentation, i.e., “Field Note-Taking Guide” that will be explained in Session 4.***

## C. Implied Consent

Session 3 – The Legal Environment

### Implied Consent Law

Refer to local State information



DWI DETECTION & SFST 3-10

**Slide 10.**

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

Session 3 – The Legal Environment

### Elements of Implied Consent

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

DWI DETECTION & SFST 3-11

**Slide 11.**

The law provides penalties for refusal to submit to the testing. These penalties may include the suspension or revocation of the individual's driver's license.

The purpose of implied consent is to encourage those arrested for DWI to submit to a chemical test so valuable evidence may be obtained.



***Point out implied consent requires the driver to submit a chemical test(S). The law provides penalties for refusal to submit to the test(s).***

***Emphasize in the majority of States, implied consent is not triggered until probable cause has been established for an arrest for DWI. Some States criminalize refusals. Some States allow refusal evidence to be used by prosecutors in their case.***

***Insert State-specific slide if refusal is a separate crime. Discuss State-specific license sanctions.***

Session 3 – The Legal Environment

## Legal Presumptions

- BAC \_\_\_\_\_ or more
  - Presumed under the influence
- Less than \_\_\_\_\_
  - Presumed not under the influence
- At least \_\_\_\_\_ but below \_\_\_\_\_
  - No presumption

DWI DETECTION & SFST 3-12

**Slide 12.**



***Insert State-specific information for Legal Presumptions (if applicable – This may not apply to all States).***

Legal presumptions define impairment and emphasize the significance of the scientific chemical test evidence. For example, if the chemical test shows the person's BAC is .08 or more it shall be presumed the person is under the influence. In this State, if the test shows the BAC is \_\_\_\_\_ or less, it shall be presumed the person is not under the influence.

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



***Some States use breath alcohol concentration (BrAC).***

***Statutory presumption levels vary from State to State. Know your State law.***

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

---

Session 3 – The Legal Environment

### Example Number 1

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

DWI DETECTION & SFST3-13

Slide 13.

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

*Example 1:* A driver is arrested for DWI. A chemical test administered to the driver shows a BAC of 0.13. At the subsequent trial, the chemical test evidence is introduced. However, the arresting officer's testimony about the defendant's driving, appearance, and behavior was confusing and unclear. Therefore, the State was unable to prove all of the elements of the crime beyond a reasonable doubt.



***Emphasize: Law enforcement must organize, document, and present evidence to articulate the impairment exhibited by the defendant at the time of the stop.***

Session 3 – The Legal Environment

Example Number 2

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

DWI DETECTION & SFST3-14

Slide 14.

*Example 2:* A driver is arrested for DWI. A chemical test administered to the driver shows a BAC of 0.05. At the subsequent trial, the chemical test evidence is introduced. In addition, the arresting officer testifies about the defendant’s driving, odor of alcohol, appearance, slurred speech, and inability to perform divided attention field sobriety tests. The testimony is clear and descriptive. The court finds the defendant guilty of DWI. The difference in outcomes in the two examples cited is directly attributable to how well the arresting officer articulates the evidence other than the chemical test. Remember the chemical test provides presumptive evidence of alcohol influence; it does not provide conclusive evidence. While the "legal limit" in a given jurisdiction may be 0.08 BAC, many people will demonstrate impaired driving long before that "legal limit" is reached.




***Explain “legal limit” does not actually exist. Statutory BACs establish an illegal limit.***

## D. Preliminary Breath Testing (PBT)

Session 3 – The Legal Environment

### Preliminary Breath Testing (PBT)

Refer to local State information



DWI DETECTION & SFST 3-15

**Slide 15.**



***This slide is only applicable for States that permit preliminary breath testing. If not applicable, skip this slide. Insert State statute and provide citation.***

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



***If available, demonstrate PBT operation.***

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



***Outline the statutory/administrative penalties for PBT refusal in your State, if any.***

## E. Case Law Reviews

Session 3 – The Legal Environment

### Case Law Reviews

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

DWI DETECTION & SFST3-16

Slide 16.

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

Session 3 – The Legal Environment

### SFST Case Law

Refer to local State information



DWI DETECTION & SFST3-17

Slide 17.




***Insert current relevant SFST case law pertaining to your State. For assistance, instructor may contact their State Traffic Safety Resource Prosecutor (TSRP), State DRE/SFST Coordinator or the National Traffic Law Center (NTLC) of the National District Attorneys Association at <http://www.ndaa.org>.***

Session 3 – The Legal Environment

## Horizontal Gaze Nystagmus Case Law

Refer to local State information



DWI DETECTION & SFST 3-18

**Slide 18.**




***Insert current relevant HGN case law pertaining to your State. For assistance, instructor may contact their State TSRP, State DRE/SFST Coordinator or the NTLC of the National District Attorneys Association at <http://www.ndaa.org>.***

Session 3 – The Legal Environment

## Search and Seizure Case Law

Refer to local State information



DWI DETECTION & SFST 3-19

**Slide 19.**



***Insert current relevant search and seizure case law pertaining to your State. For assistance, instructor may contact their State TSRP, State DRE/SFST Coordinator or the NTLC of the National District Attorneys Association at <http://www.ndaa.org>.***



Session 3 – The Legal Environment

## Other Relevant Case Law

Refer to local State information



DWI DETECTION & SFST 3-20

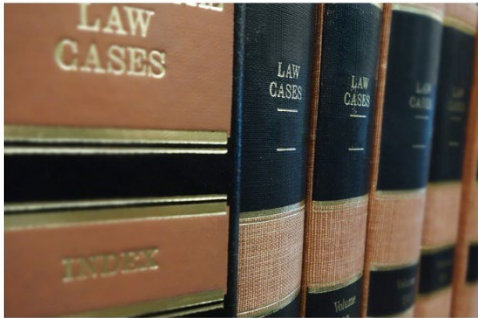
**Slide 20.**



***Insert other current relevant case law pertaining to your State. For assistance, instructor may contact their State TSRP, State DRE/SFST Coordinator or the NTLC of the National District Attorneys Association at <http://www.ndaa.org>.***

Session 3 – The Legal Environment

## Case Law Summary



DWI DETECTION & SFST 3-21

**Slide 21.**

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

Session 3 – The Legal Environment

## Test Your Knowledge

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

DWI DETECTION & SFST 3-22

**Slide 22.**

### Test Your Knowledge

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



1. ***Beyond a reasonable doubt***
2. ***Encourage a driver arrested for DWI to provide a chemical test for evidence***
3. ***Presumptive***
4. ***Drive with a statutorily prohibited BAC level***

# 4 **SFST**

---

## Overview of Detection, Note Taking, and Testimony

### LEARNING OBJECTIVES

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

### CONTENTS

A. Three Phases of Detection .....	5
B. DWI Investigation Field Notes .....	17
C. Courtroom Testimony.....	22

### LEARNING ACTIVITIES

- Instructor-Led Presentation
- Reading Assignments



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***




***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

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

## Learning Objectives

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



DWI DETECTION & SFST 4-2

**Slide 2.**

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



***Briefly review the objectives, content, and activities of this session.***

***Write on dry erase board or easel/easel pad – “Focus: DWI Detection”.***

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

## DWI Detection

The entire process of identifying and gathering evidence to determine if a subject should be arrested for a DWI violation.

DWI DETECTION & SFST 4-3

**Slide 3.**

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



***Point out other definitions sometimes are given for “DWI Detection,” but this particular definition will be used for this course.***

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

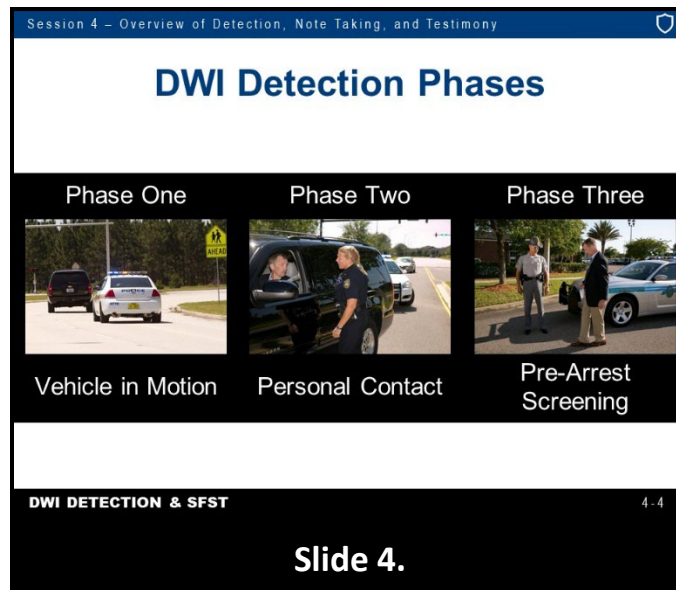


***Point out the initial suspicion may be slight in some cases and may be strong in others. For example, the initial suspicion may be slight with an equipment violation and strong with a wrong way driver.***

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

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

## A. Three Phases of Detection



The typical DWI contact involves three separate and distinct phases: Phase One: Vehicle in motion; Phase Two: Personal contact; and, Phase Three: Pre-arrest screening.

In Phase One, you usually observe the driver operating the vehicle. In Phase Two, after you have stopped the vehicle, there usually is an opportunity to observe and speak with the driver face to face. In Phase Three, you usually have an opportunity to administer Standardized Field Sobriety Tests (SFSTs) to the driver to determine impairment.

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



***Emphasize PBTs should be used after administering SFSTs.***

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



***Emphasize the importance of being able to articulate why the driver did not or could not perform the tests.***

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


## Decisions/Possible Outcomes

**Decisions**

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

**Possible Outcomes**

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



DWI DETECTION & SFST 4-5


**Slide 5.**

In each of the three phases, there will be decisions and possible outcomes. Each detection phase usually involves two major tasks and one major decision.

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

## Decisions

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



DWI DETECTION & SFST 4-6

**Slide 6.**

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



***Point out merely stopping the subject doesn't necessarily mean the officer is committed to arresting the subject for DWI. Emphasize the importance of collecting evidence and the use of mobile video and visual aids in accordance with departmental policy.***



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



***Point out by instructing the driver to exit the vehicle the officer still is not committed to making the DWI arrest. However, the officer suspects there is a possibility the driver is under the influence.***

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




***Emphasize this decision is based on the accumulation of evidence from all three phases and represents the culmination of the detection process.***

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

### Possible Outcomes – Yes

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



DWI DETECTION & SFST 4-7

**Slide 7.**

Each of the major decisions can have any one of three different outcomes: Yes - Do it Now; Wait - Look for Additional Evidence; and, No - Don't Do It. Consider the following examples.

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




***Provide an example and walk through each decision.***

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

## Possible Outcomes - Wait

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



DWI DETECTION & SFST 4-8

**Slide 8.**


Phase One: Don't stop the vehicle yet; keep following and observing it a bit longer. Phase Two: Don't get the driver out of the car yet; keep talking to and observing the driver a bit longer. (This option may be limited if the officer's personal safety is at risk.) Phase Three: Don't arrest the driver yet; administer another field sobriety test before deciding.

---

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

## Possible Outcomes - No

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



DWI DETECTION & SFST 4-9

**Slide 9.**

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

---



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

---



## DWI Detection – Phase One

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



DWI DETECTION &amp; SFST

4-11

**Slide 11.**

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

Phase One:

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



***Select a participant to describe a phase one from their experience or instructor share an example.***



## DWI Detection – Phase Two

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



DWI DETECTION &amp; SFST

4-12

### Slide 12.

#### Phase Two:

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



***Select a participant to describe a phase two from their experience or instructor share an example.***



## DWI Detection – Phase Three

- Should I administer SFSTs to the driver?
- How does the driver perform those tests?
- What indicators of impairment did I observe while the driver performed these tests?
- Do I have probable cause to arrest for DWI?
- Should I administer a preliminary breath test?
- What are the results of the preliminary breath test?



DWI DETECTION &amp; SFST

4-13

**Slide 13.**

Phase Three:

- Should I administer SFSTs to the driver?
  - How does the driver perform those tests?
  - What indicators of impairment did I observe while the driver performed these tests?
  - Do I have probable cause to arrest for DWI?
  - Should I administer a preliminary breath test?
  - What are the results of the preliminary breath test?
-



## Successful DWI Detection

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

DWI DETECTION &amp; SFST

4-14

### Slide 14.

The most successful DWI detectors are those officers who:

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



***Solicit participants' questions concerning the overview of detection phases.***



## Note Taking and Testimony

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



DWI DETECTION &amp; SFST

4-15

### Slide 15.

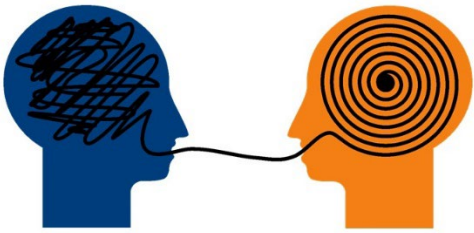
A basic skill needed for DWI enforcement is the ability to graphically describe your observations. Just as detection is the process of collecting evidence, description largely is the process of conveying or articulating evidence. Successful description demands the ability to convey evidence clearly and convincingly. Your challenge is to communicate evidence to people who weren't there to see, hear, and smell the evidence themselves. Your tools are the words that make up your written report and verbal testimony. You must communicate with the supervisor, the prosecutor, the judge, the jury, and even with the defense attorney. You are trying to "paint a word picture" for those people to develop a sharp mental image that allows them to "see" what you saw, "hear" what you heard, and "smell" what you smelled. Officers who select the most appropriate terminology for both written reports and courtroom testimony will be better able to communicate clearly and convincingly, making DWI prosecution more successful.

---



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

## Use Clear Convincing Language



DWI DETECTION & SFST 4-16

**Slide 16.**

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



***Encourage class interaction to further describe in more detail the “Clear Language” examples in the next two slides. Solicit participants’ questions concerning the overview of detection phases.***

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

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

DWI DETECTION & SFST 4-17

Slide 17.

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

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

DWI DETECTION & SFST 4-18

Slide 18.

Consider these examples.


---

## B. DWI Investigation Field Notes

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

Officer Must Be Able To

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



DWI DETECTION & SFST 4-19

Slide 19.

One of the most critical tasks in the DWI enforcement process is the recognition and documentation of facts and clues that establish legal grounds to stop, investigate, and subsequently arrest persons suspected of DWI. The evidence gathered during the detection process must establish the elements of the violation and must be completely documented to support successful prosecution of the defendant. This evidence is largely sensory (sight, smell, hearing) in nature, and therefore, is extremely short-lived. You must be able to recognize and act on the facts and circumstances with which you are confronted. But you also must completely document your observations and describe them clearly and convincingly to secure a conviction. You may be inundated with evidence of DWI, i.e., sights, sounds, smells. You recognize this evidence, sometimes subconsciously, and on this evidence base your decisions to stop, to investigate, and ultimately to arrest.



***Point out how practice opportunities will be provided (e.g., video segments, classroom demonstrations, etc.).***

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

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

# Observations - Short-Lived Evidence

FIELD NOTE-TAKING GUIDE

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

II. MEDICAL HISTORY

INITIAL OBSERVATIONS \_\_\_\_\_  
OBSERVATION OF STOP \_\_\_\_\_

III. PERSONAL CONTACT

OBSERVATION OF DRIVER \_\_\_\_\_  
STATEMENTS \_\_\_\_\_  
PRE-EXIT SOBRIETY TESTS \_\_\_\_\_  
OBSERVATION OF THE EXIT \_\_\_\_\_  
ODORS \_\_\_\_\_

GENERAL OBSERVATIONS

SPEECH \_\_\_\_\_  
ATTITUDE \_\_\_\_\_  
CLOTHING \_\_\_\_\_  
PHYSICAL DEFECTS/DRUGS OR MEDICATIONS USED \_\_\_\_\_

IV. PRE-ARREST SCREENING

EQUAL PUPILS ☐ Yes ☐ No ☐ LACK OF SMOOTH PURSUIT  
EQUIL TRACKING ☐ Yes ☐ No ☐ DISTINCT AND SUSTAINED NYSTAGMUS AT MAX DEV  
NOVEMBER NYSTAGMUS ☐ Yes ☐ No ☐ ONSET OF NYSTAGMUS PRIOR TO 45 DEGREES  
OTHER \_\_\_\_\_ ☐ VERTICAL NYSTAGMUS ☐ Yes ☐ No

HORIZONTAL GAZE NYSTAGMUS

LEFT	RIGHT

DWI DETECTION & SFST

4-20

Slide 20.



***Write on dry erase board or easel/easel pad: “observations – short-lived evidence.”***

One way to improve the effectiveness of your handwritten field notes is to use a structured note taking guide. The guide makes it easy to record brief "notes" on each step of the detection process and ensures vital evidence is documented. The field notes provide the information necessary to complete required DWI report forms and assist you in preparing a written account of the incident. The field notes will also be useful if you are required to provide oral testimony since they can be used to refresh your memory. A model note taking guide is provided for your use. A brief description follows. Details are provided in subsequent units.



***Distribute Note-Taking Guide or State/Local DWI Investigation guide to participants.***

***Have participants refer to guide at the end of this session or hand out local note-taking guide.***

***Advise participants each section of the note taking guide will be broken down and thoroughly explain in subsequent sessions.***

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

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

## Field Note-Taking Guide

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

II. VEHICLE IN MOTION  
 INITIAL OBSERVATIONS \_\_\_\_\_  
 \_\_\_\_\_  
 OBSERVATION OF STOP \_\_\_\_\_  
 \_\_\_\_\_

**DWI DETECTION & SFST** 4-21

**Slide 21.**

Section I provides space to record basic information describing the subject, vehicle, location, and date and time the incident occurred.



***Briefly indicate the types of notes that should be taken in each section of the standard note-taking guide.***

Section II provides space to record brief descriptions of the vehicle in motion (Detection Phase One), including initial observation of the vehicle in operation and observation of the stopping sequence.

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

## Field Note-Taking Guide

III. PERSONAL CONTACT  
 OBSERVATION OF DRIVER \_\_\_\_\_  
 \_\_\_\_\_  
 STATEMENTS \_\_\_\_\_  
 \_\_\_\_\_  
 PRE-EXIT SOBRIETY TESTS \_\_\_\_\_  
 \_\_\_\_\_  
 OBSERVATION OF THE EXIT \_\_\_\_\_  
 \_\_\_\_\_  
 ODORS \_\_\_\_\_  
 \_\_\_\_\_

GENERAL OBSERVATIONS

SPEECH \_\_\_\_\_  
 ATTITUDE \_\_\_\_\_  
 CLOTHING \_\_\_\_\_  
 PHYSICAL DEFECTS/DRUGS OR MEDICATIONS USED \_\_\_\_\_

**DWI DETECTION & SFST** 4-22

**Slide 22.**



***Point out the specific contents of the guide will be clarified as the training progresses through the three phases of detection.***

Section III provides space to record brief descriptions of the personal contact with the subject (Detection Phase Two) including observations of the driver. General Observations provides space to record the subject's manner of speech, attitude, clothing, etc. Any physical evidence collected should also be noted in this section.



***Point out the participants will use copies of the standard guide to practice taking notes on DWI detection evidence.***

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

### Field Note-Taking Guide

IV. PRE-ARREST SCREENING

**HORIZONTAL GAZE NYSTAGMUS**

	LEFT	RIGHT
Equal Pupils	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Equal Tracking	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Resting Nystagmus	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Other		

**WALK AND TURN**

**INSTRUCTION STAGE**

CANNOT KEEP BALANCE ☐

STARTS TOO SOON ☐

**WALKING STAGE**

STOPS WALKING ☐

HOSES HEEL-TO-TOE ☐

STEPS OFF LINE ☐

USES ARMS TO BALANCE ☐

ACTUAL STEPS TAKEN ☐

IMPROPER TURN (Describe) \_\_\_\_\_

CANNOT COMPLETE TEST (Explain) \_\_\_\_\_

OTHER: \_\_\_\_\_

**DWI DETECTION & SFST** 4-23

**Slide 23.**



***Point out the Field Note-Taking Guide can be used to record all observations of suspect's actions. The validated clues of the SFSTs will be discussed in depth in Session 8.***


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

## Field Note-Taking Guide

ONE LEG STAND

L	R

Sways while balancing  
Uses arm(s) to balance  
Hopping  
Puts foot down



Type of Footwear: \_\_\_\_\_

OTHER: \_\_\_\_\_

---

OTHER FIELD SOBRIETY TESTS

NAME OF TEST: \_\_\_\_\_  
DESCRIBE PERFORMANCE: \_\_\_\_\_

NAME OF TEST: \_\_\_\_\_  
DESCRIBE PERFORMANCE: \_\_\_\_\_

NAME OF TEST: \_\_\_\_\_  
DESCRIBE PERFORMANCE: \_\_\_\_\_

PBT (1) (optional) Time: \_\_\_\_\_ Results: \_\_\_\_\_ PBT (2) (optional) Time: \_\_\_\_\_ Results: \_\_\_\_\_

**DWI DETECTION & SFST** 4-24

### Slide 24.

Section IV provides space to record the results of all field sobriety tests administered and the results of the preliminary breath test (PBT) if such a test was given.

Section V provides space to record the officer's general observations, such as the subject's manner of speech, attitude, clothing, etc. Any physical evidence collected should also be noted in this section.

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



***Encourage officers not to rely strictly on video to document these observations. Notes should be taken as soon as possible after the arrest.***

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



***Solicit participant's questions concerning note-taking procedures.***


## C. Courtroom Testimony

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

### Preparing Testimony

**At time of incident:**

- Recognize evidence
- Compile notes
- Prepare report



DWI DETECTION & SFST4-25

Slide 25.

Testimonial evidence in DWI cases establishes the defendant was, in fact, the driver and was under the influence. Your testimony should be clear, detailed, and concise. Preparation for trial is done both at the scene and prior to trial. To be effective, testimonial evidence must be clear and convincing. The first requirement for effective testimony is preparation. Testimony preparation begins at the time of the DWI incident. From the very beginning of the DWI contact, it is your responsibility to recognize significant evidence, compile complete, accurate field notes, and prepare a complete, accurate, detailed report.

---




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

## Preparing Testimony

**Prior to trial:**

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



DWI DETECTION & SFST 4-26

**Slide 26.**

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

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




***Point out a pretrial conference is recommended. However, the decision whether or not to conduct one is controlled by the prosecutor. The “conference” may occur minutes prior to trial.***

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

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

## Chronology of Testimony



DWI DETECTION & SFST 4-27

**Slide 27.**

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



***Point out in many instances the prosecutor will control the sequence of testimony. However, the officer should organize testimony in a logical time sequence, i.e., to present facts and observations in the order in which they occurred.***

Phase One: Vehicle in Motion – initial observation of vehicle, the driver, or both including what first attracted your attention to the vehicle/driver and details about the driving before you initiated the traffic stop. Reinforcing cues, maneuvers, or actions observed after signaling the driver to stop but before driver's vehicle came to a complete stop.

A “cue” is defined as a reminder or prompting as a signal to do something.



***Emphasize: A “cue” is defined as a reminder or prompting as a signal to do something. For example, observing a vehicle driving without headlights is a “cue” or prompt to stop the vehicle.***

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

A “clue” is defined as something that leads to the solution of a problem.



***Emphasize: A “clue” is defined as a something that leads to the solution of a problem. For example, an empty alcohol container in the vehicle is a clue the driver may have been consuming alcohol.***

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

---

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

## Chronology of Testimony

**Arrest and post arrest observations:**

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

DWI DETECTION & SFST 4-28

**Slide 28.**

### Arrest and Post Arrest Observations

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



***Emphasize the importance of documentation in preparation for court testimony.***

***Discuss your State's administrative license suspension hearing procedure.***

***Point out participants may have the opportunity to practice giving testimony as the training progresses through the three detection phases.***

***Solicit participant's questions concerning testimonial requirements.***

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

Questions?

DWI DETECTION & SFST 4-29

Slide 29.



## Test Your Knowledge

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

DWI DETECTION &amp; SFST

4-30

**Slide 30.**

### Test Your Knowledge

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



**1. The entire process of identifying and gathering evidence to determine whether or not a subject should be arrested for a DWI violation**

**2A. Vehicle in Motion**

**2B. Personal Contact**

**2C. Pre-arrest Screening**

**3. Observe the driver operating the vehicle**



## Test Your Knowledge

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

DWI DETECTION &amp; SFST

4-31

### Slide 31.

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



4. *The driver is badly injured, grossly impaired, or refuses to submit to the tests*
5. *Whether the driver should be asked to exit the vehicle*
6. *3; Yes - do it now; wait - look for additional evidence; no - don't do it*



## Test Your Knowledge

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

DWI DETECTION &amp; SFST

4-32

### Slide 32.

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



**7. *Whether there is sufficient evidence to establish legal grounds necessary to proceed to the next step in the detection process***

**8. *Sensory***

**9. *Short lived.***

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

## Test Your Knowledge

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

**Slide 33.**

10. Testimony preparations begins \_\_\_\_\_
11. List two things the officer should do to prepare testimony just before the trial.
  - A. \_\_\_\_\_
  - B. \_\_\_\_\_
  - C. \_\_\_\_\_
  - D. \_\_\_\_\_
  - E. \_\_\_\_\_
12. In court, the officer's testimony should be organized \_\_\_\_\_



**10. At the time of initial observation**

**11A. Review field notes**

**11B. Mentally organize elements of the offense**

**11C. Mentally organize testimony**

**11D. Identify weak spots on potential issues of the case**

**11E. Discuss the case with the prosecutor and other witnesses**

**12. Chronologically and should cover each phase of the DWI incident**



## FIELD NOTE-TAKING GUIDE

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

---

### II. VEHICLE IN MOTION

INITIAL OBSERVATIONS \_\_\_\_\_

OBSERVATION OF STOP \_\_\_\_\_

### III. PERSONAL CONTACT

OBSERVATION OF DRIVER \_\_\_\_\_

STATEMENTS \_\_\_\_\_

PRE-EXIT SOBRIETY TESTS \_\_\_\_\_

OBSERVATION OF THE EXIT \_\_\_\_\_

ODORS \_\_\_\_\_

### GENERAL OBSERVATIONS

SPEECH \_\_\_\_\_

ATTITUDE \_\_\_\_\_

CLOTHING \_\_\_\_\_

PHYSICAL DEFECTS/DRUGS OR MEDICATIONS USED \_\_\_\_\_

### IV. PRE-ARREST SCREENING

#### HORIZONTAL GAZE NYSTAGMUS

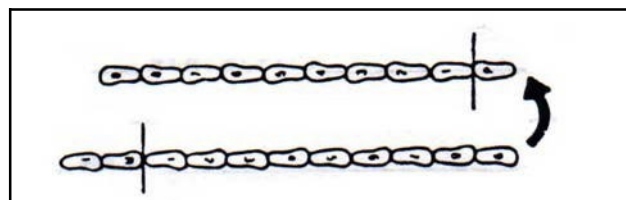
Equal Pupils ☐ Yes ☐ No ☒ LACK OF SMOOTH PURSUIT  
Equal Tracking ☐ Yes ☐ No ☒ DISTINCT AND SUSTAINED NYSTAGMUS AT MAX DEV  
Resting Nystagmus ☐ Yes ☐ No ☒ ONSET OF NYSTAGMUS PRIOR TO 45 DEGREES  
Other \_\_\_\_\_ ☒ VERTICAL NYSTAGMUS ☐ Yes ☐ No

LEFT	RIGHT

### WALK AND TURN

#### INSTRUCTION STAGE

CANNOT KEEP BALANCE  
STARTS TOO SOON

#### WALKING STAGE

STOPS WALKING  
MISSES HEEL-TO-TOE  
STEPS OFF LINE  
USES ARM(S) TO BALANCE  
ACTUAL STEPS TAKEN

#### FIRST NINE STEPS

#### SECOND NINE STEPS


IMPROPER TURN (Describe) \_\_\_\_\_

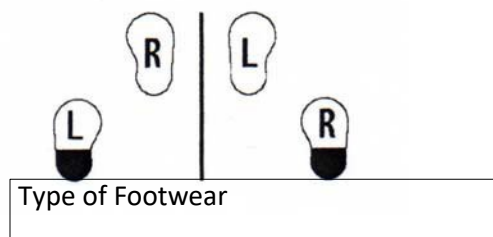
CANNOT COMPLETE TEST (EXPLAIN) \_\_\_\_\_

OTHER: \_\_\_\_\_

### ONE LEG STAND

L	R

Sways while balancing  
Uses arm(s) to balance  
Hopping  
Puts foot down



OTHER: \_\_\_\_\_

### OTHER FIELD SOBRIETY TESTS

NAME OF TEST \_\_\_\_\_

DESCRIBE PERFORMANCE \_\_\_\_\_

NAME OF TEST \_\_\_\_\_

DESCRIBE PERFORMANCE \_\_\_\_\_

NAME OF TEST \_\_\_\_\_

DESCRIBE PERFORMANCE \_\_\_\_\_

PBT (1) (optional) Time: \_\_\_\_\_ Results: \_\_\_\_\_ PBT (2) (optional) Time: \_\_\_\_\_ Results: \_\_\_\_\_

# 5 SFST

---

## Phase One: Vehicle in Motion

### LEARNING OBJECTIVES

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

### CONTENTS

A. Overview: Tasks and Decision.....	4
B. Initial Observations: Visual Cues of Impaired Operations (Automobiles) .....	6
C. Initial Observations: Visual Cues of Impaired Operation (Motorcycles) .....	13
D. Recognition and Description of Initial Cues.....	18
E. Typical Reinforcing Cues of the Stopping Sequence.....	23
F. Recognition and Description of Initial and Reinforcing Cues .....	24

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Video Presentation
- Instructor-Led Demonstrations
- Participants Presentations



***EXPLAIN*** that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***



## Learning Objectives

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



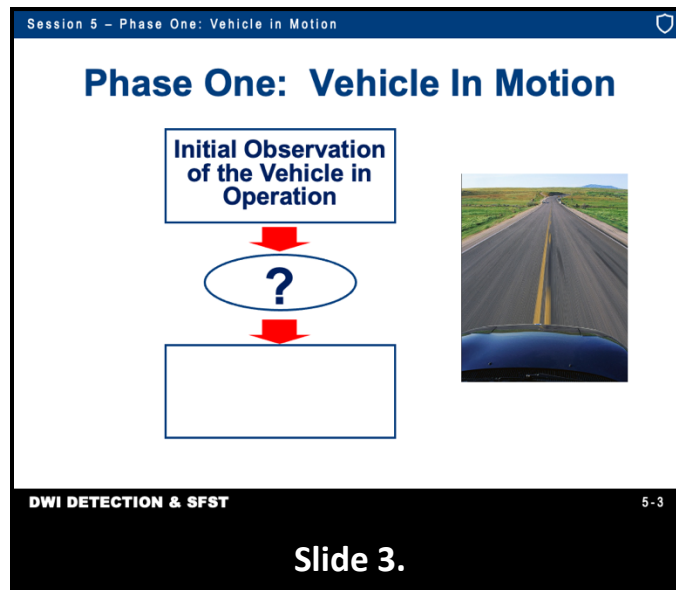
DWI DETECTION &amp; SFST

5-2

**Slide 2.**

***Briefly review the objectives, content, and activities of this session.***

## A. Overview: Tasks and Decision



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



***Point out Block No. 1 on the slide. Pose this question: “What are some of the kinds of things that might first draw your attention to a vehicle?”***

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: (1) Stop the vehicle; (2) Continue to observe the vehicle; (3) Disregard the vehicle.

Session 5 – Phase One: Vehicle in Motion

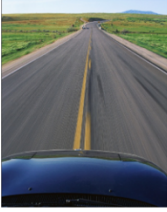
## Phase One: Vehicle In Motion

Initial Observation  
of the Vehicle in  
Operation

Should I  
Stop the  
Vehicle?

?

Observation of  
the Stop



DWI DETECTION & SFST 5-4

**Slide 4.**



***Point out the decision on the slide. Ask class to suggest circumstances under which it would be appropriate to delay the stop decision and to continue to observe the vehicle.***

***Emphasize the officer may not have an explicit reason to suspect impairment at this time.***

Alternatives to stopping the vehicle include delaying the stop/no stop decision in order to continue observing the vehicle and/or disregarding the vehicle.

Whenever there is a valid reason to stop a vehicle, the officer should be alert to the possibility the driver may be impaired by alcohol and/or other drugs. Once the stop command has been communicated to the suspect driver, the officer must closely observe the driver's actions and vehicle maneuvers during the stopping sequence.



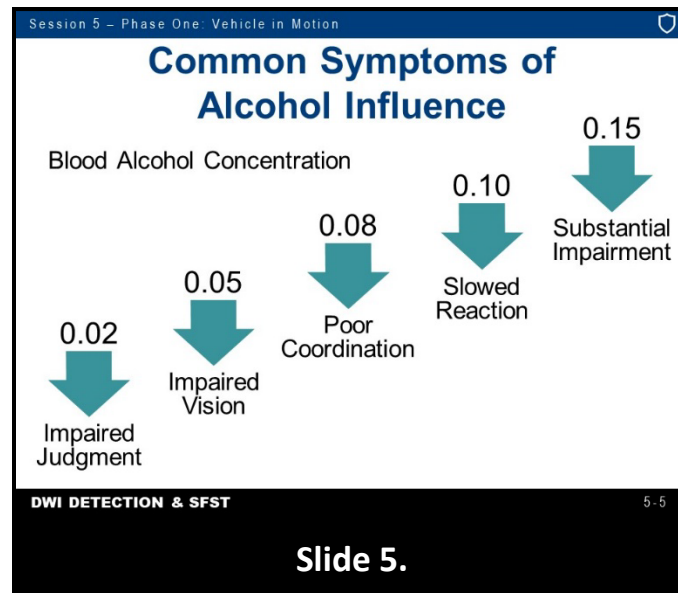
***Point out block No. 2 on the slide.***

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.



***Emphasize officer's need to be alert for own safety.***

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



Blood Alcohol Concentration (BAC) <sup>1</sup>	Typical Effects	Predictable Effects on Driving
.02	<ul style="list-style-type: none"> <li>Some loss of judgment</li> <li>Relaxation</li> <li>Slight body warmth</li> <li>Altered mood</li> </ul>	<ul style="list-style-type: none"> <li>Decline in visual functions (rapid tracking of a moving target)</li> <li>Decline in ability to perform two tasks at the same time (divided attention)</li> </ul>
.05	<ul style="list-style-type: none"> <li>Exaggerated behavior</li> <li>May have loss of small- muscle control (e.g., focusing your eyes)</li> <li>Impaired judgment</li> <li>Usually good feeling</li> <li>Lowered alertness</li> <li>Release of inhibition</li> </ul>	<ul style="list-style-type: none"> <li>Reduced coordination</li> <li>Reduced ability to track moving objects</li> <li>Difficulty steering</li> <li>Reduced response to emergency driving situation</li> </ul>
.08	<ul style="list-style-type: none"> <li>Muscle coordination becomes poor (e.g., balance, speech, vision, reaction time, and hearing)</li> <li>Harder to detect danger</li> <li>Impaired judgment, self-control, reasoning, and memory</li> </ul>	<ul style="list-style-type: none"> <li>Concentration</li> <li>Short term memory loss</li> <li>Speed control</li> <li>Reduced information processing capability (e.g., signal detection, visual search)</li> <li>Impaired perception</li> </ul>
.10	<ul style="list-style-type: none"> <li>Clear deterioration of reaction time and control</li> <li>Slurred speech, poor coordination, and slowed thinking</li> </ul>	<ul style="list-style-type: none"> <li>Reduced ability to maintain lane position and brake appropriately</li> </ul>
.15	<ul style="list-style-type: none"> <li>Far less muscle control than normal</li> <li>Vomiting may occur (unless this level is reached slowly or a person has developed a high tolerance for alcohol)</li> <li>Significant loss of balance</li> </ul>	<ul style="list-style-type: none"> <li>Substantial impairment in vehicle control, attention to driving task, and in necessary visual and auditory information processing</li> </ul>

<sup>1</sup>Information in this table shows the BAC level at which the effect usually is first observed, and has been gathered from a variety of sources including the National Highway Traffic Safety Administration, the National Institute on Alcohol Abuse and Alcoholism, the American Medical Association, and [www.webMD.com](http://www.webMD.com).



Drivers who are impaired frequently exhibit certain effects or symptoms of impairment. These include slowed reactions, impaired judgment as evidenced by a willingness to take risks, impaired vision, and poor coordination.



***Use the following types of questions to involve the participants in a discussion of driving violations/characteristics associated with alcohol influence (all vehicles):***

- ***What violations may result from impaired judgment? (i.e., divided attention, relaxation, loss of judgment)***
- ***What violations might result from impaired vision? (i.e., focusing your eyes, difficulty steering, lowered alertness)***
- ***What violations might result from poor coordination? (i.e., poor balance, speed control, impaired perception)***
- ***What violations might result from slowed reaction? (i.e., inability to maintain lane position, slowed thinking)***

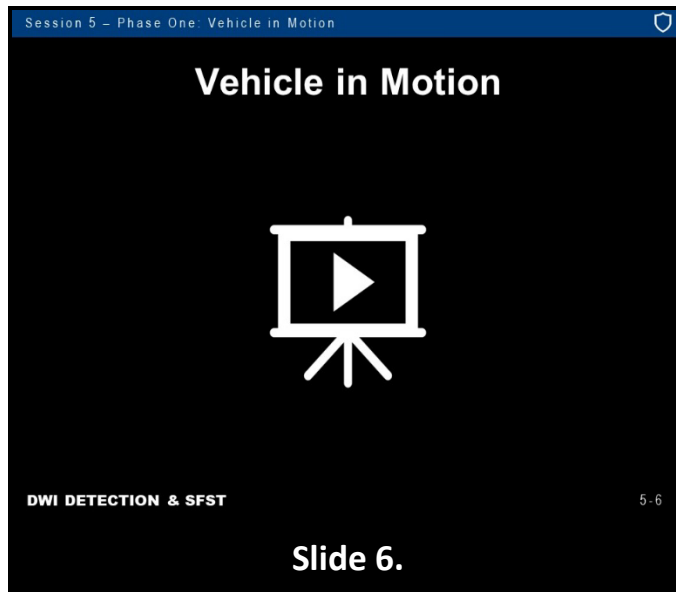
Below presents common symptoms of alcohol influence. This unit focuses on alcohol impairment because research currently provides more information about the effects of alcohol on driving than it does about the effects of other drugs on driving. Remember whether the driver is impaired by alcohol and/or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



***The Drug Evaluation Classification (DEC) Program and the Advanced Roadside Impaired Driving Enforcement (ARIDE) course have increased awareness of the DWI drug problem.***



***The following video segments were produced to show a variety of traffic stop situations being performed by different law enforcement agencies. The goal of these segments is to depict the cues associated with impaired driving. Participants should be guided by their own agency's policy regarding traffic stops, officer safety tactics, and professional conduct.***



***Show the video first. Use slide for review. Allow 12 minutes.***



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

The Visual Detection of DWI Motorists is located in the Participant Manual.



***Source:***

Stuster, J. (1997). *The Detection of DWI at BACs Below 0.10*. (Final Rep. DOT-HS-808-654). Santa Barbara, CA: Anacapa Sciences, Inc.

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




***The cues presented in these categories predict a driver is DWI at least 35% 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.

Session 5 – Phase One: Vehicle in Motion

## Most Common and Reliable Initial Indicators of DWI

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



DWI DETECTION & SFST 5-7


**Slide 7.**

The driving behaviors are presented in four categories: (1) Problems in maintaining proper lane position; (2) Speed and braking problems; (3) Vigilance problems; and, (4) Judgment problems.

Session 5 – Phase One: Vehicle in Motion

## Problems Maintaining Proper Lane Position

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



DWI DETECTION & SFST 5-8

**Slide 8.**



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


There is a brochure published by NHTSA that contains these cues. The title is “The Visual Detection of DWI Motorists” DOT HS 808 677. See Attachment at the end of this session. The first category is Problems in maintaining proper lane position. [p=.50-.75]

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

Session 5 – Phase One: Vehicle in Motion

## Speed and Braking Problems

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



DWI DETECTION & SFST 5-9

**Slide 9.**


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
-

Session 5 – Phase One: Vehicle in Motion

## Vigilance Problems

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



DWI DETECTION & SFST 5-10

**Slide 10.**


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
-

Session 5 – Phase One: Vehicle in Motion

## Judgment Problems

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



DWI DETECTION & SFST 5-11

**Slide 11.**

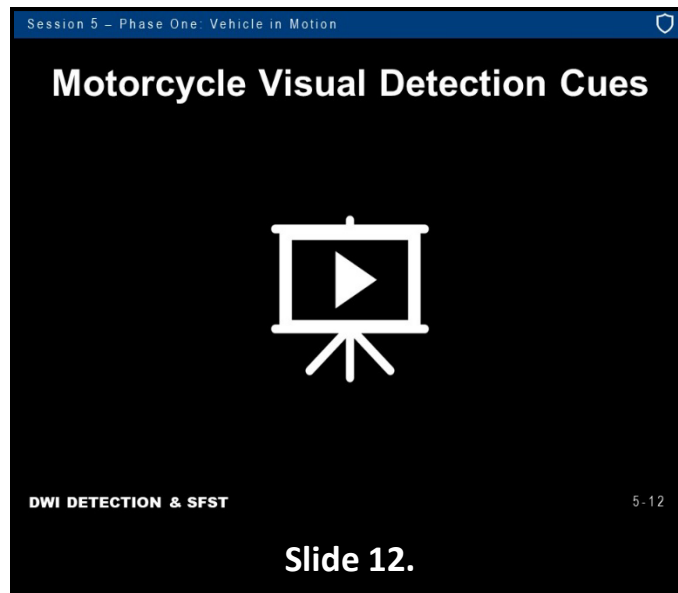
Judgment problems. [P=.35-.90]

- 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



***Ask if there are any questions about the 24 detection cues.***

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



**Show video. Allow 14 minutes.**



NHTSA estimated in 2020, 27 percent of all motorcycle riders killed were involved in alcohol-impaired crashes.



#### **Sources:**

National Center for Statistics and Analysis. (2016, June). *Motorcycles: 2020 Data*. (Traffic Safety Facts. Report No. DOT HS 813 294). Washington D.C.: National Highway Traffic Safety Administration.

Stuster, J. (1993). *The Detection of DWI Motorcyclists*. (Final Rep. DOT-HS-807-839). Santa Barbara, CA: Anacapa Sciences, Inc.

***For purposes of this study, motorcycles are defined as two- or three-wheeled motorcycles, off-road motorcycles, mopeds, scooters, minibikes, and pocket bikes. The motorcycle rider is the person operating the motorcycle; the passenger is a person seated on, but not operating, the motorcycle; the motorcyclist is a general term referring to either the rider or passenger.***

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 and Good Predictors.


---

Session 5 – Phase One: Vehicle in Motion

## Motorcycle DUI Detection Guide

### Excellent Cues (50% or Greater Probability)

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



DWI DETECTION & SFST5-13

Slide 13.

Research has identified driving impairment cues for motorcyclists.

The Detection of DWI Motorcyclists is located in the Participant Manual.



**Source:**

(2013, March). *The Detection of DWI Motorcyclists*. (Publication: DOT HS 807 856). Washington, D.C.: National Highway Traffic Safety Administration.

Excellent cues (50% or greater probability).

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





## Motorcycle DUI Detection Guide

### Good cues (30 to 50% probability)

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



DWI DETECTION &amp; SFST

5-14


**Slide 14.**

#### 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

Session 5 – Phase One: Vehicle in Motion

## Elements of the Driving Task



DWI DETECTION & SFST 5-15

**Slide 15.**



***Point out it is important to understand how the effects of alcohol are exhibited in driving so officers can recognize the significance of their visual observations.***

Driving is a complex task, composed of many parts.




***Ask participants to name the various parts of the driving task. List them on the easel/easel pad as they are named.***

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

Session 5 – Phase One: Vehicle in Motion

## Safe Driving Demands



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

DWI DETECTION & SFST 5-16

**Slide 16.**

In order to drive safely, a driver must be able to divide attention among all of these various activities. Under the influence of alcohol or many drugs, a person's ability to divide attention becomes impaired. The impaired driver tends to concentrate on certain parts of driving and to disregard other parts.



***This picture shows a driver running a red light. Another Example: Person stops at a green light (scene from previous video).***

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

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



***Point out the concept of divided attention is especially important during personal contact with DWI subjects and during pre-arrest screening of them.***

## D. Recognition and Description of Initial Cues

Session 5 – Phase One: Vehicle in Motion

### Vehicle In Motion Initial Cues

**What do you see?**

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

DWI DETECTION & SFST 5-17

**Slide 17.**

What do you see?



***Solicit responses to below questions from participants.***

Moving violation

- Equipment violation
  - Other violation
  - Unusual operation
  - Anything else (suspicious location, motorists assist)
-

Session 5 – Phase One: Vehicle in Motion

## Phase One: Task One

### Initial Observation of Vehicle Operation

**Requires the ability to:**

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

DWI DETECTION & SFST 5-18

**Slide 18.**

The task of making initial observations of vehicle operation is the first step in the job of DWI detection. Proper performance of that task demands two distinct but related abilities: Ability to recognize evidence of alcohol and/or other drug influence and Ability to describe that evidence clearly and convincingly.

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



***Emphasize observational evidence is of little value if the officer cannot make the judge or jury “see” what the officer saw.***

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



## Procedures for Practicing Cue Recognition and Description

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

DWI DETECTION &amp; SFST

5-19

### Slide 19.



***All participants view brief video segments illustrating possible DWI violations. Make sure all participants understand the procedures that will be followed during the practice sessions. Following the video segment, a few minutes will be given to allow all participants to write notes on what was observed.***

***Hand out copies of the standard note taking guide.***

***One or more participants will be called forth to "testify" concerning what was observed. Emphasize participants are to use the guide to compile notes on their observations of the video segments.***

***Class will critique the "testimony" in terms of how clearly and convincingly it conveys what was actually observed. Emphasize the purpose of the critique is not to embarrass anyone, but rather to help everyone become more skilled at providing clear, descriptive testimony. Goal is to choose words carefully and provide as much detail as necessary and to construct an accurate mental image of the observations.***



Instructor  
Note



Video



Activity

**Show Video Segment "Leaving the Shopping Center" (Video approximately 54 seconds). Allow two minutes for participants to compile notes.**

**Testimony of Video Segment "Leaving the Shopping Center".**

**Select a representative participant to come forward and "take the witness stand" facing the class. Key points to be elicited:**

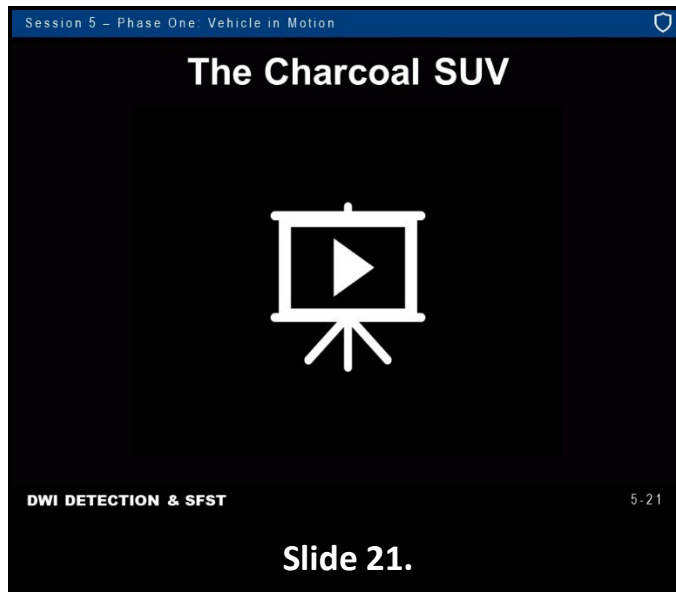
- **Weather/Traffic conditions**
- **Drives up over raised island**
- **Makes wide right turn**
- **Causes bicyclist to swerve**

**Elicit testimony as follows: "Officer, you have been sworn. Please tell the court exactly what you observed at the time and place in question."**

**Allow the participants to refer to their notes, if so desired. When participant completes testimony ask: "Officer, do you have anything else to add?"**

**Once participant indicates there is nothing further to add, ask the class to comment on the clarity and completeness of the testimony and to add any important details left out. Continue to prompt the class to offer comments until all of the key points have been noted.**

**If so desired and appropriate, repeat the showing of Video Segment No. 1 to point out the key details.**



Instructor  
Note



Video



Activity

**Show Video Segment “The Charcoal SUV” (Video approximately 1 minute). Allow two minutes for participants to compile notes.**

**Testimony on Video Segment “The Charcoal SUV”.**

**Select a representative participant to come forward to “testify.” Allow participant to refer to notes. Probe for any additional details or more descriptive language in the testimony. Solicit comments from the class. Key points to be elicited:**

- **Weather/Traffic conditions**
- **Wrong directional light on**
- **Sits on green arrow**
- **Turns on red light**
- **Drifts first to left then right**

**Stress the importance of the particular words used to describe the subject vehicle's motion. Point out words such as “swerving” and “drifting,” etc., convey a powerful and clear mental image of how the vehicle moved, while terms such as “erratic” and “abnormal,” etc., are essentially non-descriptive. Point out it is permissible and desirable for the officer to use hand movements, along with verbal testimony, to convey clearly how the vehicle moved.**

**If desired and appropriate, repeat the showing of Video Segment “The Charcoal SUV”.**




## E. Typical Reinforcing Cues of the Stopping Sequence

Session 5 – Phase One: Vehicle in Motion

### Vehicle in Motion: Stopping Sequence

What do you see?

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



DWI DETECTION & SFST 5-22

**Slide 22.**

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



***Ask participants to suggest possible cues that might be observed after the stop command that might reinforce the initial suspicion of DWI.***

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



***Point out the concept of divided attention is especially important during personal contact with DWI subjects and during pre-arrest screening of them.***

***Point out here the dangers inherent with fleeing operators. If time allows, review agency's pursuit policy.***

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

Signal to stop requires the driver to turn the steering wheel, operate the brake pedal, activate the signal light, etc. As soon as an officer gives the stop command, the subject's driving task becomes more complex. If subject is under the influence, the subject may not be able to handle this more complex driving very well.



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

Session 5 – Phase One: Vehicle in Motion

## Phase One: Task Two Observation of the Stop

Requires the ability to:

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

DWI DETECTION & SFST 5-23

**Slide 23.**

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

---

### F. Recognition and Description of Initial and Reinforcing Cues



***The next two video segments combine both tasks and the decision of DWI Detection Phase One.***

- ***Each segment begins with the initial observation of the vehicle in operation***
- ***In each segment, the decision to stop the vehicle is made***
- ***Each segment concludes with the observation of the stop***

***Standard note taking guide to be used to compile notes.***

***Following each segment, a few minutes will be given to allow participants to gather thoughts and compile notes.***

***Participants will be called upon to "testify" concerning what was observed, both prior to and after the stop command.***

***Class will constructively critique the "testimony." Make sure all participants understand the procedures.***



**Instructor  
Note**



**Video**



**Activity**

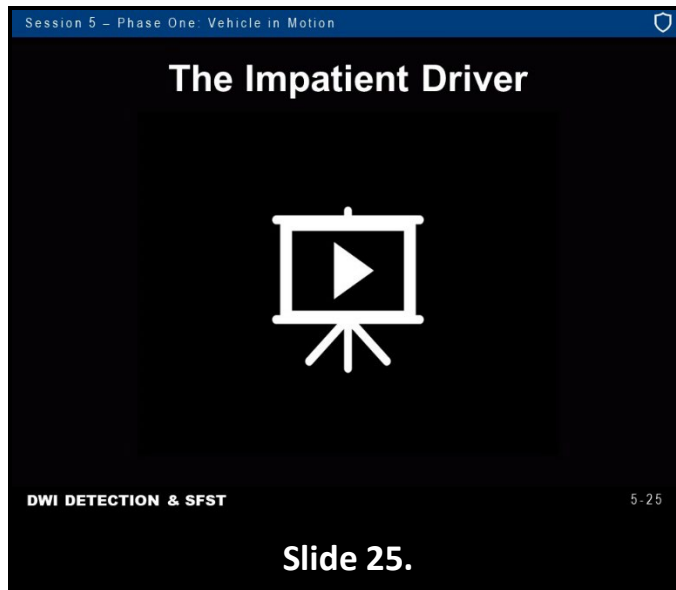
**Show Video Segment "The Sliding Sports Car" (Approximately one minute).  
Allow two - three minutes for the participants to compile notes.**

**Testimony on Video Segment "The Sliding Sports Car"**

**Select a representative participant to come forward to "testify." Instruct participants as follows: "Officer, first tell us exactly why you signaled the driver to stop." Make sure participant confines this stage of testimony strictly to what was observed prior to the stop command. Next, instruct as follows: "Officer, now tell us exactly what you observed after you turned on the patrol vehicle's emergency lights." Key points to be elicited concerning observations prior to the stop command (allow participants to refer to notes):**

- **Weather/traffic conditions**
- **Sports car slides through the stop sign**
- **Crosses over the fog line into the bicycle lane**
- **Weaves back across right lane and enters middle lane**
- **Slow response to stop signal**
- **Stops inappropriately (right tires drive on curb)**

**Solicit class comments concerning details or possible improvements to the participant's testimony. If desired and appropriate, repeat the showing of Video segment "The Sliding Sports Car."**



**Instructor  
Note**



**Video**



**Activity**

**Show Video Segment "The Impatient Driver" (Approximately one minute, 20 seconds). Allow two - three minutes for the participants to compile notes.**

**Testimony on Video Segment "The Impatient Driver"**

**Select a representative participant to come forward to "testify". Key points to be elicited:**

- **Weather/traffic conditions**
- **Honks at other drivers**
- **Passes on the left out of the driveway**
- **Violates the "No Left Turn" restriction**
- **Drives over the concrete island with left tires**

**Key points to be elicited concerning observations prior to the stop command (allow participant to refer to notes):**

- **Drifts into left lane and swerves back to right**
- **Slow response to stop command**
- **Drifts again into left lane and swerves back to right second time**
- **Stops with right front tire on curb**

**Instruct participant to testify first concerning everything observed prior to the stop command, and then to everything observed after the stop command.**



Instructor  
Note



Video



Activity

***Show Video Segment "Half in The Bag" (Approximately one minute). Allow two - three minutes for the participants to compile notes.***

***Testimony on Video Segment "Half in the Bag"***

***Select a representative participant to come forward to "testify". Key points to be elicited concerning observations prior to the stop command (allow participant to refer to notes):***

- ***Weather/Traffic conditions***
- ***Fail to stop for stop sign***
- ***Right turn from left turn lane***
- ***Wide right turn***
- ***Driver throws trash at road sign***
- ***Crosses lane line***

***Instruct participant to testify first concerning everything observed prior to the stop command and then to everything observed after the stop command. Key points to be elicited concerning observations subsequent to stop command:***

- ***Slow response to the stop command***
- ***Drives onto the curb two times prior to stopping***

Session 5 – Phase One: Vehicle in Motion

Questions?

DWI DETECTION & SFST5-27

Slide 27.

Session 5 – Phase One: Vehicle in Motion

## Test Your Knowledge

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

DWI DETECTION & SFST 5-28

**Slide 28.**

### Test Your Knowledge

1. The Phase One tasks are \_\_\_\_\_
2. Two common symptoms of impairment are: \_\_\_\_\_



- 1. Observation of the vehicle and to observe the manner in which the driver responds to your signal to stop**
- 2. Slowed reactions, impaired judgment, impaired vision, poor coordination**

Session 5 – Phase One: Vehicle in Motion

## Test Your Knowledge

3. Alcohol impairs the ability to \_\_\_\_\_ among tasks

4. Three clues reinforcing the suspicion of DWI which may be observed during the stopping sequence are:

- A. \_\_\_\_\_
- B. \_\_\_\_\_
- C. \_\_\_\_\_

DWI DETECTION & SFST 5-29

**Slide 29.**

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



**3. Divide attention**

**4. Attempt to flee, no response, slow response, an abrupt swerve, sudden stop, striking the curb or another object**



# The Visual Detection of DWI Motorists



# **The Visual Detection of DWI Motorists**



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



DOT HS 808 677

## INTRODUCTION

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

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

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

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

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

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

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

This booklet contains:

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

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

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

---

## DWI DETECTION GUIDE

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

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

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

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

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

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

### Vigilance Problems $p = .55-.65$

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

### Judgment Problems $p = .35-.90$

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

---

### Post Stop Cues $p \geq .85$

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

---

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

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

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

---

## PROBLEMS IN MAINTAINING PROPER LANE POSITION

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



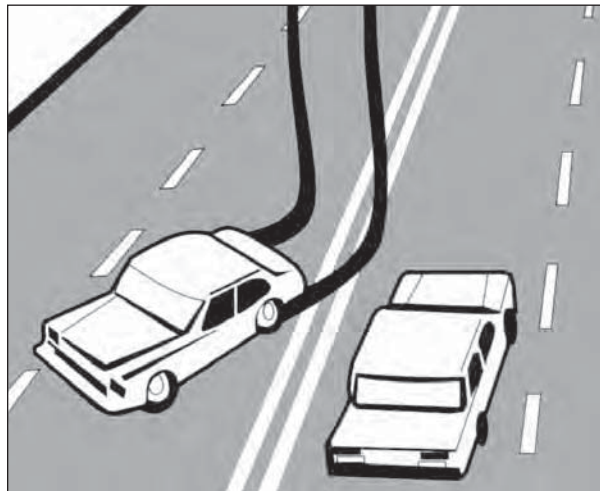
**Weaving**

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



Drifting

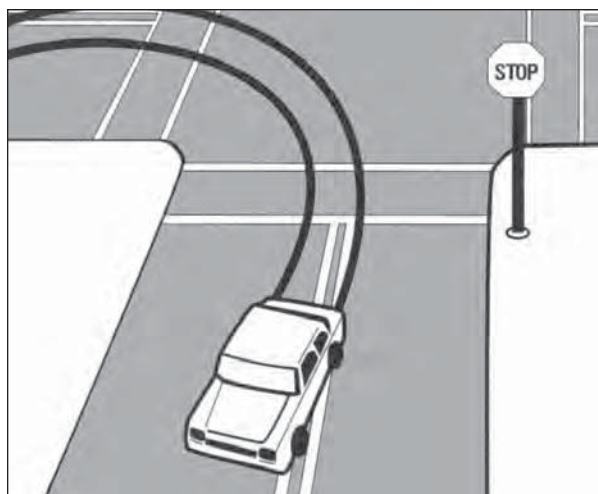
Course corrections can be gradual or abrupt. For example, you might observe a vehicle to **swerve**, making an abrupt turn away from a generally straight course, when a driver realizes that he or she has drifted out of proper lane position or to avoid a previously unnoticed hazard.



Swerving

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

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



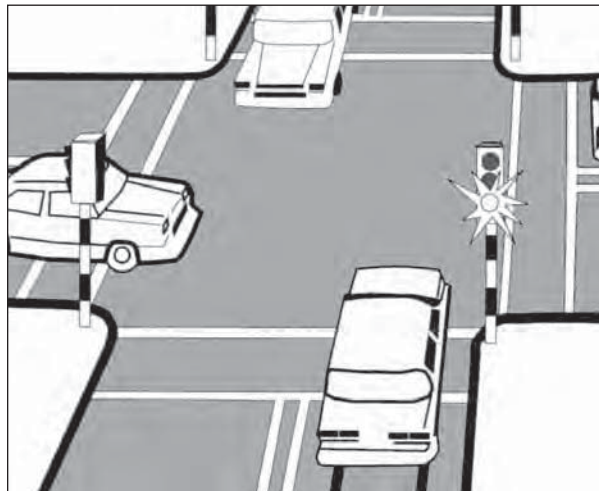
**Turning With a Wide Radius**



## SPEED AND BRAKING PROBLEMS

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

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



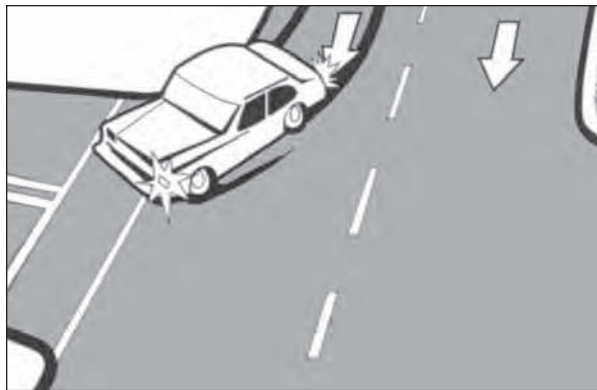
**Stopping Beyond a Limit Line**

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

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

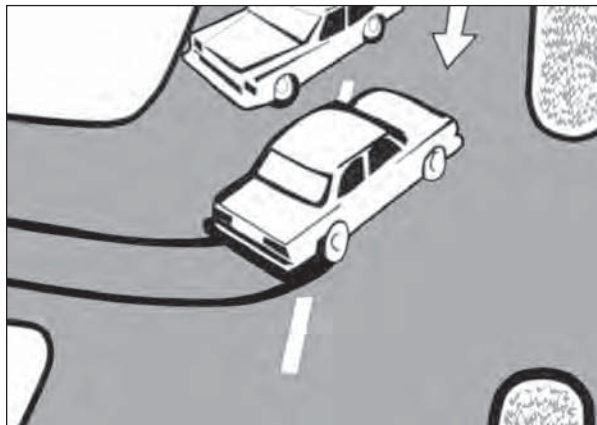
## VIGILANCE PROBLEMS

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



**Signaling Inconsistent With Driving Actions**

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



**Driving Into Opposing or Crossing Traffic**

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

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

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

## JUDGMENT PROBLEMS

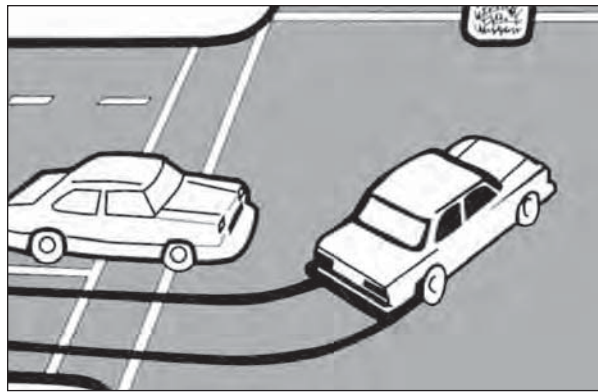
Operating a motor vehicle requires continuous decision making by the driver. Unfortunately, judgment abilities can be affected by even small amounts of alcohol. For example, alcohol-impaired judgment can cause a driver to follow another vehicle too closely, providing an unsafe stopping distance.

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

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

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

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

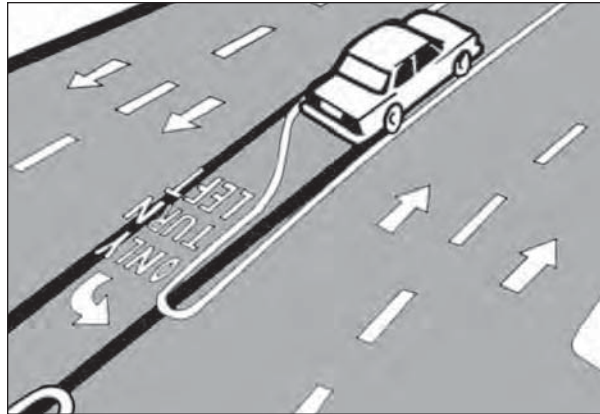


Turning Illegally

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

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

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



**Driving on Other Than the Designated Roadway**

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



**Appearing To Be Impaired**

## SUMMARY

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

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

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

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

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

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

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

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

## POST-STOP CUES

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

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

DOT HS 808 677  
March 2010



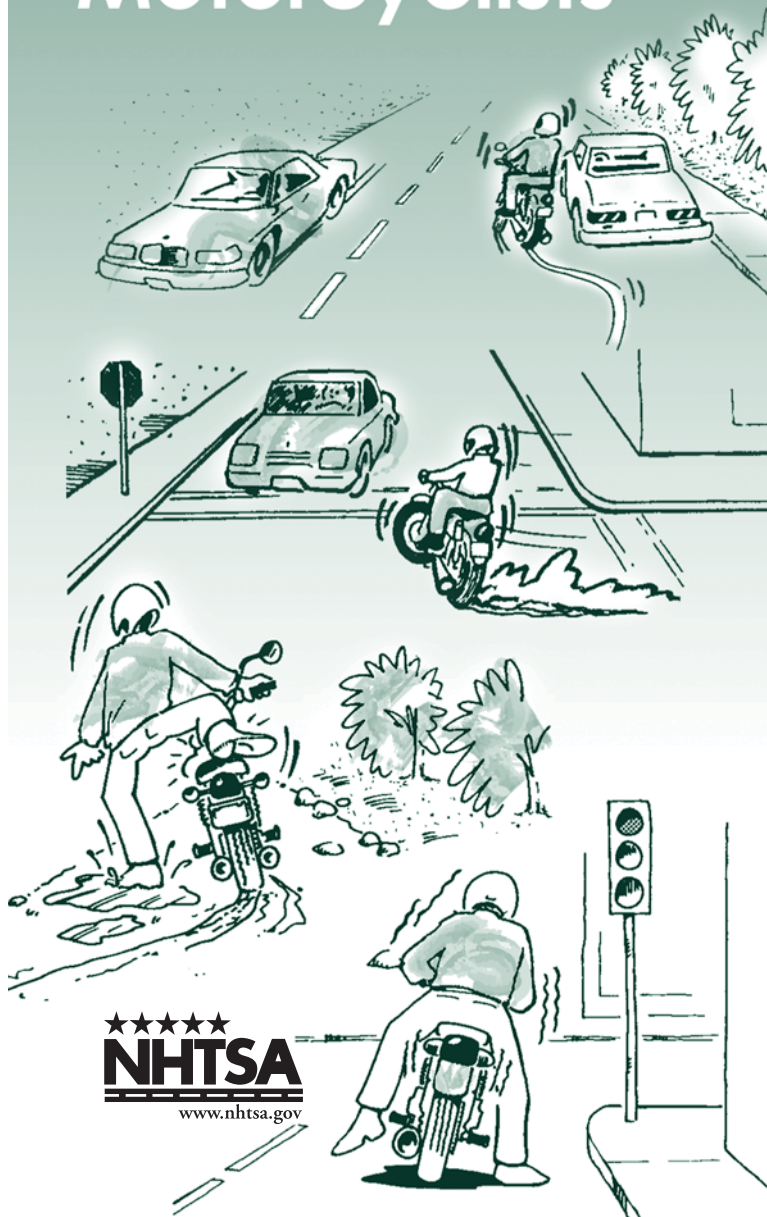
U.S. Department of Transportation  
**National Highway Traffic Safety  
Administration**





National Highway Traffic Safety Administration

# The Detection of DWI Motorcyclists



★★★★★  
**NHTSA**  
[www.nhtsa.gov](http://www.nhtsa.gov)

## Motorcycle DWI Detection Guide

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

### Excellent Cues (50% or greater probability)

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

### Good Cues (30 to 50% probability)

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

## The Detection of DWI Motorcyclists

---

### Introduction

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

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

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

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

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

---

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

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

---

## Important Information

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

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

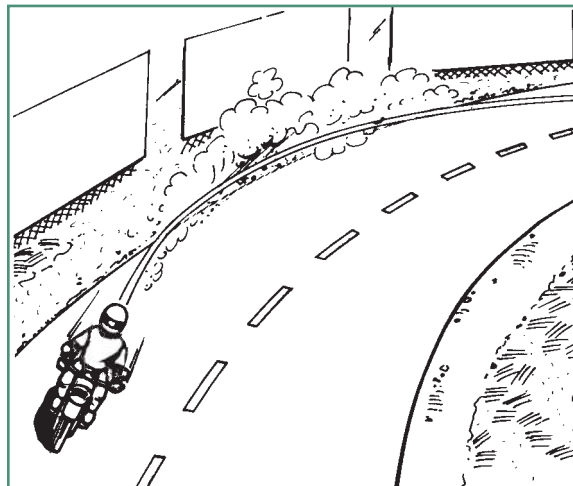
This research will be helpful to officers in:

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

---

## Drifting During Turn or Curve

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



## Trouble With Dismount

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

---

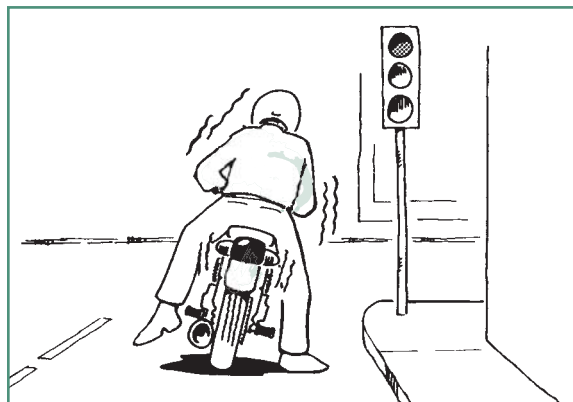
operator must decide upon a safe place to stop the bike. Problems with any step in this sequence can be evidence of alcohol impairment.



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

### Trouble With Balance at Stop

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

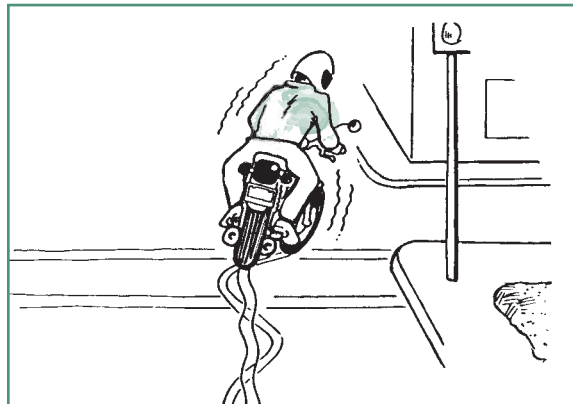


---

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

## Turning Problems

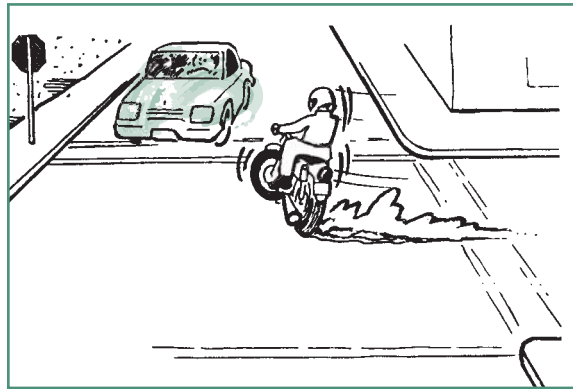
The research also identified four turning problems that indicate rider impairment:



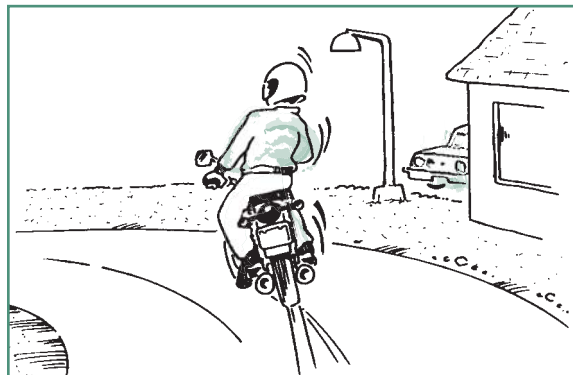
- **Unsteady During Turn or Curve.** The gyroscopic effects of a motorcycle's wheels tend to keep a motorcycle "on track" as long as speed is maintained. As a motorcycle's speed decreases, the demands placed on the operator's balancing capabilities increases. As a result, an officer might observe a motorcycle's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



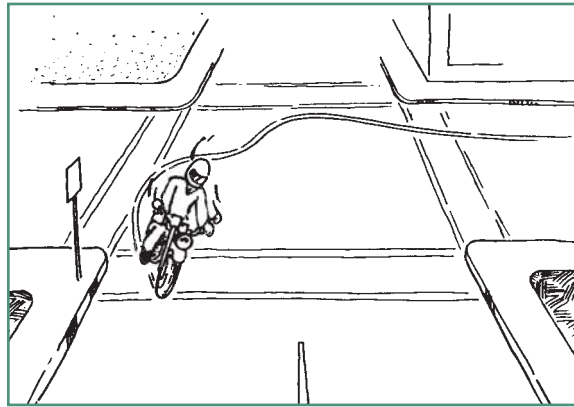
- 
- **Late Braking During Turn.** The next turning problem is “late braking during a turn or on a curve.” A motorcyclist normally brakes prior to entering a turn or curve, so the motorcycle can accelerate through the maneuver for maximum control. An impaired motorcyclist might misjudge the speed or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



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

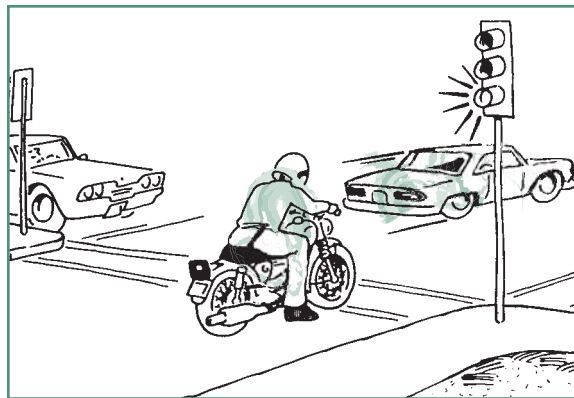


- 
- **Erratic Movements During Turn.** The fourth turning problem is “erratic movements.” These are defined as an inconsistent action or a sudden correction of a motorcycle maneuver during a turn or curve that can also indicate impaired driving. If you observe a motorcyclist who is unsteady during a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



## Inattentive to Surroundings

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



---

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

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

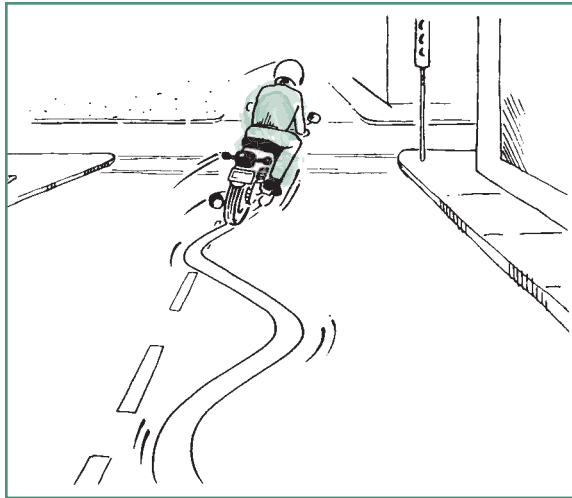
If you observe a motorcyclist to be inattentive to the surroundings, there is a better than average chance that the motorcyclist is a DWI violator.

## Inappropriate or Unusual Behavior

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

## Weaving

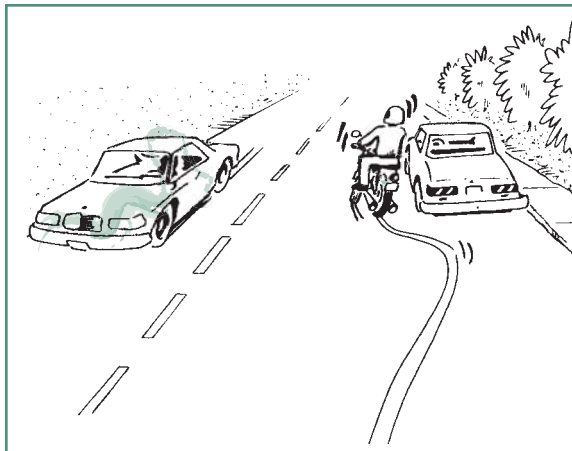
You are probably familiar with weaving as a predictor of DWI. If you see an automobile weaving there is a better than average chance the driver has exceeded the legal alcohol limits, but if you observe a motorcycle to be weaving, the probability of DWI is



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

### Erratic Movements While Going Straight

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

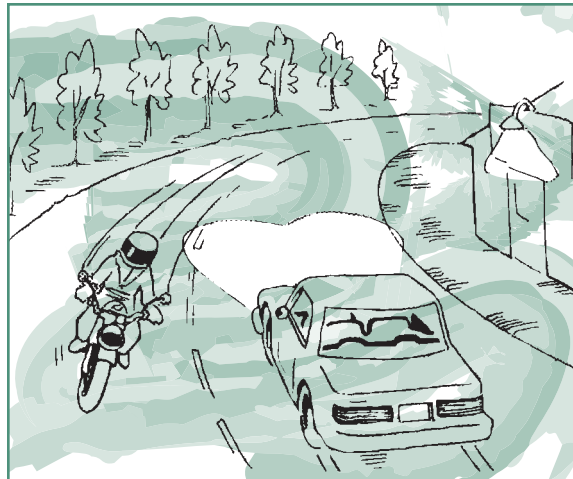


---

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

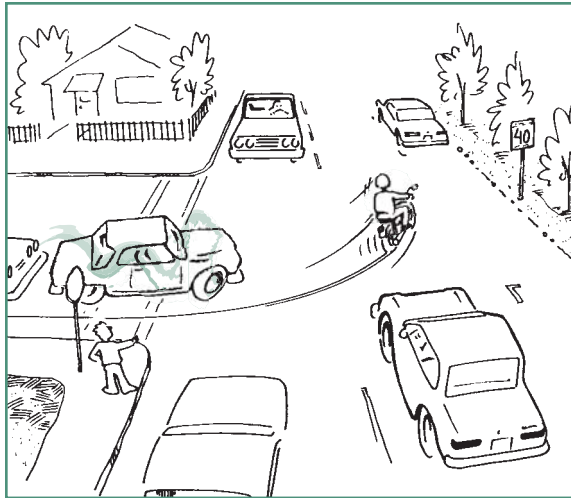
### Operating without Lights at Night

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



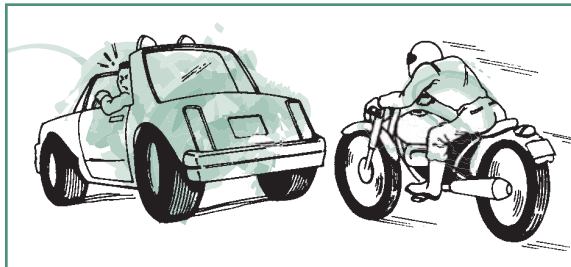
### Recklessness

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



### Following Too Closely

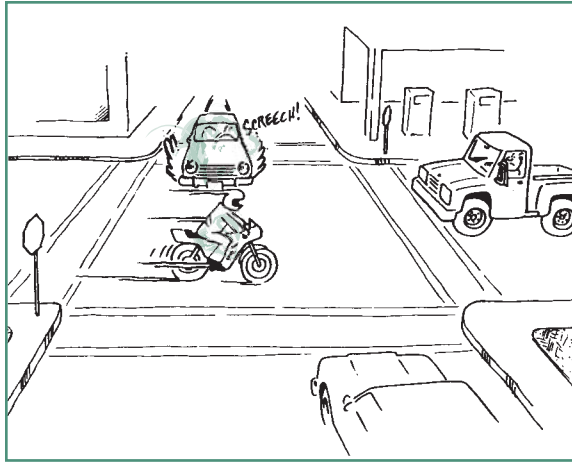
Following too closely, which is an unsafe following distance, is another indication of impaired operator judgment. During the study, this cue was found to be a good predictor of DWI by motorcycle riders.



---

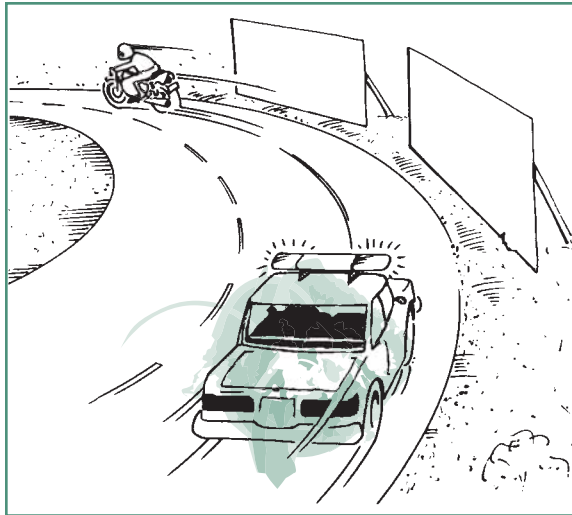
## Running Stop Light or Sign

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



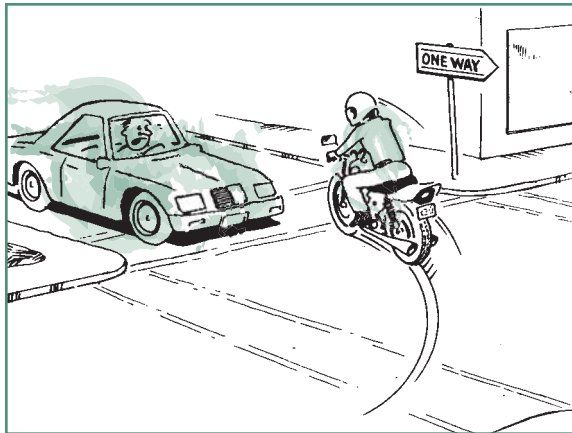
## Evasion

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



### Wrong Way

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





---

## Motorcycle DWI Detection Guide

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

### Excellent Cues (50% or greater probability)

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

### Good Cues (30 to 50% probability)

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

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

DOT HS 807 856  
revised March 2013



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



9396a-102914-v3

# 6 SFST

---

## Phase Two: Personal Contact

### LEARNING OBJECTIVES

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

### CONTENTS

A. Overview: Tasks and Decision.....	4
B. Typical Investigation Clues of the Driver Interview .....	6
C. Recognition and Description of Investigation Clues .....	11
D. Interview/Questioning Techniques .....	14
E. Recognition and Description of Clues Associated with the Exit Sequence .....	20

### LEARNING ACTIVITIES

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



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***



## Learning Objectives

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



DWI DETECTION & SFST

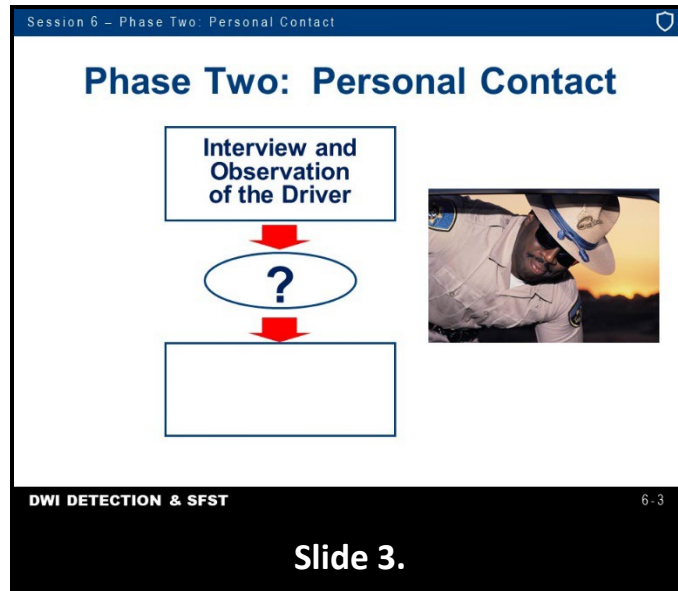
6-2

Slide 2.



*Briefly review the objectives, content, and activities of this session.*

## A. Overview: Tasks and Decision



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

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

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



***Point out block No. 1 on the slide.***

Session 6 – Phase Two: Personal Contact

## Phase Two: Personal Contact

Interview and  
Observation  
of the Driver


↓

Should  
Driver  
Exit?

?

↓

Observation of  
the Exit



DWI DETECTION & SFST 6-4

**Slide 4.**

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



***Ask participants to suggest situations where this might be the case.***

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 indicators the driver may be impaired.

**Decision:** Based upon your face-to-face interview and observation of the driver, and upon your previous observations of the vehicle in motion and the stopping sequence, you must decide whether there is sufficient reason to instruct the driver to step from the vehicle. For some law enforcement officers, this decision is automatic since their agency's policy dictates the driver always be told to exit the vehicle, regardless of the cause for the stop.

Other agencies, however, treat this as a discretionary decision to be based on what the officer sees, hears, and smells during observation and interview with the driver while the driver is seated in the vehicle. If you decide to instruct the driver to exit, closely observe the driver's actions during the exit from the vehicle and note any evidence of impairment.



***Ask participants to suggest circumstances under which it would be appropriate not to instruct the driver to exit. Ask participants to suggest circumstances under which it would be appropriate to instruct the driver to exit.***

***Remind participants that they must always practice appropriate officer safety tactics while the driver exits the vehicle.***

## B. Typical Investigation Clues of the Driver Interview



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

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



***Write “see – hear – smell” on dry erase board.***

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:





***Ask participants to suggest typical things an officer might see during the interview that would be describable clues or evidence of alcohol and/or other drug influence.***

***What do you see?***

- ***Bloodshot eyes***
- ***Soiled clothing***
- ***Fumbling fingers***
- ***Alcohol containers***
- ***Drugs or drug paraphernalia***
- ***Bruises, bumps or scratches***
- ***Unusual actions***

***After most major sight clues have been suggested display the next slide.***

Session 6 – Phase Two: Personal Contact

### What Do You See?

- Bloodshot eyes
- Soiled clothing
- Fumbling fingers
- Alcohol containers
- Drug and drug paraphernalia
- Bruises, bumps, scratches
- Unusual actions

DWI DETECTION & SFST6-6


Slide 6.

- Bloodshot eyes
- Soiled clothing
- Fumbling fingers
- Alcohol containers
- Drugs or drug paraphernalia
- Bruises, bumps or scratches
- Unusual actions

Session 6 – Phase Two: Personal Contact

## Personal Contact

What do you hear?



DWI DETECTION & SFST 6-7

**Slide 7.**

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:



***Ask participants to suggest typical things an officer might hear during the interview that would be describable clues or evidence of alcohol and/or other drug influence. After most major sound clues have been suggested display the next slide.***

***What do you hear?***

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

Session 6 – Phase Two: Personal Contact

## What Do You Hear?

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

DWI DETECTION & SFST 6-8


**Slide 8.**

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

Session 6 – Phase Two: Personal Contact

## Personal Contact

What do you smell?



DWI DETECTION & SFST 6-9

**Slide 9.**

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:



***Ask participants to suggest typical things an officer might smell during the interview that would be describable clues or evidence of alcohol or drug ingestion.***

***For officer safety be aware of communicable airborne diseases, etc.***

***After most major odor clues have been suggested, display the next slide.***

***What do you smell?***

- ***Alcoholic beverages***
- ***Marijuana***
- ***Cover up odors***
- ***Other unusual odors***

Session 6 – Phase Two: Personal Contact

## What Do You Smell?

- Alcoholic beverage
- Marijuana
- “Cover-up” odors
- Other unusual odors

DWI DETECTION & SFST6-10

Slide 10.

- Alcoholic beverages
- Marijuana
- Cover up odors
- Other unusual odors

Session 6 – Phase Two: Personal Contact

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

**Requires the ability to:**

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

DWI DETECTION & SFST 6-11

**Slide 11.**

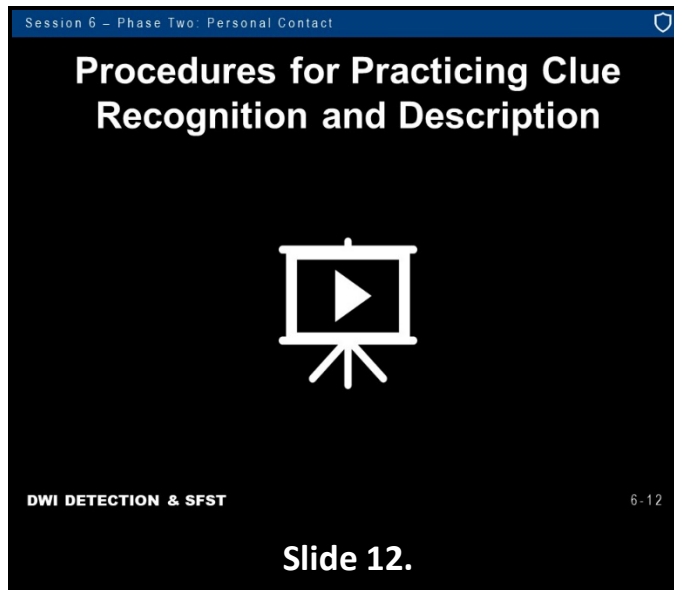
Proper face-to-face observation and interview of the driver demands two distinct but related abilities; The ability to recognize the sensory evidence of alcohol and/or other drug influence; and the ability to describe that evidence clearly and convincingly. Developing these abilities requires practice.

---

### C. Recognition and Description of Investigation Clues

A basic purpose of the face-to-face observation and interview of the driver is to identify and gather evidence of alcohol and/or other drug influence. This is the purpose of each task in each phase of DWI detection. During the face-to-face observation and interview stage, it is not necessary to gather sufficient evidence to arrest the driver immediately for DWI.

---



***One or more participants will be called upon to “testify” concerning what was seen and heard. Class will constructively critique the testimony. Make sure all participants understand the procedures. The next video segment deals strictly with the face-to-face observation and interview of a driver.***

You will have to base your description of the driver’s possible impairment strictly on what you see and hear during the face-to-face contact. Both senses provide some critically important evidence, not only in this video segment but in all face-to-face contacts.



***Participants can use the standard note taking guide to compile notes during the video. When the video segment ends, participants will be given a few minutes to gather their thoughts and compile notes on what they have seen and heard.***



***Show video segment “The Busy Businessman” (approximately one minute, 10 seconds).***

Session 6 – Phase Two: Personal Contact

## Testimony on *The Busy Businessman*

What was seen?

What was heard?

DWI DETECTION & SFST 6-13

**Slide 13.**



***Select two participants to come forward together to testify. Key points to be elicited concerning what was seen:***

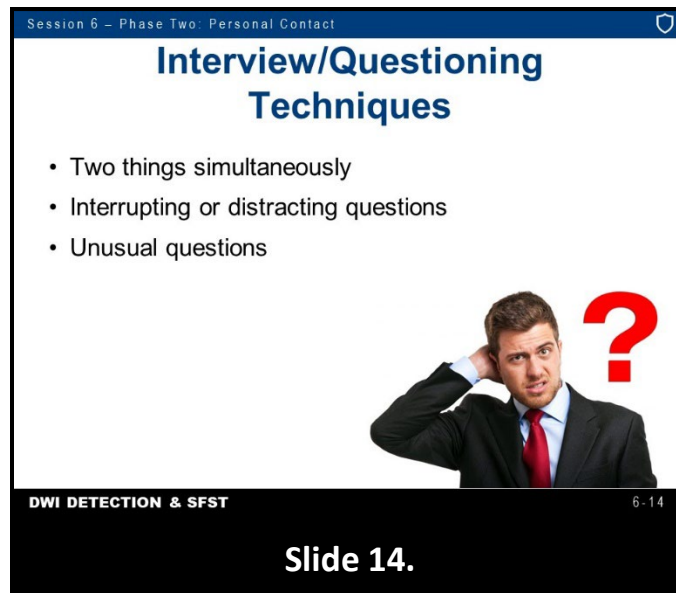
- ***Weather/Traffic conditions***
- ***Driver produces wrong document***

***Instruct participants to testify strictly to what was seen. Solicit class comments concerning details or possible improvements to the first participant's testimony. Key points to be elicited concerning what was heard:***

- ***Driver does not lower window all the way***
- ***Hair is disheveled***
- ***Hands wrong document initially***
- ***Fails to let go of driver license***
- ***Forgets registration, has to be reminded***

***Instruct the second participant to testify strictly to what was heard. Solicit class comments concerning details or possible improvements to the second participant's testimony. Replay video (as appropriate) to compare with second participant's testimony.***

## D. Interview/Questioning Techniques



There are a number of techniques you can use to assess impairment while the driver is still behind the wheel. Most of these techniques apply the concept of divided attention. They require the driver to concentrate on two or more things at the same time. They include both questioning techniques and psychophysical (mind/body) tasks. These techniques are not as reliable as the Standardized Field Sobriety Tests but they can still be useful for obtaining evidence of impairment. **THESE TECHNIQUES DO NOT REPLACE THE SFSTs.**

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; and, 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.



***Ask participants to suggest possible evidence of impairment that might be observed during the production of the license and registration.***



Session 6 – Phase Two: Personal Contact

## License and Registration

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

DWI DETECTION & SFST 6-15

**Slide 15.**

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

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

Session 6 – Phase Two: Personal Contact

## Questions that Divide Attention

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

DWI DETECTION & SFST 6-16

**Slide 16.**

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 the license, registration, or both, you ask unrelated questions; “What day is it?” or “Where are you coming from?”

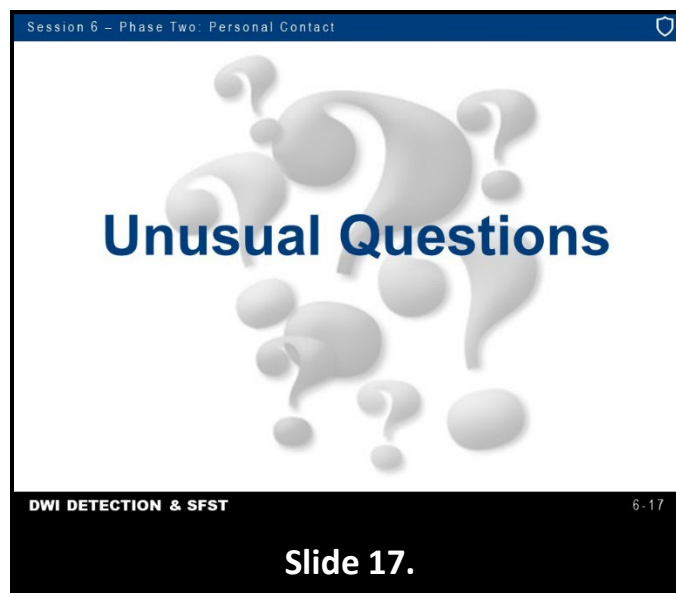
Possible evidence of impairment may be disclosed by the actions of the driver after this question has been posed. Be alert for the driver who:

- 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



***Ask class to suggest possible evidence of impairment that might be disclosed by these types of questions. Continue to probe until all major possibilities have been mentioned.***

***Ask class to suggest other questions that might be put to a driver during the retrieval of the driver's license.***



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?" "What is your zip code?" "What is the month and day of your birth?" etc.



***Ask class to suggest other unusual questions that might serve as simple, pre-exit techniques.***

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 misunderstood the unusual question and responded instead to a usual – but unasked – question.




***Asking for two things simultaneously and searching for documents while answering questions assesses the ability to divide attention, while asking unusual questions tests the driver's mental faculties.***

Session 6 – Phase Two: Personal Contact

## Medical Questions

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



DWI DETECTION & SFST 6-18

**Slide 18.**

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

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

Session 6 – Phase Two: Personal Contact

## Additional Techniques

### Alphabet

**A B C D E F G**  
**H I J K L M N**  
**O P Q R S T**  
**U V W X Y Z**

DWI DETECTION & SFST 6-19

## Slide 19.

These techniques are optional and may help the officer with their decision to have the driver exit the vehicle. These techniques have not been scientifically validated by NHTSA but still can be useful for obtaining evidence of impairment.



***Know if there are any judicial restraints in reference to these tests.***

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

Session 6 – Phase Two: Personal Contact

### Additional Techniques Count Down

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

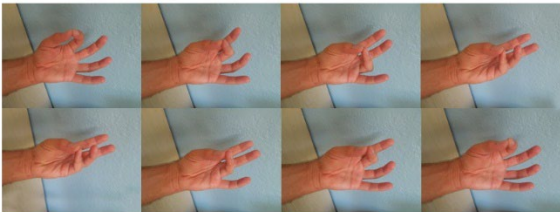
DWI DETECTION & SFST 6-20

Slide 20.

The Count Down technique requires the driver to count out loud 15 or more numbers in reverse sequence. For example, you might request a driver to, "Count out loud backwards, starting with the number 68 and ending with the number 53." This, too, divides attention because the driver must continuously concentrate to count backwards while trying to recall where to stop. **This technique should never be given using starting and stopping points ending in 0 or 5 because these numbers are too easy to recall. For example, do not request the driver count backwards from 65 to 50. Instead, ask the driver to count backwards from 68 to 53.**

Session 6 – Phase Two: Personal Contact

## Additional Techniques Finger Count



DWI DETECTION & SFST 6-21

**Slide 21.**

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



***Demonstrate the finger count.***

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



***Point out the alphabet, count down, and finger count tests, etc. have not been scientifically validated by NHTSA but still can be useful for obtaining evidence of impairment. Only the HGN, WAT, and OLS are scientifically validated by NHTSA for roadside investigations.***

***Demonstrate the examples.***


## E. Recognition and Description of Clues Associated with the Exit Sequence

Session 6 – Phase Two: Personal Contact

### The Exit

What do you see?

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



DWI DETECTION & SFST 6-22

**Slide 22.**

Your decision to instruct the driver to step from the vehicle usually is made after you have developed a suspicion the driver is impaired. Even if that suspicion may be very strong, the driver is usually not under arrest when you give the instruction. How the driver steps and walks from the vehicle and actions or behavior during the exit sequence may provide important evidence of impairment. Be alert to the driver who:



***Ask participants to suggest typical things that might be seen with an impaired driver during the exit sequence.***

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



***When participants identify items on this list, reveal the bottom portion of the slide.***

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

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



***Show Video “The Busy Businessman Exiting” (Approximately 1 minute).***

***Testimony on Video Segment “The Busy Businessman Exiting”***



***Select a participant to testify. Key points prior to the exit:***

- ***Angry response***

***Solicit class comments concerning testimony.***

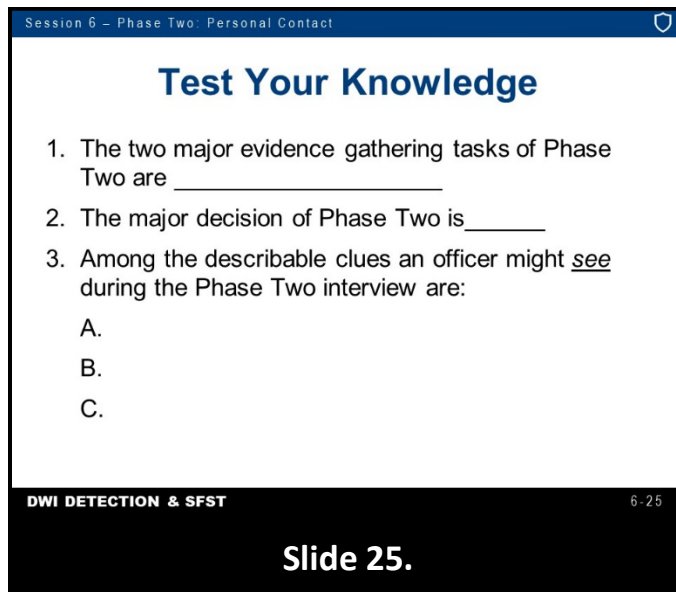
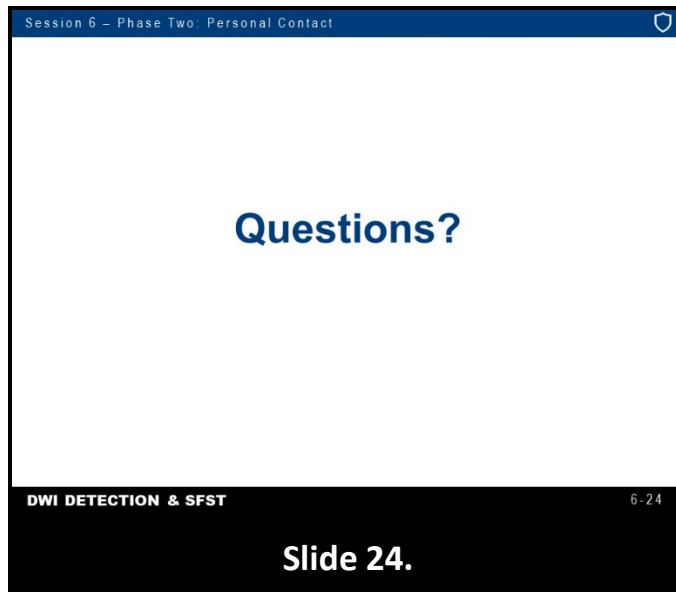


***Key points during the exit:***

- ***Driver says no mechanical problems***
- ***Driver admits to looking at papers while driving (distracted driving)***
- ***Forgets to remove seatbelt***
- ***Uses both hands to exit vehicle (right hand on door, left hand on side of vehicle)***
- ***Uses vehicle to steady himself while walking to rear of vehicle***
- ***Driver drops wallet***
- ***Admissions to alcohol use***

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

---



### Test Your Knowledge

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





1. 1) *face-to-face interview of the driver* 2) *observation of the exit*
2. *Do I have enough suspicion of DWI to instruct the suspect to exit the vehicle?*
- 3A. *Bloodshot eyes*
- 3B. *Soiled clothing*
- 3C. *Fumbling fingers*
- Other acceptable answers: alcohol containers, drugs or drug paraphernalia, bruises, bumps or scratches, unusual actions*

Session 6 – Phase Two: Personal Contact

### Test Your Knowledge

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

DWI DETECTION & SFST 6-26

**Slide 26.**

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



- 4A. *Slurred speech*
- 4B. *Admission of drinking*
- 4C. *Inconsistent responses*
- Other acceptable answers: abusive language, unusual statements*
- 5A. *Alcoholic beverages*
- 5B. *Marijuana*
- Other acceptable answers: "cover up" odors, unusual odors*

Session 6 – Phase Two: Personal Contact

## Test Your Knowledge

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

DWI DETECTION & SFST 6-27

**Slide 27.**

6. There are three techniques an officer might use in asking questions that constitute simple divided attention tasks. These techniques are: \_\_\_\_\_
7. The Count Down Technique requires the driver to \_\_\_\_\_
8. Leaning against the vehicle is a clue to DWI which may be observed during \_\_\_\_\_.



**6. Asking for two things simultaneously; Asking interrupting or distracting questions; Asking unusual questions**

**7. Count out loud 15 or more numbers in reverse sequence.**

**8. The exit sequence.**

# 7 SFST

---

## Phase Three: Pre-Arrest Screening

### LEARNING OBJECTIVES

- Describe the tasks and decision for Phase Three
- Define and describe nystagmus and concept of divided attention
- Describe the role and limitations of preliminary breath tests
- Discuss the arrest decision process

### CONTENTS

A. Overview: Tasks and Decision.....	4
B. Horizontal Gaze Nystagmus – Definition, Concepts, Demonstration.....	6
C. Vertical Gaze Nystagmus – Definition, Concepts, Demonstration .....	9
D. Divided Attention Tests: Concepts, Examples, Demonstration.....	10
E. Advantages and Limitations of Preliminary Breath Testing .....	21
F. The Arrest Decision .....	26

### LEARNING ACTIVITIES

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



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***



## Learning Objectives

- Describe tasks and decision for Phase Three
- Define and describe nystagmus and concept of divided attention
- Describe role and limitations of preliminary breath tests
- Discuss arrest decision process



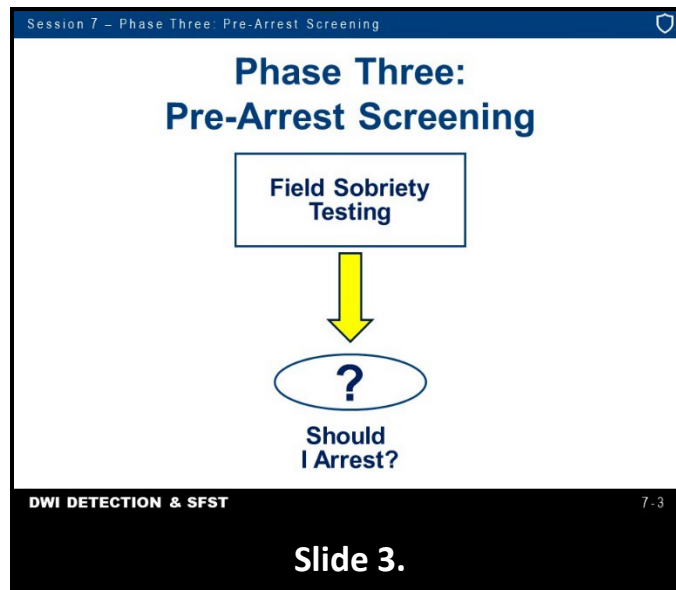
DWI DETECTION &amp; SFST

7-2

**Slide 2.**

***Briefly review the objectives, content, and activities of this session.***

## A. Overview: Tasks and Decision



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

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



***If PBTs are used in your State, emphasize the appropriate use of a PBT.***



## The Arrest Decision

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



DWI DETECTION &amp; SFST

7-4

### Slide 4.

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



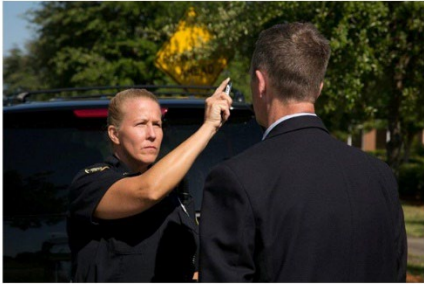
***The arrest decision is based on all of the evidence obtained during all three detection phases.***

## B. Horizontal Gaze Nystagmus – Definition, Concepts, Demonstration

Session 7 – Phase Three: Pre-Arrest Screening

### Nystagmus

Involuntary Jerking of the Eyes



DWI DETECTION & SFST 7-5

**Slide 5.**

"Nystagmus" means an involuntary jerking of the eyes. Alcohol and certain other drugs cause Horizontal Gaze Nystagmus (HGN).

---

Session 7 – Phase Three: Pre-Arrest Screening

### Horizontal Gaze Nystagmus

- Reliable
- Involuntary
- Noticeable
- CNS Depressants, Inhalants, and Dissociative Anesthetics cause HGN

DWI DETECTION & SFST 7-6

**Slide 6.**

HGN is the most reliable field sobriety test. Especially when used in combination with the divided attention tests, it will help law enforcement officers correctly identify subjects who are impaired.

Involuntary jerking of the eyes becomes readily noticeable when a person is impaired by alcohol and certain drug categories. As a person's blood alcohol concentration (BAC) increases, the eyes will begin to jerk sooner as they gaze to the side. HGN refers to an involuntary jerking occurring as the eyes gaze toward the side. In addition to being involuntary, the person experiencing the nystagmus is usually unaware the jerking is happening.



In administering the HGN test, the officer has the subject follow the motion of a small stimulus with the eyes only. The stimulus may be the tip of a pen or penlight, or an eraser on a pencil, whichever contrasts with the background. In addition to alcohol, drugs such as Central Nervous System (CNS) Depressants, Inhalants, and Dissociative Anesthetics cause HGN.

Session 7 – Phase Three: Pre-Arrest Screening

## Horizontal Gaze Nystagmus Indications

- Lack of Smooth Pursuit
- Distinct and Sustained Nystagmus at Maximum Deviation
- Onset of Nystagmus Prior to 45 Degrees
- 88% accurate detecting subjects  $\geq 0.08$  BAC

DWI DETECTION & SFST7-7

Slide 7.

When the HGN test is administered, always begin with subject's left eye. Each eye is examined for three specific clues. As the eye moves from side to side, does it move smoothly, or does it jerk noticeably? As people become impaired by alcohol, their eyes exhibit a Lack of Smooth Pursuit as they move from side to side. When the eye moves as far to the side as possible and is kept at that position for four seconds, does it jerk distinctly? Distinct and Sustained Nystagmus at Maximum Deviation is another clue of impairment. As the eye moves toward the side, does it start to jerk prior to a 45-degree angle? Onset of Nystagmus Prior to 45 Degrees is another clue of impairment. As a person's BAC increases, it is more likely these clues will appear. The maximum total number of clues is six. The maximum number of clues that may appear in one eye is three. Based upon research using SFST-experienced personnel, HGN is 88% accurate at detecting subjects at or above 0.08 BAC.



***This accuracy level was determined through the San Diego Study (“Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 %”). These percentages were obtained from experienced SFST personnel. With experience, properly administering and interpreting the SFSTs in a systematic and standardized manner, officers can obtain results similar to the studies mentioned above. Remind participants this validation applies only when:***

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

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



***Ask the participant if they have any eye problems or eye abnormalities. If the participant is wearing glasses, have the participant remove them.***

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



***The stimulus should be held approximately 12 – 15 inches (30 -38 cm) from the subjects' nose.***

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

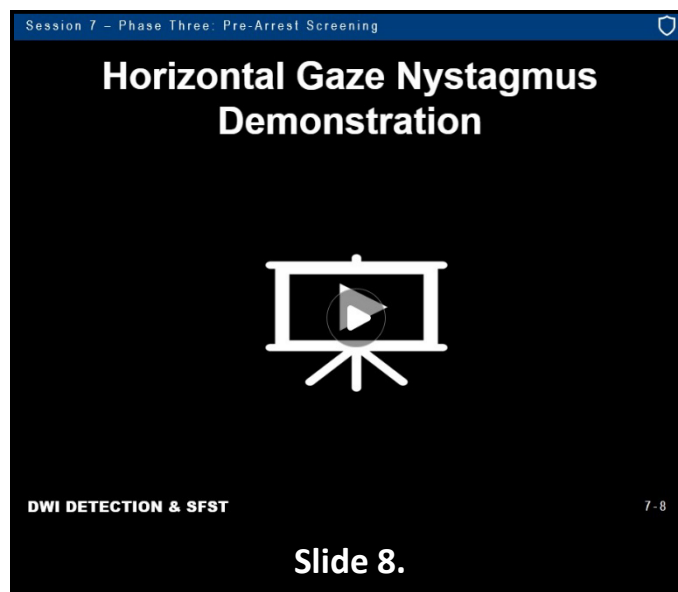


***Demonstrate the administration of the HGN test using a participant.***

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



***Allow participant to return to seat.***



***Show HGN Video (approximately two minutes)***



---

## C. Vertical Gaze Nystagmus – Definition, Concepts, Demonstration



***Vertical Gaze Nystagmus (VGN) was not included in the original research, however, it is a reliable indicator of a high quantity of alcohol for that individual, or other drug impairment.***

Vertical Gaze Nystagmus (VGN) is an involuntary jerking of the eyes occurring as the eyes are held at maximum elevation. For VGN to be recorded, it must be distinct and sustained for a minimum of four seconds at maximum elevation.



***Demonstrate the administration of the VGN test using a participant.***


***Both HGN and VGN will be covered in detail in Session 8.***

## D. Divided Attention Tests: Concepts, Examples, Demonstration

Session 7 – Phase Three: Pre-Arrest Screening

### Divided Attention

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



DWI DETECTION & SFST7-10

**Slide 10.**

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

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

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



***Remind participants of the many tasks subjects must perform in order to operate a vehicle safely.***

Session 7 – Phase Three: Pre-Arrest Screening

## Typical Simultaneous Capabilities Required for Driving

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

DWI DETECTION & SFST 7-11

**Slide 11.**

Typical simultaneous capabilities required for driving:

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



***Briefly give examples/indications of how these capabilities relate to driving.***

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



***The best psychophysical tests are those that exercise the same mental and physical capabilities a person needs to drive safely.***

Session 7 – Phase Three: Pre-Arrest Screening

## Psychophysical Tests

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

DWI DETECTION & SFST7-12

Slide 12.

Psychophysical tests are methods of assessing a subject's mental and physical impairment. These tests focus on the abilities needed for safe driving: balance, coordination, information processing, and so on. Indicators of psychophysical impairment may be observed as soon as you come into face-to-face contact with the subject and begin the interview. Additional indicators of impairment can be observed as the subject exits the vehicle to begin the field sobriety tests. The SFSTs are the most scientifically reliable indicators of psychophysical impairment.

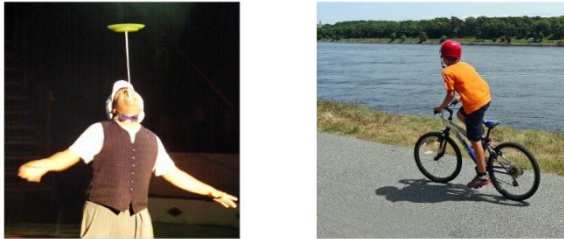


***Write on dry erase board or easel/easel pad: “Standardized Field Sobriety Tests.”***

Session 7 – Phase Three: Pre-Arrest Screening

## Simplicity

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



DWI DETECTION & SFST 7-13

**Slide 13.**

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



***Prior to administering the psychophysical tests, confirm the subject is physically able to perform the tests.***

Session 7 – Phase Three: Pre-Arrest Screening

## Two Divided Attention Field Sobriety Tests



Walk and Turn One Leg Stand

DWI DETECTION & SFST 7-14

**Slide 14.**

Two divided attention field sobriety tests that have proven accurate and effective in DWI detection are the Walk and Turn (WAT) and the One Leg Stand (OLS).

Session 7 – Phase Three: Pre-Arrest Screening

## Walk and Turn Overview

- Validated by NHTSA
- 79% accurate detecting 0.08 BAC
- Administer as instructed
- Two stages:
  - Instruction Stage
  - Walking Stage

DWI DETECTION & SFST 7-15

Slide 15.

WAT is a test that has been validated through extensive research sponsored by the National Highway Traffic Safety Administration (NHTSA). Based upon research using SFST-experienced personnel, WAT is 79% accurate at detecting subjects at or above 0.08 BAC.



***Officers should be reminded of the rigid standards the scientific community must follow in order to validate laboratory research (i.e., the development of psychophysical test for DWI detection) and the differences between validated testing and standardized testing. Officers administering SFSTs at roadside are expected to: 1) be reasonable and prudent in their decision to test; and 2) administer the SFST instructions as described later in this course.***

WAT is a divided attention test consisting of two stages: Instruction stage and Walking stage.

Session 7 – Phase Three: Pre-Arrest Screening

## Walk and Turn Instruction Stage

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

DWI DETECTION & SFST 7-16

Slide 16.



The Instruction Stage divides the subject's attention between a balancing task (standing while maintaining the heel-to-toe position) and an information processing task (listening to and remembering instructions). In the Instruction Stage, the subject must stand with their feet in a heel-to-toe position, keep their arms at their sides, and listen to the instructions.



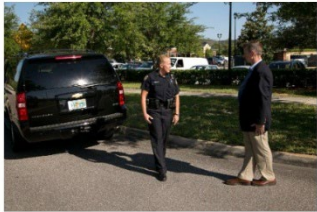
***Demonstrate stance.***

Session 7 – Phase Three: Pre-Arrest Screening

## Walk and Turn Walking Stage

**Divides subject's attention**

- Balancing
- Small muscle control
- Short term memory



DWI DETECTION & SFST 7-17

**Slide 17.**

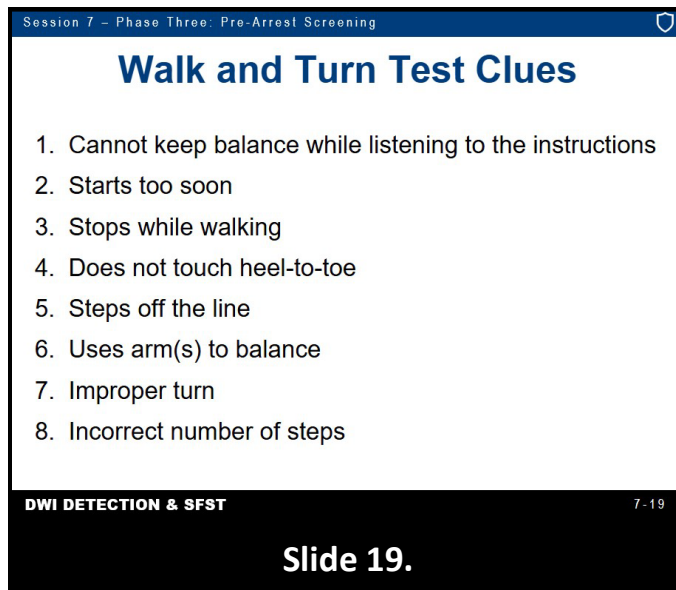
In the Walking Stage, the subject takes nine heel-to-toe steps, turns in a prescribed manner, takes nine heel-to-toe steps back, counts the steps out loud, keeping arms at their side, and watches their feet. During the turn, the subject keeps their front foot on the line, turns in a prescribed manner,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



***Demonstrate turn. Point out this divides attention between a balancing task and an information processing task. Demonstrate heel-to-toe steps and simultaneous counting.***



*Click to start demonstration video (approximately one minute, 30 seconds).*



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

1. Cannot keep balance while listening to the instructions
2. Starts too soon
3. Stops while walking

4. Does not touch heel-to-toe
5. Steps off the line
6. Uses arm(s) to balance
7. Improper turn
8. Incorrect number of steps

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

---

Session 7 – Phase Three: Pre-Arrest Screening

## One Leg Stand Overview

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

DWI DETECTION & SFST7-20

Slide 20.

The OLS has also been validated through NHTSA-sponsored research. Based upon research using SFST-experienced personnel, OLS is 83% accurate at detecting subjects at or above 0.08 BAC. It is a divided attention test consisting of two stages: Instruction stage and Balance and counting stage.


---

Session 7 – Phase Three: Pre-Arrest Screening

## One Leg Stand Instruction Stage

**Divides subject's attention**

- Balancing
- Information processing



DWI DETECTION & SFST 7-21

**Slide 21.**

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



***This divides the subject's attention between a balancing task (maintaining a stance) and an information-processing task (listening to and remembering instructions.)***

***Demonstrate the stance.***

Session 7 – Phase Three: Pre-Arrest Screening

## Balance and Counting Stage

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

DWI DETECTION & SFST 7-22

**Slide 22.**

In the Balance and Counting Stage, the subject must raise one foot, either foot, with the raised foot approximately six inches off the ground, keeping arms at their side, with both legs straight and the raised foot parallel to the ground. Have the subject, while looking at the elevated foot, count out loud in the following manner: "one thousand one", "one thousand two",

“one thousand three” until told to stop. This divides the subject's attention between balancing (standing on one foot) and information processing (counting out loud).



***Demonstrate stance and counting. The subject should be timed for 30 seconds while performing this test.***

***Point out this divides the subject's attention between balancing and counting out loud.***

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



***Click to start demonstration video (approximately one minute).***



Session 7 – Phase Three: Pre-Arrest Screening

## One Leg Stand Test Clues

1. Sways while balancing
2. Uses arm(s) to balance
3. Hopping
4. Puts foot down

DWI DETECTION & SFST 7-24

**Slide 24.**

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

1. Sways while balancing
2. Uses arm(s) to balance
3. Hopping
4. Puts foot down

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



***If time permits, explain and demonstrate other divided attention tests that may be used by participants' respective departments.***

***Other examples of simple divided attention tests. Typical tests:***

- ***Finger-to-Nose (FTN)***
- ***Modified Romberg Balance (MRB) Test***

## E. Advantages and Limitations of Preliminary Breath Testing

Session 7 – Phase Three: Pre-Arrest Screening

### Preliminary Breath Testing Overview

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

DWI DETECTION & SFST7-25

Slide 25.

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

The basic purpose of PBT is to demonstrate the association of alcohol with the observable evidence of the subject's impairment. The subject's impairment is established through sensory evidence: what the officer sees, hears, and smells. The PBT provides the evidence that alcohol is the chemical basis of impairment by yielding an on-the-spot indication of the subject's BAC. The PBT provides direct indication of the BAC level. **It does not indicate the level of the subject's impairment.** Impairment varies widely among individuals with the same BAC level. If the PBT results are not consistent with the level of impairment, other drugs or a medical condition could be contributing to the observed impairment.



***The subject's impairment is established through what the officer sees, hears, and smells.***

Session 7 – Phase Three: Pre-Arrest Screening

## Preliminary Breath Testing Investigative Process

- Not sole basis for a DWI arrest
- Provides direct indication of alcohol impairment
- Administer after SFSTs

DWI DETECTION & SFST 7-26

**Slide 26.**

The DWI incident remains in the investigative process. Whenever possible, the PBT result should not be the sole basis for a DWI arrest. It is an important factor because it provides direct indication of alcohol impairment. All other evidence, from initial observation of the vehicle in operation through psychophysical testing, indicates alcohol influence indirectly, based on impairment of the subject's mental and physical faculties.



*The PBT helps to confirm the chemical basis (alcohol) of that impairment. Also, PBTs should be used after administering SFSTs.*

Session 7 – Phase Three: Pre-Arrest Screening

## Preliminary Breath Testing Advantages

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

DWI DETECTION & SFST 7-27

**Slide 27.**

A PBT offers several important advantages for DWI detection. First, it may corroborate other evidence by demonstrating the suspicion of alcohol impairment is consistent with the officer's observations of the subject's mental and physical impairment.



Second, it may confirm the officer's own observations and help gain confidence in evaluating alcohol impairment accurately based on observations and SFSTs. Many officers experienced in DWI enforcement find they rely less and less on the PBT as their confidence in their own skills of detection increases.

Third, it may disclose the possibility of medical complications or impairment due to drugs other than alcohol. The PBT can confirm or deny alcohol is the cause of the observed impairment. For example, observed psychophysical impairment coupled with a PBT result showing a very low BAC indicates an immediate need to investigate the possibility the subject has ingested a drug other than alcohol or suffers from a medical problem.

Lastly, where permissible, it can help to establish probable cause for a DWI arrest. The role of the PBT in establishing probable cause may be affected by the evidentiary value of PBT results in your State. Consult your specific PBT law, your supervisor, or the local prosecutor for clarification, if necessary.

Session 7 – Phase Three: Pre-Arrest Screening

## Preliminary Breath Testing Limitations

- **Evidentiary** – vary with specific laws
- **Accuracy** – must be used properly

DWI DETECTION & SFST7-28

Slide 28.



***The potential role of the PBT in establishing probable cause may be affected by the evidentiary value of PBT results in your State.***

***Consult your specific PBT statute and your local State's or district attorney to clarify this point for your participants.***

***Explain the specific circumstances under which PBT results may and may not be admissible as evidence in your State. Explain the weight or probative value of PBT evidence, when admissible.***

PBT may have both evidentiary limitations and accuracy limitations. Evidentiary limitations vary with specific laws. In some States, PBT results are admissible as evidence; in other States they are not admissible.

Where the results are admissible, there may be differences in the weight or value they are given. Consult your State PBT law, your supervisor, or your local prosecutor, as necessary, for clarification. Although all PBT instruments currently used by law enforcement are reasonably accurate, they are subject to the possibility of some error, especially if they are not used properly. There are factors that can affect the accuracy of PBT devices. Some of these factors tend to produce "high" test results; others tend to produce "low" results.

---

Session 7 – Phase Three: Pre-Arrest Screening

### Possible Factors Affecting High Preliminary Breath Testing

- Residual mouth alcohol
- Breath contaminants



DWI DETECTION & SFST 7-29

Slide 29.

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

**Residual Mouth Alcohol** – After a person takes a drink, some of the alcohol will remain in the mouth. If the person exhales soon after drinking, the breath sample will pick up some of this leftover mouth alcohol. In this case, the breath sample will contain an additional amount of alcohol and the test result will be higher than the true BAC. It takes approximately 15 minutes for the residual alcohol to be eliminated from the mouth. The only sure way to eliminate this factor is to make sure the subject does not consume any alcohol for at least 15 to 20 minutes before conducting a breath test. Remember, too, most mouthwashes, breath sprays, cough syrups, etc., contain alcohol and may produce residual mouth alcohol. Therefore, do not permit the subject to put anything in their mouth for at least 15 to 20 minutes prior to testing.


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

---

Session 7 – Phase Three: Pre-Arrest Screening

## Possible Factors Affecting Low Preliminary Breath Testing

- Breath sample cooling
- Breath sample composition



DWI DETECTION & SFST 7-30

**Slide 30.**

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

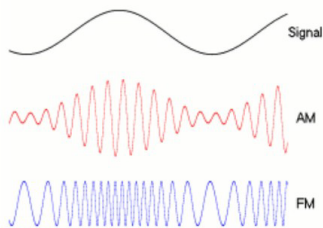
**Breath Sample Cooling** – If the captured breath sample is allowed to cool before it is analyzed, some of the alcohol vapor in the breath may turn to liquid and precipitate out of the sample. If that happens, the subsequent analysis of the breath sample will produce a low BAC result.

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

Session 7 – Phase Three: Pre-Arrest Screening

## Possible Factor Affecting Either High or Low Preliminary Breath Testing

Radio frequency interference



DWI DETECTION & SFST 7-31

**Slide 31.**

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



***Point out the first two factors listed act to produce high test results and the third and fourth act to produce low test results.***

***Point out RFI can produce either high- or low-test results or can prevent a breath test device from producing any result.***

***Briefly explain the factors and their influence.***

## F. The Arrest Decision



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

### PHASE ONE:

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

### PHASE TWO:

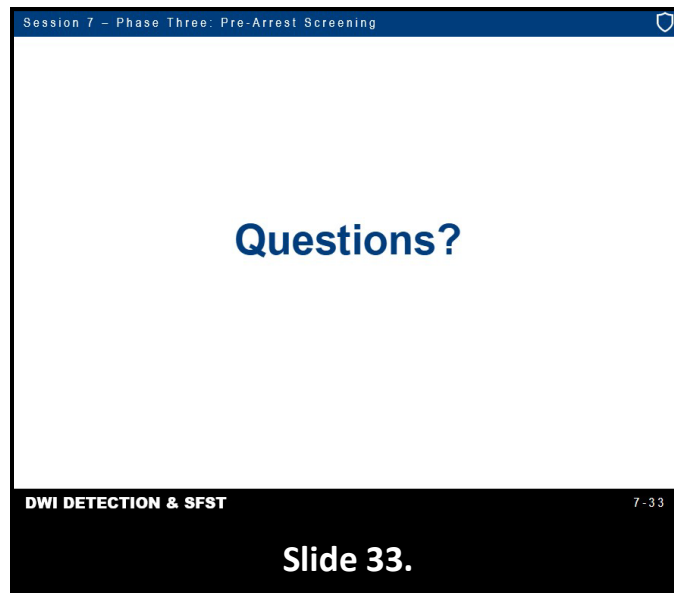
- Face-to-face observation and interview
- Observation of the exit

### PHASE THREE:

- SFSTs
- PBTs

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

---



Session 7 - Phase Three: Pre-Arrest Screening

## Test Your Knowledge

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

DWI DETECTION & SFST 7-34

**Slide 34.**

### Test Your Knowledge

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



1. ***Psychophysical (field) sobriety tests and Preliminary breath testing (PBT).***
2. ***Should I arrest the subject for DWI?***
3. ***The arrest decision***
4. ***Concentrate on two things at once***

Session 7 – Phase Three: Pre-Arrest Screening

## Test Your Knowledge

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

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

6. The two stages of the WAT are:

- A.
- B.

DWI DETECTION & SFST 7-35

### Slide 35.

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

- A. \_\_\_\_\_
- B. \_\_\_\_\_
- C. \_\_\_\_\_
- D. \_\_\_\_\_

6. The two stages of the WAT are:

- A. \_\_\_\_\_
- B. \_\_\_\_\_



**5A. Information processing**

**5B. Short term memory**

**5C. Judgment and decision making**

**5D. Balance**

**Other acceptable answers: Steady, sure reactions; clear vision; small muscle control; coordination of limbs**

**6A. Instruction stage**

**6B. Walking stage**

Session 7 – Phase Three: Pre-Arrest Screening

## Test Your Knowledge

7. The two stages of the OLS are:

- A.
- B.

8. The purpose of PBT is \_\_\_\_\_

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

- A.
- B.

DWI DETECTION & SFST

7-36

Slide 36.

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



**7A. Instruction stage**

**7B. Balance and counting stage**

**8. To demonstrate the association of alcohol with the observable evidence of the suspect's impairment**

**9A. Residual mouth alcohol**

**9B. Breath contaminants**



Session 7 – Phase Three: Pre-Arrest Screening

## Test Your Knowledge

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

- A.
- B.

DWI DETECTION & SFST 7-37

**Slide 37.**

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

- A. \_\_\_\_\_
- B. \_\_\_\_\_



- 10A. Cooling of the breath sample**
- 10B. The composition of the breath sample**





# SFST

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

### LEARNING OBJECTIVES

- Discuss the development and validity of the research and the standardized elements, clues, and interpretation of the three Standardized Field Sobriety Tests (SFSTs)
- Discuss the different types of nystagmus and their effects on the Horizontal Gaze Nystagmus (HGN) test
- Discuss and properly administer the three SFSTs
- Discuss and properly recognize the clues of the three SFSTs
- Describe in a clear and convincing manner and properly record the results of the SFSTs on a standard note-taking guide
- Identify the limitations of the three SFSTs

### CONTENTS

A. Overview: Development and Validation.....	4
B. SFST Field Validation Studies .....	7
C. Horizontal Gaze Nystagmus.....	14
D. Vertical Gaze Nystagmus (VGN).....	49
E. Walk and Turn .....	50
F. One Leg Stand .....	60
G. Taking Field Notes on the Standardized Field Sobriety Tests.....	68

### LEARNING ACTIVITIES

- Instructor-Led Demonstration
- Participant Practice Session
- Demonstration



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***



***Pocket-sized, laminated cards of the SFST administrative procedures are available to agencies and states. These can be requested through NHTSA's Enforcement and Justice Services Division at [christine.frank@dot.gov](mailto:christine.frank@dot.gov).***



## Learning Objectives

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



DWI DETECTION &amp; SFST

8-2

**Slide 2.**

## Learning Objectives

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



DWI DETECTION &amp; SFST

8-3

**Slide 3.**

***Briefly review the objectives, content, and activities of this session.***

## A. Overview: Development and Validation

Session 8 – Concepts and Principles of the SFSTs

### Overview: Development and Validation

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

DWI DETECTION & SFST 8-4

**Slide 4.**

For many years, law enforcement officers have utilized field sobriety tests to determine a driver's impairment due to alcohol influence. The performance of the driver on those field sobriety tests was used by the officer to develop probable cause for arrest and as evidence in court. A wide variety of field sobriety tests existed and there was a need to develop valid SFSTs. Beginning in late 1975, extensive scientific research studies were sponsored by the National Highway Traffic Safety Administration (NHTSA) through a contract with the Southern California Research Institute (SCRI) to determine which roadside field sobriety tests were the most accurate. SCRI published the following three reports: (1) California: 1977 (Lab); (2) California: 1981 (Lab and Field); (3) Maryland, District of Columbia, Virginia, North Carolina: 1983 (Field).

---

Session 8 – Concepts and Principles of the SFSTs

## Original Research Objectives



DWI DETECTION & SFST 8-5


**Slide 5.**

The original research objectives were to evaluate currently used physical coordination tests to determine their relationship to intoxication and driving impairment, develop more sensitive tests that would provide more reliable evidence of impairment, and standardize the tests and observations.

Session 8 – Concepts and Principles of the SFSTs

## Volunteers Were Subjected to Six Tests

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



DWI DETECTION & SFST 8-6

**Slide 6.**

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

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

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



***Emphasize other field sobriety tests (including FTN, Finger Count, Tracing, etc.) can be effectively used to assess impairment.***

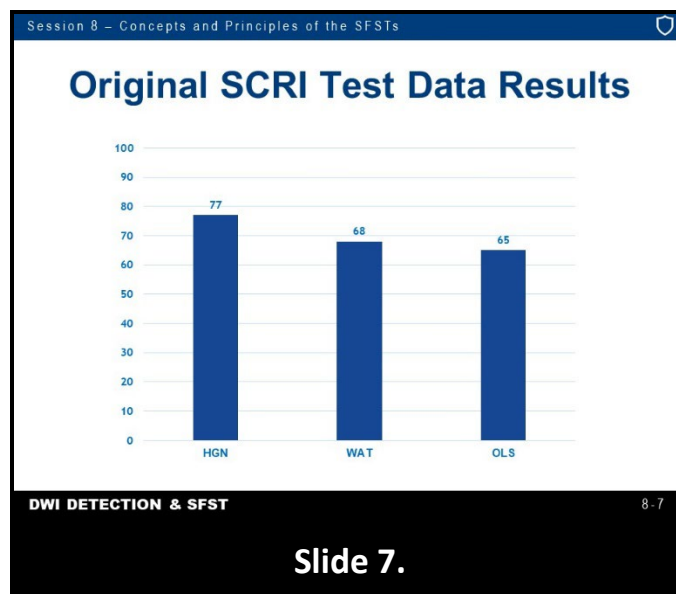
While many field sobriety tests are valid tests, the SFSTs have been validated through numerous research studies.



***Explain the difference between valid and validated.***

***VALID – Conforming to accepted principles. Producing accurate and reliable results; effective.***

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



NHTSA analyzed the original SCRI research laboratory test data and found HGN, by itself, was 77% accurate, WAT, by itself, was 68% accurate, and OLS, by itself, was 65% accurate.



***Emphasize these percentages were from the original SCRI research for BACs of 0.10 or higher and were refined in the San Diego field validation study.***



## B. SFST Field Validation Studies

Session 8 – Concepts and Principles of the SFSTs

### Third Phase: Field Validation and Standardization Objectives

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

DWI DETECTION & SFST 8-8

**Slide 8.**

In 1983, the final phase of this research was conducted as a field validation study in Maryland, Washington D.C., Virginia, and North Carolina.

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

Session 8 – Concepts and Principles of the SFSTs

### Standardized Elements

- Administrative Procedures
- Clues
- Criteria



DWI DETECTION & SFST 8-9

**Slide 9.**

The three standardized tests were found to be highly reliable in identifying subjects whose BACs were at or above 0.10. The results of the study unmistakably validated the SFSTs. The “Standardized” elements included Standardized Administrative Procedures, Standardized Clues, and Standardized Criteria.



## Importance of Large Scale Field Validation Study

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

### Slide 10.

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



## SFST Field Validation Studies




### Slide 11.

Three SFST validation studies were undertaken between 1995 and 1998. These were Colorado – 1995, Florida – 1997, and San Diego – 1998.

Session 8 – Concepts and Principles of the SFSTs

## “Correct” and “Incorrect” Arrest Decisions



DWI DETECTION & SFST 8-12

**Slide 12.**

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

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



***Emphasize it is important for the officer who is trained in SFST to prepare themselves to understand and explain these statistics in layman terms in order to effectively articulate them to a jury in a courtroom.***

Each of these studies have shown the SFSTs are scientifically validated and are a reliable method for distinguishing between impaired and unimpaired drivers. It is important for the officer who is trained in SFST to prepare themselves to understand and explain these statistics in layman terms in order to effectively articulate them to a jury in a courtroom. Remember, if you do not know the answer to a defense question you can say, “I DON’T KNOW.”

Session 8 – Concepts and Principles of the SFSTs

## Colorado Field Validation Study of SFST

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

DWI DETECTION & SFST8-13

Slide 13.

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 were 86% accurate based on the three SFSTs (HGN, WAT, OLS) and 93% of arrested drivers had a BAC of 0.05 or higher. These results, by officers who were trained in the SFST curriculum, were higher than the initial 1977 study results.



**Source:**

Burns, M., & Anderson, E. (1995, November). *A Colorado Validation Study of the Standardized Field Sobriety Test (SFST) Battery*. Colorado Department of Transportation.

Session 8 – Concepts and Principles of the SFSTs

## Florida Field Validation Study of SFST

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

DWI DETECTION & SFST 8-14

**Slide 14.**

The Florida SFST field validation study was undertaken in order to answer the question of whether SFSTs are valid and reliable indices of the presence of alcohol when used under present-day traffic and law enforcement conditions. Correct decisions to arrest were made 95% of the time based on the three SFSTs (HGN, WAT, OLS). This was the second SFST field validation study undertaken. This study was the first study conducted at the lower BAC limit of 0.08.



**Source:**

Burns, M., & Dioquino, T. (1997). *A Florida Validation Study of the Standardized Field Sobriety Test (SFST) Battery*. National Highway Traffic Safety Administration.

Session 8 – Concepts and Principles of the SFSTs

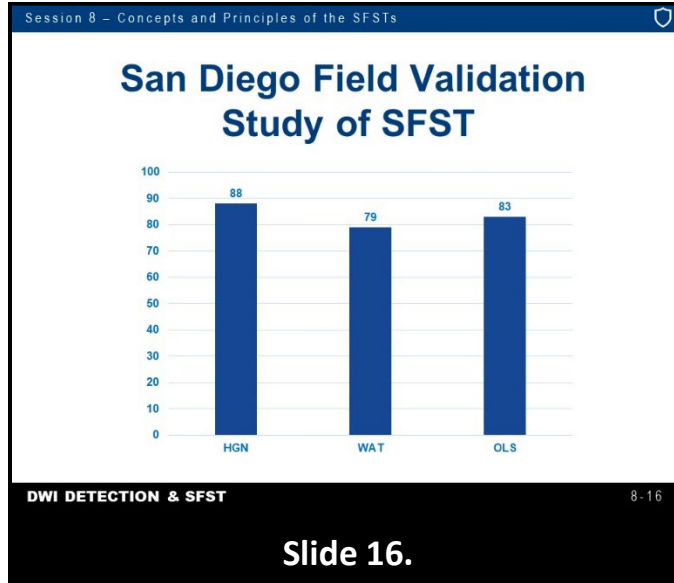
## San Diego Field Validation Study of SFST

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

DWI DETECTION & SFST 8-15

**Slide 15.**

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



***Emphasize 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-tests to support arrest decisions at above or below 0.08. It strongly suggests the SFSTs also identify BACs at 0.04 and above.

Results: Three SFST 1990's Field Studies	
Study	% Correct
Colorado	86% Arrest/Release Decisions
Florida	95% Arrest Decisions
San Diego	91% Arrest Decisions



***These percentages were obtained from experienced SFST personnel. With experience, properly administering and interpreting the SFSTs in a systematic and standardized manner, officers can obtain results similar to the studies mentioned above.***

It is necessary to emphasize this validation applies only when the tests are administered in the prescribed and standardized manner, the standardized clues are used to assess the subject's performance, and the standardized criteria are employed to interpret that performance. If any one of the SFST elements is changed, the validity may be compromised.



**Source:**

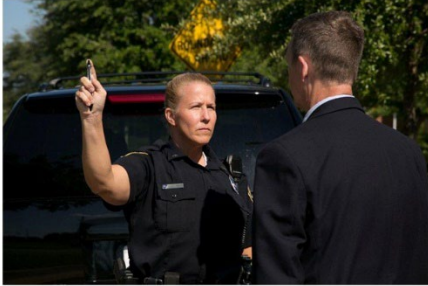
Stuster, J., & Burns, M. (1998, August). *Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent*. Santa Barbara, CA: Anacapa Sciences, Inc.

## C. Horizontal Gaze Nystagmus

Session 8 – Concepts and Principles of the SFSTs

### Horizontal Gaze Nystagmus

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



DWI DETECTION & SFST 8-17

**Slide 17.**

Definition Review: Involuntary jerking of the eyes, occurring as the eyes gaze to the side. In addition to being involuntary, the person is usually unaware it is happening, and the person is unable to control it.

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



***Drug categories that can cause nystagmus are Central Nervous System (CNS) Depressants, Inhalants, and Dissociative Anesthetics.***



Session 8 – Concepts and Principles of the SFSTs

## Categories of Nystagmus

- Vestibular
- Neural
- Pathological Disorders and Diseases

DWI DETECTION & SFST 8-18

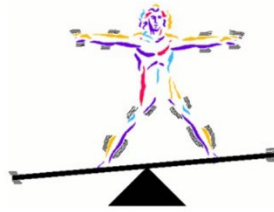
**Slide 18.**

HGN is not the only kind of nystagmus. There are other circumstances under which the eyes will jerk involuntarily. It is important to know some of the other common types of nystagmus and to be aware of their potential impact on field sobriety tests. Nystagmus of several different origins may be seen. The three general categories of nystagmus are Vestibular, Neural, and Pathological Disorders and Diseases.

Session 8 – Concepts and Principles of the SFSTs

## Vestibular Nystagmus

- Rotational
- Post Rotational
- Caloric
- Positional Alcohol Nystagmus



DWI DETECTION & SFST 8-19

**Slide 19.**

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



***Point out the vestibular system is a sense organ located in the inner ear. It provides information to the brain, and consequently to the eyes, about position and movement of the head to maintain orientation and balance of the body.***

The HGN test will not be influenced by Vestibular Nystagmus when administered properly.

Types of Vestibular Nystagmus are:

Rotational Nystagmus occurs when the person is spun around or rotated rapidly, causing the fluid in the inner ear to be disturbed. If it were possible to observe the eyes of a rotating person, they would be seen to jerk noticeably.

Post Rotational Nystagmus is closely related to Rotational Nystagmus: when the person stops spinning, the fluid in the inner ear remains disturbed for a period of time and the eyes continue to jerk.

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



***To illustrate rotational and post rotational, swirl a half glass of water several times. Stop swirling glass, water will continue to spin for a short period of time.***

Caloric Nystagmus occurs when fluid motion in the canals of the vestibular system is stimulated by temperature as by putting warm water in one ear and cold in the other.

Positional Alcohol Nystagmus (PAN) occurs when a foreign fluid, such as alcohol, that alters the specific gravity of the blood, is in unequal concentrations in the blood and the vestibular system. This causes the vestibular system to respond to gravity in certain head positions, resulting in nystagmus. By administering HGN with the head in line with the spine, PAN should not occur.

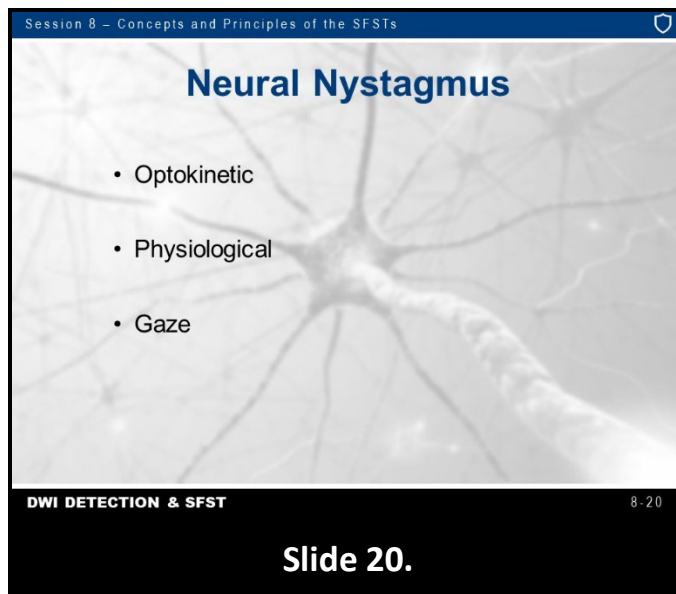
In the original HGN study, research was not conducted for performing HGN on people lying down. Current research demonstrates HGN can be performed on someone in this position. A person who is secured to a back board, partially upright on a gurney, or is seated upright, provided their head is in line with the spine, should not display PAN.



***Source:***

Citek, K., Ball, B., & Rutledge, D.A. (2003, November). Nystagmus Testing In Intoxicated Individuals. *Optometry*, 74(11), 695-710.

***An example of PAN is the spinning of a room when a person lies down after consuming alcohol.***



Nystagmus can also result directly from neural activity. Optokinetic Nystagmus occurs when the eyes fixate on an object that suddenly moves out of sight, or when the eyes watch sharply contrasting moving images. Examples of Optokinetic Nystagmus include watching strobe lights, rotating lights, or rapidly moving traffic in close proximity. The HGN test will not be influenced by Optokinetic Nystagmus when administered properly. During the HGN test, the subject is required to fixate the eyes on a penlight, pencil, or similar object that moves in accordance with the HGN testing procedures, thus Optokinetic Nystagmus will not occur. The movement of the stimulus and the fixation on the stimulus by the subject precludes this form of nystagmus from being observed by the officer.



***Point out during the HGN test, the subject is required to focus the eyes on a penlight, pencil, or similar object that moves smoothly and relatively slowly across the field of view, thus Optokinetic Nystagmus will not occur.***

***When practical, remind participants to face the driver away from potential distractions that could be raised later.***

Physiological Nystagmus is a natural nystagmus that keeps the sensory cells of the eye from tiring. It is the most common type of nystagmus. It happens to all of us, all the time. This type of nystagmus produces extremely minor tremors or jerks of the eyes. These tremors are usually too small to be seen with the naked eye. Physiological Nystagmus will not be mistaken for HGN.



***Emphasize Physiological Nystagmus will not be mistaken for HGN.***


Gaze Nystagmus is a form of nystagmus that occurs when the eyes attempt to maintain visual fixation on a stimulus.

---

Session 8 – Concepts and Principles of the SFSTs

## Gaze Nystagmus

- Horizontal
- Vertical
- Resting



DWI DETECTION & SFST 8-21

**Slide 21.**


For our purposes, Gaze Nystagmus is separated into three types which are Horizontal, Vertical, and Resting.

---

Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus

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



DWI DETECTION & SFST 8-22

Slide 22.

Horizontal Gaze Nystagmus is an involuntary jerking of the eyes, occurring as the eyes gaze to the side. It is the observation of the eyes for Horizontal Gaze Nystagmus that provides the first and most accurate test in the SFSTs. Although this type of nystagmus is indicative of alcohol impairment, its presence may also indicate use of certain other drugs. Examples of other drug categories are CNS Depressants, Inhalants, and Dissociative Anesthetics such as PCP and its analogs.



***Emphasize this training course is concerned with HGN and this procedure has been validated as an accurate indicator for alcohol influence by extensive scientific research.***



**Source:**

(1999). *Horizontal Gaze Nystagmus: The Science and the Law: A Resource Guide for Judges, Prosecutors and Law Enforcement*. National Traffic Law Center. National Highway Traffic Safety Administration. Retrieved from [https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/horizontal\\_gaze\\_nystagmus-the\\_science\\_and\\_the\\_law.pdf](https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/horizontal_gaze_nystagmus-the_science_and_the_law.pdf)

Any deficiency in eye movement, especially if it is acquired or of recent onset, can impair a person's ability to see properly. Drug impairment, including from alcohol, can affect eye movements in several ways, depending on the nature of the intoxicant used. Drug use, including alcohol, is understood to cause physiological changes that are acquired.




**Source:**

Leigh, R., & Zee, D. (2015). *The Neurology of Eye Movements, Fifth Edition*. Oxford University Press.

Session 8 – Concepts and Principles of the SFSTs

## Vertical Gaze Nystagmus

Involuntary jerking of eyes (up and down)



DWI DETECTION & SFST 8-23

**Slide 23.**


Vertical Gaze Nystagmus is an involuntary jerking of the eyes (up and down) which occurs when the eyes gaze upward at maximum elevation. The presence of this type of nystagmus is associated with high doses of alcohol for that individual. It may also be present with certain other drugs. The drugs that cause VGN are the same ones that cause HGN. There is no known drug that will cause VGN without causing at least four clues of HGN. If VGN is present and HGN is not, it could be a medical condition. For VGN to be recorded, it must be distinct and sustained for a minimum of four seconds at maximum elevation.

---

Session 8 – Concepts and Principles of the SFSTs

## Resting Nystagmus

Jerking of eyes as they look straight ahead



DWI DETECTION & SFST 8-24

**Slide 24.**

Resting Nystagmus is referred to as a jerking of the eyes as they look straight ahead. Its presence usually indicates a medical condition or high doses of a Dissociative Anesthetic drug.

---

Session 8 – Concepts and Principles of the SFSTs

## Pathological Disorder Nystagmus

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

DWI DETECTION & SFST 8-25

**Slide 25.**

Nystagmus may also be caused by certain pathological disorders. They include brain tumors and other brain damage or some diseases of the inner ear. These pathological disorders occur in very few people and in even fewer drivers. Congenital nystagmus is developed at birth and up to six months, while acquired nystagmus may be caused later in life from medical conditions and/or alcohol or drugs.



***Point out nystagmus caused by pathological disorders is extremely rare in the driving population. Persons suffering from these disorders are rarely able to drive.***

Individuals with a long-standing abnormality or deficiency in eye movements often learn to compensate in some manner. One example includes making a head movement rather than an eye movement when someone has a natural lack of smooth pursuit, not due to intoxication, illness, or trauma. Likewise, someone who has a constant and long-standing nystagmus may be able to detect and extract visual information between successive eye movements. Therefore, while the appearance to the officer may be abnormal, the person is not necessarily impaired.



## Medical Impairment

Even though the possibility of alcohol and/or drug impairment exists, be aware of medical conditions having symptoms in common with alcohol influence.



DWI DETECTION &amp; SFST

8-26

**Slide 26.**

Even though the possibility of alcohol and/or drug impairment exists, officers should be aware of medical conditions having symptoms in common with alcohol influence. By passing a stimulus across both eyes, you can check to see if both eyes are tracking equally. If they don't (i.e., if one eye tracks the stimulus, but the other fails to move or lags behind the stimulus) there is the possibility of a neurological disorder. If a person has sight in both eyes, but the eyes fail to track together, there is a possibility the person is suffering from an injury or illness affecting the brain.



***For further information on drugs other than alcohol and procedures for conducting a preliminary examination to check for medical impairment, injury, or drug impairment, see the curriculum package entitled “Introduction to Drugged Driving” or “Advanced Roadside Impaired Driving Enforcement (ARIDE)”.***



Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus Medical Impairment Assessment Procedures

**Check eyes for:**

- Equal Pupil Size
- Resting Nystagmus
- Equal Tracking



DWI DETECTION & SFST 8-27

**Slide 27.**

Prior to administration of HGN, the eyes are checked for Equal Pupil Size, Resting Nystagmus, and Equal Tracking (can they follow an object together). If the eyes do not track together, or if the pupils are noticeably unequal in size, the chance of medical disorders or injuries causing the nystagmus may be present. If the eyes track together, continue with the test and document the results.

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

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

Resting Nystagmus is referred to as jerking as the eyes look straight ahead. This condition is not frequently seen. Its presence usually indicates a pathology or high doses of a drug such as a Dissociative Anesthetic. Resting Nystagmus may also be a medical problem. Tracking ability may be affected by certain medical conditions or injuries involving the brain.



***Demonstrate how to check for Equal Pupil Size, Resting Nystagmus, and Equal Tracking.***

This observation is a medical assessment. If the two eyes do not track together, the possibility of a serious medical condition or injury is present. Officers are reminded to ask questions about the subject's eye and general health conditions prior to administering the HGN test. If a subject responds or volunteers information that he or she is blind in one eye or has an artificial eye, and the subject has equal tracking, the officer should make note of the abnormality and proceed with the HGN test. If there are any abnormal findings on the pre-test checks, the officer may choose not to continue with the testing. If HGN testing is continued, officers are reminded this does not follow the standardized protocol and should acknowledge such in any report.

If HGN testing is conducted on a person with a blind eye, typical inconsistent findings could be related to the blind eye not being able to see or track the stimulus, or when the normal eye can no longer see the stimulus, e.g., when checking Distinct and Sustained Nystagmus at Maximum Deviation on the blind eye side.



**Source:**

Citek, K. (2014). *Eye Tests on a Suspect with a Blind Eye*. Pacific University College of Optometry.

***For most HGN testing, the normal eye can see the stimulus and the movement of either eye should be consistent with what is expected. When the normal eye can no longer see the stimulus, most commonly when assessing Distinct and Sustained Nystagmus at Maximum Deviation on the blind eye side, eye movements not consistent with nystagmus may be observed.***

Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus Testing: Three Clues

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

DWI DETECTION & SFST 8-28

**Slide 28.**

The HGN test is comprised of three separate components: Lack of Smooth Pursuit, Distinct and Sustained Nystagmus at Maximum Deviation, and Onset of Nystagmus Prior to 45 Degrees. This test may provide important indicators of alcohol and drug use.

The first recommended test you will use at roadside is HGN – an involuntary jerking of the eyes occurring as the eyes gaze to the side. When a person is impaired by alcohol or certain drugs, some jerking will be seen if the eyes are moved far enough to the side.



***Inform the participants CNS Depressants, Inhalants, and Dissociative Anesthetics can cause HGN.***

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. While not an actual Gaze Nystagmus, Lack of Smooth Pursuit is a validated clue in the HGN test.

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.



***Unimpaired people also may exhibit a slight jerking of the eye at maximum deviation, but this will not be evident or sustained for more than a few seconds.***

Onset of Nystagmus Prior To 45 Degrees (Clue Number Three) – The jerking of the eye begins prior to the stimulus reaching an approximate 45-degree angle.

---

Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures

1. Check for eyeglasses
2. Verbal instructions
3. Position stimulus (12-15 inches and slightly above eye level)
4. Check for Equal Pupil Size and Resting Nystagmus
5. Check for Equal Tracking

DWI DETECTION & SFST 8-29

**Slide 29.**

Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures

6. Lack of Smooth Pursuit
7. Distinct and Sustained Nystagmus at Maximum Deviation
8. Onset of Nystagmus Prior to 45 Degrees
9. Total the clues
10. Check for Vertical Nystagmus

DWI DETECTION & SFST 8-30

**Slide 30.**

### HGN

HGN and VGN can be observed directly and does not require special equipment. You will need a contrasting stimulus for the subject to follow with their eyes. This can be a penlight, pen, or similar object. The stimulus used should be held slightly above eye level, so the eyes are wide open when they look directly at it. It should be held approximately 12 - 15 inches in front of the nose. Remain aware of your position in relation to the subject at all times.

**OFFICER SAFETY IS THE NUMBER ONE PRIORITY ON ANY TRAFFIC STOP.**

### Administrative Procedures

1. Check for eyeglasses
2. Verbal instructions
3. Position stimulus (12-15 inches and slightly above eye level)
4. Check for Equal Pupil Size and Resting Nystagmus

5. Check for Equal Tracking
6. Lack of Smooth Pursuit
7. Distinct and Sustained Nystagmus at Maximum Deviation
8. Onset of Nystagmus Prior to 45 Degrees
9. Total the clues
10. Check for Vertical Nystagmus

Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus Procedures

1. Check for eyeglasses
2. Verbal instructions
3. Position stimulus

DWI DETECTION & SFST8-31

Slide 31.

It is important to administer the HGN test systematically using the following steps to ensure nothing is overlooked.



***There are 10 steps in the systemic administration of the HGN test.***

Step 1: Check for Eyeglasses (Note if subject wears contacts especially colored contacts because some colored contacts may affect the ability to compare pupil size). Begin by instructing the subject to remove eyeglasses, if worn.



***Point out eyeglasses may impede the subject's peripheral vision and may also impede the officer's ability to observe the eye carefully.***

It does not matter whether the subject can see the stimulus with perfect clarity. The subject just needs to see it and be able to follow it.



***Remind participants nystagmus is not a vision test.***

Step 2: Verbal instructions. Give the subject the appropriate verbal instructions:



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

- Put feet together, arms down 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



***Emphasize these are the major points that must be conveyed during the verbal instructions.***

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.

---

Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus Procedures

4. Equal Pupil Size and Resting Nystagmus
5. Equal Tracking

DWI DETECTION & SFST 8-32

**Slide 32.**

Step 4: Equal Pupil Size and Resting Nystagmus. Check for Equal Pupil Size and Resting Nystagmus.



***Remind the participants, if Resting Nystagmus is observed, they can continue with the remainder of the test to check for other possible indicators of impairment and any possible indicators of a medical condition.***

***Remind participants to also check for Resting Nystagmus when checking for Equal Pupil Size.***

Step 5: Equal Tracking. Check for Equal Tracking. Move the stimulus from center to far right, to far left, and back to center. The speed of the stimulus should be approximately the same speed used as checking for the Lack of Smooth Pursuit. This check may be done more than once.

**There should be a clear, distinguishable break between the check for Equal Tracking and Lack of Smooth Pursuit.**

If there are any abnormal findings on the pre-test checks, the officer may choose not to continue with the testing. If HGN testing is continued, officers are reminded this does not follow the standardized protocol and should acknowledge such in any report.

Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus Procedures

6. Check for Lack of Smooth Pursuit
7. Check for Distinct and Sustained Nystagmus at Maximum Deviation
8. Check for Onset of Nystagmus Prior to 45 Degrees

DWI DETECTION & SFST 8-33

**Slide 33.**

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. Check each eye at least twice.



***Remind participants to make at least two complete passes in front of the eyes to check this clue.***

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. Check each eye at least twice.



***Emphasize the jerking must be definite, distinct and sustained in order to record this clue. Remind participants to check each eye at least twice for this clue.***

***Check the right eye for the "Distinct and Sustained Nystagmus at Maximum Deviation" clue and compare.***

***Point out in most cases no white should be showing in the corner of the eye when observing this 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 an approximate 45-degree angle, that is one clue.



***Remind participants to check each eye at least twice for this clue. Point out, for many subjects, nystagmus clues will appear in the sequence listed.***

Check the right eye for "Onset of Nystagmus Prior to 45 Degrees" clue and compare. Check each eye at least twice.



Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus Procedures

9. Total the clues  
10. Check for Vertical Gaze Nystagmus

DWI DETECTION & SFST 8-34

**Slide 34.**

Step 9: Total the clues. Maximum number of clues possible for each eye: 3. Total maximum number of clues possible for both eyes: 6



***Also, point out the subject's performance may not be exactly identical in both eyes.***

It is possible all three clues definitely will be found in one eye, while only two (or sometimes only one) will show up in the other eye. It is always necessary to check both eyes and to check them independently. Notwithstanding, it is unlikely the eyes of someone under the influence of alcohol will behave totally different. Thus, if one eye shows all three clues distinctly while the other eye gives no evidence of nystagmus, the person may be suffering from one of the pathological disorders covered previously.



***As BAC increases, many people first show inability of smooth pursuit, then show distinct jerkiness at maximum deviation, and finally show an onset within 45 degrees. However, that may not always be true.***

Step 10: Check for Vertical Nystagmus. The VGN test is simple to administer. During the VGN test, look for jerking as the eyes gaze up and are held for a minimum of four seconds at maximum elevation. Position the stimulus horizontally and instruct the subject to hold their head still and follow the stimulus with the eyes only. Raise the stimulus until the subject's eyes are elevated as far as possible and hold for a minimum of four seconds. Watch closely for evidence of the eyes jerking upward. The jerking must be definite, distinct and sustained.

Session 8 – Concepts and Principles of the SFSTs

## Test Interpretation

**Look for three clues of nystagmus in each eye:**

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

DWI DETECTION & SFST 8-35

**Slide 35.**

You should look for three clues of nystagmus in each eye.

- Lack of Smooth Pursuit (The eye cannot follow a moving object smoothly)
- Distinct and Sustained Nystagmus at Maximum Deviation (nystagmus is distinct and sustained when the eye is held at maximum deviation for a minimum of four seconds)
- Onset of Nystagmus Prior to 45 Degrees

Based on recent research, if you observe four or more clues it is likely the subject's BAC is at or above 0.08. Using this criterion, you will be able to classify about 88% of your subjects accurately. This was determined during laboratory and field testing and helps you weigh the various SFSTs as you make your arrest decision.



***This accuracy level was determined through the San Diego Study (“Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10%”). These percentages were obtained from experienced SFST personnel. With experience, properly administering and interpreting the SFSTs in a systematic and standardized manner, officers can obtain results similar to the studies mentioned above. Remind participants this validation applies only when:***

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

Session 8 – Concepts and Principles of the SFSTs

## Three Clues of Horizontal Gaze Nystagmus

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

DWI DETECTION & SFST 8-36

**Slide 36.**



***It is important participants start with the subject's left eye first. Then check the right eye for the same clue. This procedure should be used for all three clues.***

When we administer the HGN test, we look for three specific clues as evidence of impairment. We check each eye independently for each clue.



***Remind the participants to check each eye twice for each clue.***

For standardization, begin with the subject's left eye. Check for the first clue. Next, check right eye for same clue. Repeat this procedure for each clue starting with left eye, then right eye. Compare and document the results. When we are checking an eye, it is good practice to administer the test by the numbers each time, to make sure no step is overlooked.

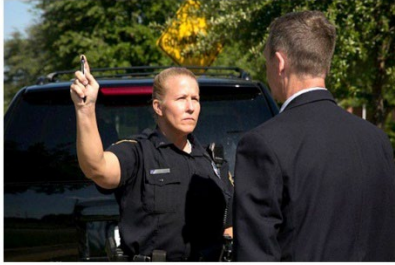


***EMPHASIZE OFFICER SAFETY IS OF KEY IMPORTANCE WHEN ADMINISTERING THESE TESTS.***

Session 8 – Concepts and Principles of the SFSTs

## Clue Number 1

Lack of Smooth Pursuit



DWI DETECTION & SFST 8-37

**Slide 37.**

The first clue requires the subject move the eye to follow the motion of a smoothly moving stimulus.



***Emphasize subject must keep their head still and follow the stimulus with their eyes only.***

The stimulus may be the eraser on a pencil, the tip of a penlight, the tip of your finger, or any similar small object.

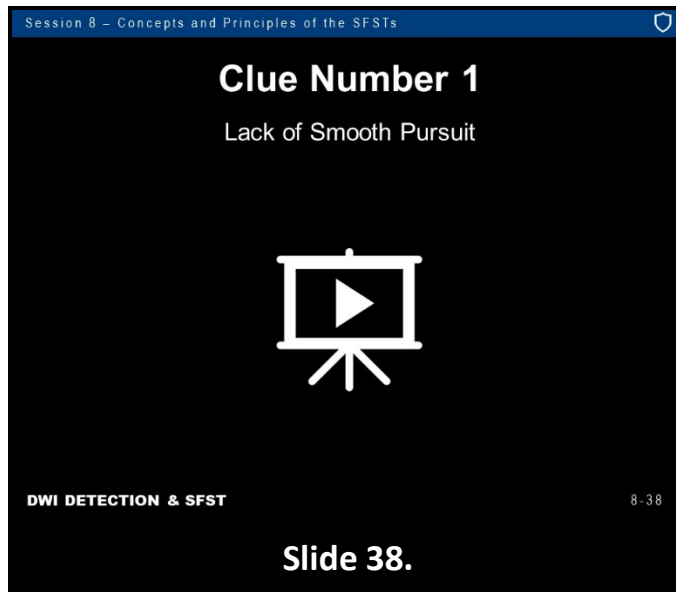


***Emphasize it is best to use a stimulus which contrasts with the background.***

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.



***Point out when stimulus is slightly higher than eye level, subject will have to open eyes wide to focus on it. Wide open eyes make it easier to see the nystagmus.***



***Note: This video will loop continuously until you go to the next slide.***



Move the stimulus smoothly all the way out to the right (checking subject's left eye first). Move the object from center to the side as far as the eye can move. Then move the stimulus smoothly all the way across the subject's face to the left (checking the subject's right eye), then back to center. Carefully watch the subject's left eye then right eye and determine if they are able to pursue smoothly. Make at least two complete passes with the stimulus. The stimulus must be moved in a smooth, continuous manner without stopping at either side or the center while checking for this clue. 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.

Lack of smooth pursuit can impair the ability to see details (such as when reading a sign) or make accurate observations (as of the direction and speed of another vehicle) when there is relative motion between the observer and the target (one or the other is moving, or both are moving but at different speeds and/or different directions).

Session 8 – Concepts and Principles of the SFSTs

## Mechanics of Clue Number 1

Move object steadily at a speed that takes approximately 2 seconds to bring the eye from center to side

DWI DETECTION & SFST 8-39

**Slide 39.**

It is necessary to move the object smoothly in order to check the eye's ability to pursue smoothly. The stimulus should be moved from center position, all the way out to the right (checking subject's left eye) where the eye can go no further, and then all the way back across subject's face all the way out to the left where the eye can go no further (checking subject's right eye) and then back to the center.



***Demonstrate.***

The object must be moved steadily, at a speed that takes approximately 2 seconds to bring the eye from center to side.



***Demonstrate.***

In checking for this clue, make at least two complete passes in front of the eyes.



***Demonstrate.***

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.



***Point out: the stimulus must be moved in a smooth, continuous manner without stopping at either side or the center while checking for this clue.***



***Live Demonstration of the Mechanics of Clue No. 1. Solicit a participant to participate in the live demonstration.***

- ***Station the participant subject in a position where the eyes can easily be seen by the class (It may be necessary to conduct the demonstration at two or more locations in the class to permit all to see.)***
- ***Position stimulus approximately 12 - 15 inches (30 - 38 cm) in front of nose, slightly higher than eye level***
- ***Articulate each step in the procedural mechanics aloud***
- ***Stimulus is moved smoothly from center all the way out to the right (checking subject's left eye), back across subject's face all the way to the left side (checking subject right eye) then back to center***
- ***Point out how the arm is held to ensure smooth movement***
- ***A second pass is conducted the same as the first***
- ***Point out each pass takes the eye as far to the side as it can go***
- ***On each pass, the arm is moved smoothly, and the eye is taken as far to the side as possible***
- ***Point out it takes approximately 2 seconds to move the object from center to the side as far as the eye can go***

***Solicit participants' questions concerning the procedural mechanics for Clue No. 1.***



***Participant Practice of the Mechanics of Clue No. 1. Practice in groups of two or three, taking turns.***

***Instruct each participant to practice conducting the test of smooth pursuit, using another participant as a subject. Remind participants they are to make at least two complete passes in front of the eyes.***

***Coaching and critiquing participants' practice. Common initial mistakes to note and correct:***

- ***Holding object too close to (or too far from) subject's eyes***
- ***Moving object too slowly (or too quickly) toward the side***
- ***Failing to move object far enough to the side to bring eye to maximum deviation***
- ***Curving downward and curving around***

***Encourage participants to practice this procedure using a flat surface such as a wall for a guide.***



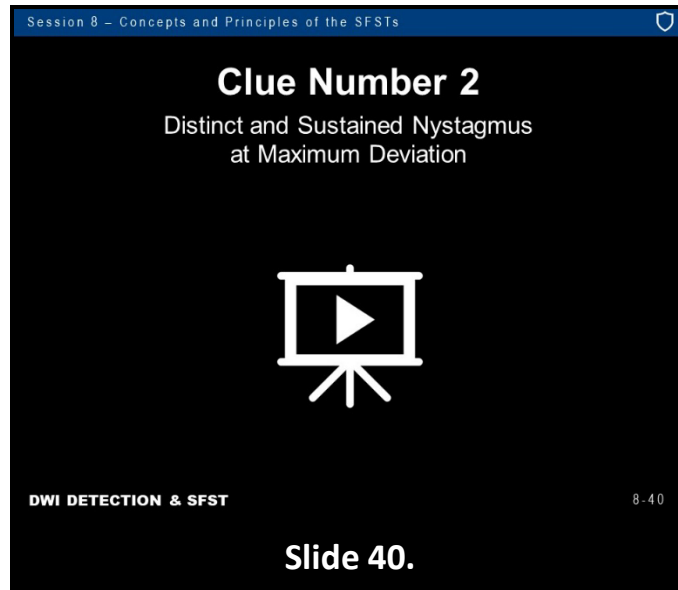
Instructor  
Note



Activity

***Participant Led Demonstration. Choose a participant who appears to be doing a good job in carrying out the procedural mechanics of Clue No. 1 and have that participant come forward with a subject to demonstrate the mechanics to the class.***

***Resume participant practice and allow it to continue until all participants appear reasonably proficient in carrying out the mechanics of Clue No. 1.***



Instructor  
Note

***Note: This video will loop continuously until you go to the next slide.***



Video

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.



Instructor  
Note

***Demonstrate.***

Move the stimulus off to the right (checking subject's left eye) until the eye has gone as far as possible.





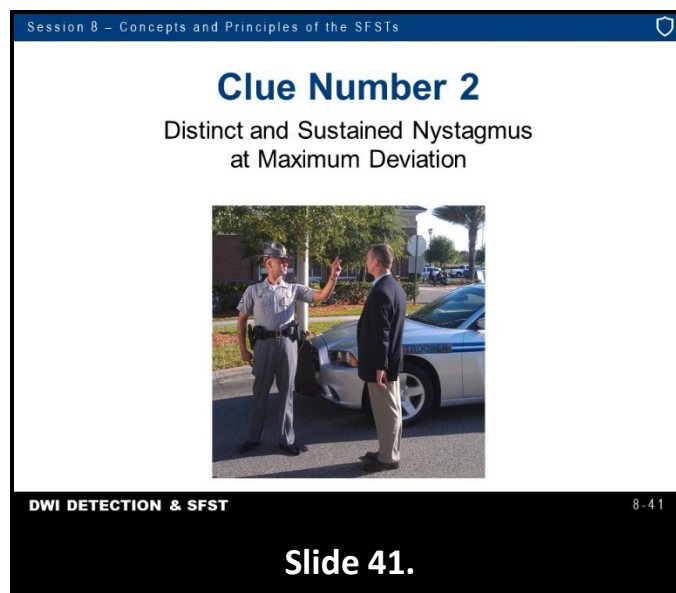
***Demonstrate holding the stimulus steadily off to the side.***

Hold the stimulus steady at that position for a minimum of four (4) seconds and carefully watch the eye.



***Point out four (4) seconds is a relatively long period of time. You cannot simply hold the eye to the side for an instant and expect to observe distinct jerking.***

Then, move the stimulus back across the subject's face all the way out to the left (subject's right eye).



Hold the stimulus steady and carefully watch the eye. If the person is impaired, the eye is likely to exhibit distinct and sustained jerking when held at maximum deviation for a minimum of 4 seconds. This type of nystagmus is different from fatigue nystagmus. Fatigue nystagmus is a result of the tiring of the eye muscles when the eyes are held at maximum deviation for at least 30 seconds. Four seconds will not cause fatigue nystagmus.



***Emphasize this point.***

In order to "count" this clue as evidence of impairment, the nystagmus must be distinct and sustained for a minimum of 4 seconds. If you think you see only slight nystagmus at this stage of the test or if you have to convince yourself nystagmus is present, then it isn't really there.



***ONCE AGAIN, EMPHASIZE OFFICER SAFETY.***

A subject with distinct and sustained nystagmus at maximum deviation, as a result of alcohol or drug impairment, experiences a reduction of visual acuity (clarity or sharpness of vision).



### ***Live Demonstration of the Mechanics of Clue No. 2***

- ***Stimulus initially positioned approximately 12 - 15 inches (30 -38 cm) in front of the participant subject's nose, slightly higher than eye level***
- ***Stimulus moved to the side, drawing the eye to its maximum deviation***
- ***Hold the stimulus steady at that point for a minimum of 4 seconds, to determine whether or not there is distinct and sustained nystagmus***
- ***Then, move the stimulus back across the subject's face all the way out to the left (subject's right eye)***
- ***Station the participant subject in a position where eyes can readily be seen by the class (It may be necessary to conduct the demonstration at two or more locations in the class.)***
- ***Hold the stimulus steady and carefully watch the eye***
- ***Articulate each step in the procedural mechanics aloud***
- ***Hold the stimulus steady at that point for a minimum of 4 seconds to determine whether or not there is distinct and sustained nystagmus***

***Solicit a participant to participate in the live demonstration.***



### ***Participant practice of the mechanics of Clue No. 2. Participant Led Demonstrations***

***Instruct each participant to practice conducting the test of maximum deviation using another participant as a subject. Practice in groups of two or three, taking turns.***

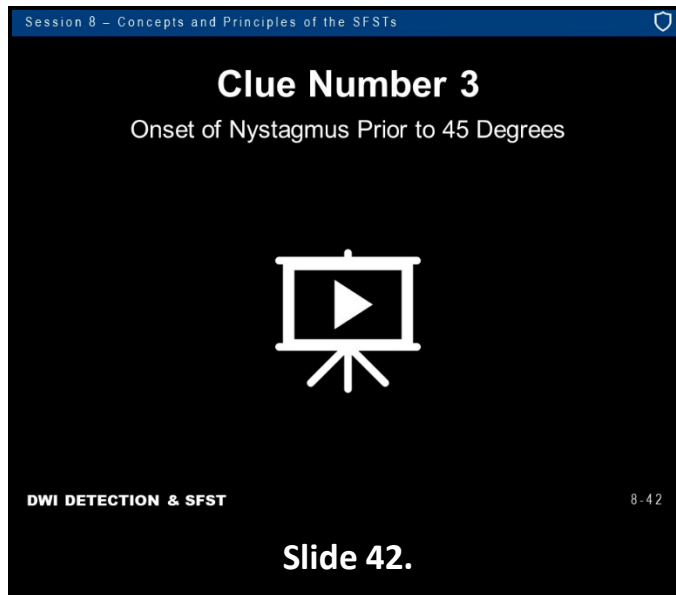


### ***Coaching and critiquing participants' practice. Common initial mistakes to note and correct:***

- ***Not bringing the eye sufficiently far to the side (some white still showing)***
- ***Not holding the object steadily for at least four seconds, at maximum deviation***

***Allow participant practice to continue until all participants appear reasonably proficient in carrying out the mechanics of Clue No. 2.***

***Solicit participants' questions concerning the procedural mechanics for Clue No. 2.***



**Note:** This video will loop continuously until you go to the next slide.



Once again, position the stimulus approximately 12 - 15 inches (30 - 38 cm) in front of subject's nose and slightly above eye level.



**EMPHASIZE OFFICER SAFETY.**

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 gaze 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.




**THE ADMINISTRATION OF HGN IS NOT TO BE USED TO QUANTIFY A SPECIFIC BAC AT THIS LEVEL OF TRAINING.**

A subject with an angle of onset of nystagmus prior to 45 degrees, as a result of alcohol or drug impairment, also experiences a reduction of visual acuity (clarity or sharpness of vision).

Session 8 – Concepts and Principles of the SFSTs

## Clue Number 3

Onset of Nystagmus Prior to 45 Degrees



DWI DETECTION & SFST 8-43

**Slide 43.**

It is not difficult to determine when the eye has reached the 45-degree point, but it does require some practice.




***Instruct participants whatever distance you position the stimulus from the nose, you will reach 45 degrees when you have moved the stimulus an equal distance to the side. (i.e., If you start with the stimulus 12 inches from the nose, move it 12 inches to the side.) QUANTIFY A SPECIFIC BAC AT THIS LEVEL OF TRAINING.***

If you start with the stimulus approximately 12 - 15 inches (30 - 38 cm) directly in front of the nose, you will reach 45 degrees when you have moved the stimulus an equal distance to the side. At 45 degrees, some white usually will still be visible in the corner of the eye (for most people). Some people's eyes may not exhibit white in the corner at 45 degrees.

---

Session 8 – Concepts and Principles of the SFSTs

## Mechanics of Clue Number 3



DWI DETECTION & SFST 8-44

**Slide 44.**

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 again with the subject's left eye. The stimulus should be moved at a speed that takes approximately 4 seconds or more to travel from center to approximately 45 degrees. Moving the stimulus at a slower speed aids the officer in observing when the eye first begins to jerk.



***Demonstrate stopping the stimulus and holding it steady.***

As you are slowly moving the stimulus, watch the eye carefully for any sign of jerking.



***Demonstrate movement at that speed.***

When you see the eye jerk, stop moving the stimulus, hold it at that position, and verify the jerking continues. 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.



***Point out nystagmus doesn't go away once the eye stops moving. If the officer actually has found the point of onset, the eye will continue to jerk when the stimulus is held steady.***

When you locate the point of onset of nystagmus, stop moving the stimulus and determine whether it is prior to approximately 45 degrees.



***Live Demonstration of the Mechanics of Clue No. 3. Solicit a participant to participate in the live demonstration.***

- ***Stimulus initially positioned approximately 12 - 15 inches (30 - 38 cm) in front of participant subject's nose, slightly higher than eye level***
- ***Station the participant subject in a position where participant's eyes can readily be seen by the class (It may be necessary to conduct the demonstration at two or more locations.)***
- ***Slowly move the stimulus toward the side, watching the eye for nystagmus***
- ***Articulate each step in the procedural mechanics aloud***
- ***Stop the stimulus and hold it steady when nystagmus is first observed***
- ***Verify the jerking is continuing***
- ***Now determine whether the onset of nystagmus is prior to 45 degrees***
- ***Is there white still showing in the corner of the eye?***

***Solicit participants' questions concerning the procedural mechanics for Clue No. 3.***



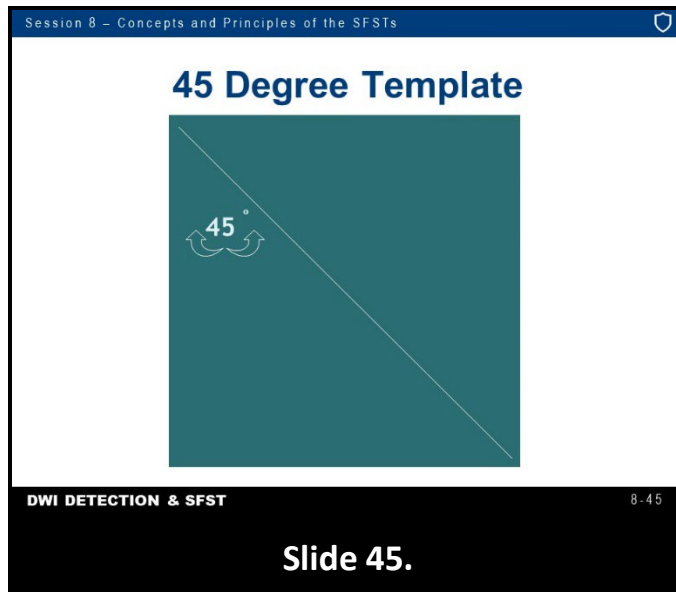
***Participant practice of the mechanics of Clue No. 3. Practice in groups of two or three, taking turns. Remind participants to move stimulus slowly.***



***Coaching and critiquing participants practice. Instruct each participant to practice conducting the test for Onset of Nystagmus Prior to 45 Degrees, using another participant as the subject. Common mistakes to note and correct:***

- ***Incorrect position of stimulus***
- ***Moving stimulus too fast***

***Participant led demonstration.***



A training aid has been provided to help you practice estimating a 45-degree angle and is located in the Participant Manual.



***Instruct participants to remove their copies of the template from their participant manuals which is located at the back of Session 8 in Attachments.***

The outline of a square, with its diagonal line, gives us a 45-degree angle. This outline, or template, is provided for practice only. **It is not to be used with actual DWI subjects.**



***Demonstrate proper placement of the template.***

To use the template, have your training partner hold the corner of the square under the nose.



***Demonstrate placement of the stimulus.***

When you line up your stimulus with the diagonal line, your partner will be looking along a 45-degree angle.



***Participant practice with 45-degree Template. Practice in groups of two or three, taking turns.***



***Instruct participants to begin by lining the stimulus up with the diagonal, so they can become familiar with the position of an eye at a 45-degree angle.***

***Point out the amount of white showing in the corner of an eye at 45 degrees. Next, instruct each participant to attempt to locate the 45-degree point without using the template, then to raise the template to check the accuracy of the estimate.***



***Coaching and Critiquing Participants' Practice. Common initial mistakes to note and correct:***



- ***Failing to check for white in the corner of the eye***
- ***Tending to stop short of 45 degrees***



***Participant led Demonstration. Choose a participant who appears to be doing a good job in estimating a 45-degree angle and have the participant come forward to demonstrate to the class.***




***Resume participant practice and allow it to continue until all participants appear reasonably proficient in carrying out the mechanics of Clue No. 3.***



Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus Test Criterion

4 or more clues indicates  
BAC above 0.08 (88% accurate)



DWI DETECTION & SFST 8-46

**Slide 46.**

Based upon the original developmental research into HGN, the criterion for this test is 4. If a person exhibits at least 4 out of the possible 6 clues, the implication is a BAC above 0.08. Using this criterion, the test is 88% accurate.



***Remind participants the SFST field evaluation study conducted in San Diego in 1998 indicated “HGN alone provides valid indications to support arrest decisions at 0.08 BAC.” These percentages were obtained from experienced SFST personnel. With experience, properly administering and interpreting the SFSTs in a systematic and standardized manner, officers can obtain results similar to the studies mentioned above. Remind participants this validation applies only when:***

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

***Test Demonstration. Choose a participant to serve as a demonstration subject.***

***Advance to next slide to conduct demonstration.***

Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures

1. Check for eyeglasses
2. Verbal instructions
3. Position stimulus (12-15 inches and slightly above eye level)
4. Check for Equal Pupil Size and Resting Nystagmus
5. Check for Equal Tracking

DWI DETECTION & SFST 8-47

**Slide 47.**

Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures

6. Lack of Smooth Pursuit
7. Distinct and Sustained Nystagmus as Maximum Deviation
8. Onset of Nystagmus Prior to 45 Degrees
9. Total the clues
10. Check for Vertical Nystagmus

DWI DETECTION & SFST 8-48

**Slide 48.**

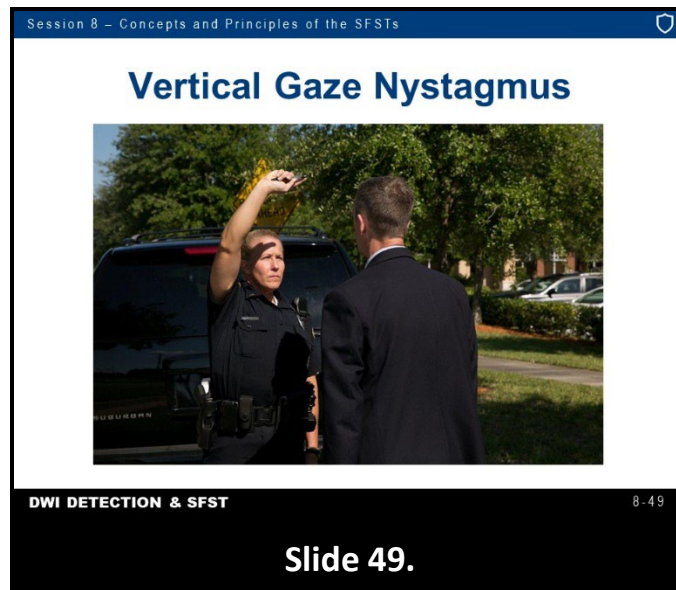


***Conduct a complete test of that participant subject, articulating every step in the testing sequence.***

***Upon completion of the demonstration, solicit participants' questions concerning HGN.***

***If time permits, conduct another complete demonstration of HGN, using another participant.***

## D. Vertical Gaze Nystagmus (VGN)



The VGN test is simple to administer. Look for jerking when the eyes are held at maximum elevation for a minimum of four seconds.

- Position the stimulus horizontally, approximately 12 - 15 inches in front of the subject's nose
- Instruct the subject to hold the head still and follow the 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
- Conduct this check at least twice



***Point out VGN was not examined in the original research that led to the validation of the SFSTs (HGN, WAT, and OLS).***



***Select a participant or another instructor to serve as a subject and demonstrate the Vertical Nystagmus test.***



***Remind the participants to make two checks for VGN.***

***Participant led demonstration. Practice in groups of two or three, taking turns.***

***Coaching and critiquing participants practice. Instruct each participant to practice conducting the test for VGN, using another participant as the subject.***

***Common mistakes to note and correct:***

- ***Incorrect position of stimulus (Not at maximum elevation)***
- ***Failure to hold stimulus at maximum deviation for four seconds***

For VGN to be recorded, it must be distinct and sustained for a minimum of four seconds at maximum elevation. VGN may be present in subjects under the influence of high doses of alcohol for that individual, and some other drugs.

---


## E. E. Walk and Turn

Session 8 – Concepts and Principles of the SFSTs

### Walk and Turn

Divided Attention Test  
Mental Task and Physical Task

- Instruction stage
- Walking stage



DWI DETECTION & SFST 8-50

**Slide 50.**

*Test Stages:* Like all divided attention tests, WAT has two stages. They are: Instruction stage and Walking stage. Both stages are important because they can affect the subject's overall performance on the test.

*Test Conditions:* Whenever possible, the WAT test should be conducted on a reasonably dry, hard, level, non-slippery surface. There should be sufficient room for subjects to complete nine heel-to-toe steps. Field validation studies have indicated varying environmental conditions have not affected a subject's ability to perform this test. Standardizing this test for every type of road condition is unrealistic. The original research study recommended this test be performed on a dry, hard, level, non-slippery surface and relatively safe conditions. If not, the research recommends: 1) subject be asked to perform the test elsewhere, or 2) only HGN be administered.

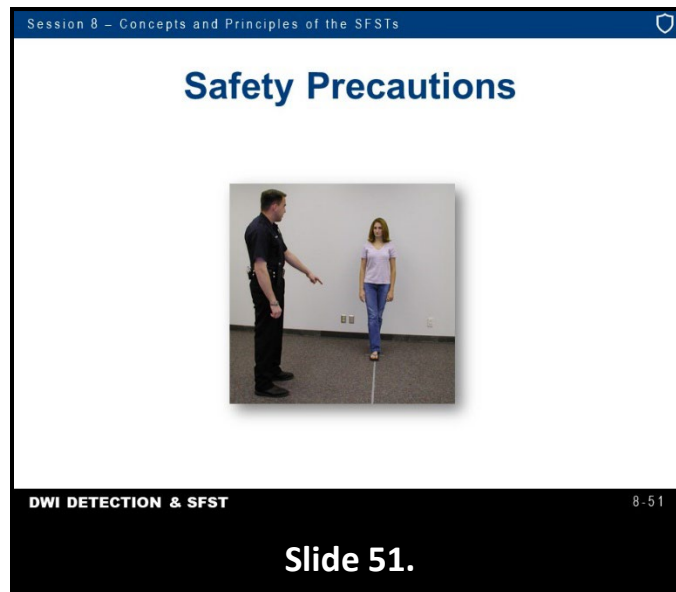
The original SCRI studies suggested individuals over 65 years of age or people with back, leg, or inner ear problems had difficulty performing this test. Less than 1.5% of the test subjects in the original studies were over 65 years of age. Also, the SCRI studies suggest individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes. Officers should consider all factors when conducting SFSTs.



***Stress to participants to consider age along with environmental factors, location, injury, or physical ailments while administering this test. The importance of the totality of all factors should not be overlooked.***

***Point out subjects with heels two inches or more or any other form of unusual footwear (i.e., flip flops, platform shoes, etc.) should be afforded the opportunity to remove that footwear prior to the test.***

***Remind participants prior to administering psychophysical tests to ask the subject if they have any physical problems or disabilities.***



***Emphasize the officer should not turn his/her back to the subject for safety reasons.***

Officers should be mindful of safety precautions when providing instructions for the WAT. By demonstrating the test perpendicular to the subject's "line" and initiating the demonstration with the subject to the left of the officer, the officer will properly demonstrate the turn WITHOUT turning his/her back to the subject. Officers should always be aware of their surroundings and environment when conducting DWI roadside investigations.

Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures Instruction Stage

**Verbal Instructions**

- Assume heel-to-toe stance
- Arms down at sides
- Don't start until told

DWI DETECTION & SFST 8-52

**Slide 52.**

For standardization in the performance of this test, have the subject assume the heel-to-toe stance by giving the following verbal instructions, accompanied by demonstrations.

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



***Demonstrate placement of left foot.***

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



***Demonstrate placement of both feet.***

- Place your arms down at your sides.



***Demonstrate placement of arms at sides.***

- Maintain this position until I have completed the instructions. Do not start to walk until told to do so.
- Do you understand the instructions so far? (Make sure subject indicates understanding.)



***Emphasize officer must receive some affirmative response before continuing.***

Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures Walking Stage

- Nine heel-to-toe steps, turn, nine heel-to-toe steps
- Turn procedures:
  - Turn around on the line
  - Several small steps

DWI DETECTION & SFST 8-53

**Slide 53.**



***A straight line must be available for this and subsequent demonstrations. A strip of masking tape on the floor of the classroom will prove suitable continuing.***

Explain the test requirements by giving the following instructions, accompanied by demonstrations:

- When I tell you to start, take nine heel-to-toe steps on the line, turn, and take nine heel-to-toe steps down the line.



***Demonstrate a minimum of three heel-to-toe steps.***

- When you turn, keep the front (lead) foot on the line, and turn by taking a series of small steps with the other foot, like this.



***Demonstrate the turn and a minimum of three heel-to-toe return steps.***

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



***Instructor's demonstration (repeat if necessary).***

If the subject does not count out loud or watch his/her feet, remind him/her to perform these tasks. This interruption will not affect the validity of the test and is essential for evaluating divided attention.




***Instruct the participants there may be instances when the officer may have to remind the subject the first step taken from the heel-to-toe position is step one.***

Session 8 – Concepts and Principles of the SFSTs

### Instruction Stage Clues

- Cannot keep balance while listening to instructions
- Starts too soon



DWI DETECTION & SFST 8-54

**Slide 54.**

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

Cannot keep balance while listening to the instructions. Two tasks are required at the beginning of this test. The subject must balance heel-to-toe on the line, and at the same time, listen carefully to the instructions. Typically, the person who is impaired can do only one of these things. The subject may listen to the instructions, but not keep balance. Record this clue if the subject does not maintain the heel-to-toe position throughout the instructions. (Feet must actually break apart or step off the line.) Do not record this clue if the subject sways or uses the arms to balance but maintains the heel-to-toe position.



***Instructor may break away from the heel-to-toe stance at this point.***

***Demonstrate actions that constitute “Cannot keep balance while listening to instructions” and demonstrate other actions that do not justify recording this clue.***

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.





Instructor  
Note

***Emphasize this clue can't be recorded unless subject was told not to start walking until directed to do so.***


***Stress these first two clues, like all clues in this test, can be accumulated only once.***

***Demonstrate.***

Session 8 – Concepts and Principles of the SFSTs

### Walking Stage Clues

- Stops while walking
- Does not touch heel-to-toe
- Steps off the line
- Uses arm(s) to balance
- Improper turn
- Incorrect number of steps



DWI DETECTION & SFST 8-55

**Slide 55.**

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



Instructor  
Note

***Emphasize it is because of this clue that it is important to inform the subject not to stop walking once the test begins.***

***Also emphasize a stop should be clear and deliberate and it could be attributed to a number of things, i.e., trying to regain balance, problems with divided attention, or problems remembering the instructions. For this clue, officers may need to articulate the suspected reason for the stop in their report.***

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

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

Uses arm(s) to balance. The subject raises one or both arms six or more inches from the sides in order to maintain balance.



***Point out a movement of the arms of six or more inches from the side is required to record this clue.***

***Demonstrate each of these clues.***

***Point out it is often possible to note two of these clues simultaneously.***

***Examples: (Demonstrate)***

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.



***Inform the participants there may be times when the subject takes a wrong number of steps or begins the heel-to-toe walk with the wrong foot resulting in a turn on the right foot instead of the left. If this occurs the subject would normally be assessed a clue for an incorrect number of steps and not assessed a clue for an improper turn if the turn was made using a series of small steps as instructed and the subject did not lose his/her balance while attempting the turn. This recording is consistent with the original research and training conducted by the SCRI and with the administration and recording of the WAT test in the San Diego Field Study.***

***Demonstrate various ways of turning incorrectly (i.e., pivots, spins).***

Incorrect number of steps. Record this clue if the subject takes more or fewer than nine steps in either direction.



***Emphasize it is the number of steps the subject physically takes that matters here. Mistakes in the verbal count do not justify recording this clue.***

Session 8 – Concepts and Principles of the SFSTs

## 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.

DWI DETECTION & SFST 8-56

**Slide 56.**

If subject can't do the test, record observed clues and document the reason for not completing the test, e.g., subject's safety.



***Emphasize officers should be prepared to explain in court why the subject could not complete the test.***

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


Subject gets into a "leg lock" position (legs crossed, unable to move.) If the subject has difficulty with the test (for example, steps off the line), continue from that point, not from the beginning. This test may lose its sensitivity if it is repeated several times. Observe the subject from a safe distance and limit your movement which may distract the subject during the test. **Always consider officer safety.**

---

Session 8 – Concepts and Principles of the SFSTs

## Walk and Turn Test Criterion

2 or more clues indicates BAC  
at or above 0.08 (79% accurate)



DWI DETECTION & SFST 8-57

**Slide 57.**

Based on research, if the subject exhibits two or more clues on this test or cannot 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.



***This accuracy level was determined through the San Diego Study. These percentages were obtained from experienced SFST personnel. With experience, properly administering and interpreting the SFSTs in a systematic and standardized manner, officers can obtain results similar to the studies mentioned above. Remind participants this validation applies when:***

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

**Source:**

Stuster, J., & Burns, M. (1998, August). *Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent*. Santa Barbara, CA: Anacapa Sciences, Inc.

**Review of Divided Attention Definition:** WAT is a field sobriety test based on the important concept of divided attention.



***Pose this question: "What driving skills are assessed during the WAT test?" Lead the discussion, as these items were previously identified in Session 7.***

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.



## Walk and Turn Test Demonstration



DWI DETECTION &amp; SFST

8-58

**Slide 58.**

***Select a participant to participate as a subject in the demonstration. Use precise language to direct the participant subject to assume the instructions stance. Tell the participant subject to assume the instructions stance. Make sure directions are understood. Tell the participant subject not to start walking until told to do so. Tell the participant subject of the requirement to take nine heel-to-toe steps, to turn, and to take another nine heel-to-toe steps. Demonstrate several heel-to-toe steps. Tell the participant subject of the required turn procedures. Demonstrate the proper turn. Demonstrate the turn. Give the participant subject the final verbal instructions:***

- ***Keep watching feet***
- ***Count steps out loud***
- ***Arms at sides***
- ***Don't stop walking until test is completed***

***Ask participant subject if instructions are understood. Clarify any parts that are not understandable.***

***At this point, do not instruct the participant subject to execute the test. Rather, thank the participant subject for participating and allow the participant to return to the seat. Solicit participants' questions concerning the test administrative procedures.***



***Choose a participant to serve as a demonstration subject. Conduct a complete test of the participant subject, carefully carrying out all of the administrative procedures. Refer to the WAT administrative procedures in the Participant Manual. Have the participant subject actually perform the walking stage of the test.***

***Discuss the participant subject's performance in terms of the test recording factors. Refer to the WAT clues in the Participant Manual. If time permits, conduct another demonstration using another participant subject.***


***Have the participants divide into pairs and practice the WAT Test.***

## F. One Leg Stand

Session 8 – Concepts and Principles of the SFSTs

### One Leg Stand

Divided Attention Test  
Mental Task and Physical Task



- Instruction stage
- Balance and counting stage

DWI DETECTION & SFST 8-59

**Slide 59.**



***Remind participants prior to administering this test to check if the subject has any physical problems or disabilities.***

Like all divided attention tests, OLS has two stages. They are: Instruction stage and Balance and Counting stage. Both stages are important because they can affect the subject's overall performance on the test.

**Test Conditions:** Whenever possible, the OLS test should be conducted on a reasonably dry, hard, level, and non-slippery surface. Subject's safety should be considered at all times. Standardizing this test for every type of road condition is unrealistic. The original research study recommended this test be performed on a dry, hard, level, non-slippery surface and relatively safe conditions. If not, the research recommends: 1) subject be asked to perform the test elsewhere; or 2) only HGN be administered. However, field validation studies have indicated that varying environmental conditions have not affected a subject's ability to perform this test.

The original SCRI studies suggested individuals over 65 years of age, people with back, leg or inner ear problems, or people who are overweight by 50 or more pounds may have difficulty performing this test. Less than 1.5% of the test subjects in the original studies were over 65 years of age.

There was no data containing the weight of the test subjects included in the final report. Also, the SCRI studies suggest individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes.



***Stress to participants to consider age and excessive weight along with environmental factors, location, injury, or physical ailments while administering this test. The importance of the totality of all factors should not be overlooked.***


***Point out subjects with any form of any unusual footwear (i.e., flip flops, platform shoes, etc.) should be afforded the opportunity to remove that footwear prior to the test.***

---

Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures Instruction Stage

- Stand straight, feet together
- Keep arms at sides
- Maintain position until told otherwise



DWI DETECTION & SFST 8-60

**Slide 60.**

Initiate the test by giving the following instructions, accompanied by demonstrations.

- Please stand with your feet together and your arms down at the sides, like this.



***Demonstrate placement of both feet and placement of arms at sides.***

- Do not start to perform the test until I tell you to do so.
- Do you understand the instructions so far?




***Emphasize officer must receive some affirmative response before continuing.***



Session 8 – Concepts and Principles of the SFSTs

## Administrative Procedures Balance and Counting Stage



DWI DETECTION & SFST 8-61

**Slide 61.**

Explain the test requirements using the following verbal instructions accompanied by demonstrations:

- When I tell you to start, raise either leg with the foot approximately six inches off the ground, keeping your foot parallel to the ground.



***Demonstrate this position.***

- Keep both legs straight and your arms at your side.
- While holding that position, count out loud in the following manner: “one thousand one, one thousand two, one thousand three,” and so on until told to stop.



***Demonstrate a count, as follows: "one thousand one, one thousand two, one thousand three, etc." Officer should not look at his/her foot when conducting the demonstration - OFFICER SAFETY.***

- Keep your arms at your sides at all times and keep watching the raised foot.
- Do you understand?



***Make sure subject indicates understanding and answer any questions the subject may have about the test.***

- Go ahead and perform the test. (Officer should always time the 30 seconds. Test should be discontinued after 30 seconds.)

Observe the subject from a safe distance. Although not part of the administrative procedures, 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.

Session 8 – Concepts and Principles of the SFSTs

## One Leg Stand Test Clues

- Sways while balancing
- Uses arm(s) to balance

DWI DETECTION & SFST8-62

Slide 62.

You may observe a number of different behaviors when a subject performs this test. The original research found the behaviors listed below are the most likely to be observed in someone with a BAC at or above 0.08. When administering the OLS test, we look for certain specific behaviors. Each behavior or action is considered one clue. There is a maximum number of 4 clues on this test. Look for the following clues each time the OLS test is administered.

The subject sways while balancing – This refers to side to side or back and forth motion of the body, or a swaying motion of the foot, while the subject maintains the OLS position.



***Emphasize swaying means a distinct, noticeable side to side or front to back movement of the elevated foot or of the subject's body.***

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



***Demonstrate swaying.***

Uses arm(s) to balance – Subject moves one or both arm(s) 6 or more inches from the side of the body in order to keep balance.



***Point out a movement of the arms of six inches or more from the side is sufficient to record this clue.***

***Demonstrate uses arm(s) to balance.***

Session 8 – Concepts and Principles of the SFSTs

## One Leg Stand Test Clues

- Hopping
- Puts foot down

DWI DETECTION & SFST 8-63

**Slide 63.**

Hopping – Subject is able to keep one foot off the ground, but resorts to hopping in order to maintain balance.



***Demonstrate hopping.***

Puts foot down – The subject is not able to maintain the OLS position, putting the foot down one or more times during the 30 second count.



***Demonstrate putting the foot down.***

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.



***Test should be discontinued after 30 seconds. Point out it is possible to note two clues simultaneously. Examples (Demonstrate):***

- ***Hopping and swaying***
- ***Foot down and arms raised***

If subject can't do the test, record observed clues and document the reason for not completing the test, e.g. subject's safety.




***Emphasize officers should be prepared to explain in court why the subject could not complete the test.***

Remember time is critical in this test. The original SCRI research has shown a person with a BAC above 0.10 can maintain balance for up to 25 seconds, but seldom as long as 30.

Session 8 – Concepts and Principles of the SFSTs

## One Leg Stand Test Criterion

2 or more clues indicates BAC  
at or above 0.08 (83% accurate)



DWI DETECTION & SFST 8-64

**Slide 64.**

Based on research, if an individual shows two or more clues or cannot complete the OLS, there is a good chance the BAC is at or above 0.08. Using that criterion, you will accurately classify 83% of the people you test as to whether their BAC's are at or above 0.08.



***This accuracy level was determined through the San Diego Study. These percentages were obtained from experienced SFST personnel. With experience, properly administering and interpreting the SFSTs in a systematic and standardized manner, officers can obtain results similar to the studies mentioned above. Remind participants this validation applies only when:***

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

**Source:**

Stuster, J., & Burns, M. (1998, August). *Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent*. Santa Barbara, CA: Anacapa Sciences, Inc.

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. Terminate the test after 30 seconds.

*Review of Divided Attention Definition:* OLS is another field sobriety test that employs divided attention. The subject's attention is divided among such simple tasks as balancing, listening, and counting out loud. Although none of these is particularly difficult in itself, the combination can be very difficult for someone who is impaired.



***Test Demonstrations. Choose a participant to serve as a demonstration subject.***

***Conduct a complete test of the participant subject, carefully articulating the verbal instructions.***

***Discuss the participant subject's performance in terms of the test recording factors. If time permits, conduct another demonstration using another participant subject.***


***Refer to the OLS clues in the Participant Manual.***

***Have the participants divided into pairs and practice the OLS.***

## G. Taking Field Notes on the Standardized Field Sobriety Tests

Session 8 – Concepts and Principles of the SFSTs

### Taking Field Notes on the SFSTs



DWI DETECTION & SFST

8-65

### Slide 65.

For purposes of the arrest report and courtroom testimony, it is not enough to report the number of clues on the three tests. The numbers are important to the police officer in the field because they help determine whether there is probable cause to arrest. But to secure a conviction, more descriptive evidence is needed. The officer must be able to describe how the subject performed on the tests and what the subject did. The standard note taking guide is designed to help develop a clear description of the subject's performance on the tests.



***Instruct the participants to take out a copy of the note taking guide to follow along with this discussion.***

Session 8 – Concepts and Principles of the SFSTs

## Medical Assessment

Equal Pupils	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Equal Tracking	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Resting Nystagmus	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other _____		

DWI DETECTION & SFST

8-66

Slide 66.

The initial checks of the subject's eyes include several particularly important steps, which include: Equal Pupil Size, Equal Tracking, and Resting Nystagmus. Enter those results here.

Equal Pupils	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Equal Tracking	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Resting Nystagmus	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other _____		

In the section labeled "other", record any facts, circumstances, conditions or observations that may be relevant to this procedure. Examples of additional evidence of impairment emerging while checking for nystagmus: Subject unable to keep head still; Subject swaying noticeably; Subject utters incriminating statements.



***Give examples of facts, circumstances, etc., that should be noted in this section of the note taking guide (i.e., Resting Nystagmus).***

***Ask participants to give additional examples of facts, circumstances, etc., that should be noted.***



***Emphasize officers must be careful to place their check marks in the columns corresponding to the eye actually being checked.***

Session 8 – Concepts and Principles of the SFSTs

## Horizontal Gaze Nystagmus

LEFT	RIGHT

- Lack of a smooth pursuit
- Distinct and sustained Nystagmus at max dev
- Onset of Nystagmus prior to 45 degrees

DWI DETECTION & SFST

8-67

Slide 67.

Complete the entire procedure for both eyes, checking "yes" or "no" for each clue. Check box (✓) if the clue is present. For standardization, test the subject's left eye first. Then, check for the same clue in the right eye. If clue is not present, leave box blank. After both eyes have been completely checked, total the number of HGN clues observed. Examples of conditions that may interfere with subject's performance while checking for nystagmus: Wind, dust, etc. (irritating subject's eyes). NOTE: Try to face subject away from flashing or strobe lights that could cause visual or other distractions that could impede the test.

Session 8 – Concepts and Principles of the SFSTs

## Walk and Turn

**WALK AND TURN**

INSTRUCTION STAGE

CANNOT KEEP BALANCE

STARTS TOO SOON

WALKING STAGE

STOPS WALKING

MISSES HEEL-TO-TOE

STEPS OFF LINE

USES ARM(S) TO BALANCE

ACTUAL STEPS TAKEN

FIRST NINE STEPS

SECOND NINE STEPS

IMPROPER TURN (Describe) \_\_\_\_\_

CANNOT COMPLETE TEST (EXPLAIN) \_\_\_\_\_

OTHER: \_\_\_\_\_

DWI DETECTION & SFST

8-68

Slide 68.

The section on the WAT test appears at the top of the guide's back side. First two clues are checked only during the instruction stage. In the boxes provided, either record the number or enter a check (✓) if the clue is present. Example: if subject loses balance twice during the instruction stage, place two check marks (✓) or a "2" in the box.





***Remind participants the clue "loses balance during instructions" is recorded only if the subject's feet "break apart".***

Example: If the subject does not start too soon, write "N/A" in that box.



***Emphasize participants should not leave a box blank if the clue doesn't appear, they should indicate that by writing "N/A".***

Record the next four clues separately for each nine steps. If subject stops walking, record it by drawing a vertical line from the toe at the step at which the stop occurred and place a letter "S" at bottom of vertical line to indicate "stops walking". Do this for each of the nine steps. How many times during first nine steps? How many times during second nine steps?



***Remind participants, if subject stops walking even once, that will count as one clue; but in order to prepare a clear, descriptive arrest report, it is best to document how many times subject paused while walking.***

If subject fails to touch heel-to-toe, record how many times this happens and place a letter "M" at bottom of vertical line to indicate missed heel-to-toe.

If subject steps off the line while walking, record it by drawing a line from the appropriate footprint at the angle in the direction in which the foot stepped. Do this for each nine steps. If subject uses arm(s) to balance, give some indication of how often or how long this happens. Example: subject raised arms from sides three times. Place three check marks (✓) or a "3" in the box.

Record the actual number of steps taken by subject, in each direction. If the subject takes additional steps, draw in the additional steps to reflect the actual number of steps taken. If the subject takes less than nine steps, place an (x) in the missing steps.



***Record the actual number of steps taken. "Incorrect number of steps" is the validated clue.***

For the next clue, "Improper Turn," record a description of the turn.

- Example: turned incorrectly
- Example: stumbled, to left
- Example: wrong direction
- Example: no small steps
- If the turn is correct, note: N/A

If the subject is unable to safely complete the test, you may stop the test early. Document the reasons the test was stopped.

Officers are not limited to only documenting the above evidence during the test. Officers are encouraged to record sufficient evidence to deliver effective testimony in court.

At end of the test, examine each factor and determine the total number of clues recorded.



***Remind participants, even if a clue shows up more than once, each clue is counted only once.***

In the section labeled "other", record any facts, circumstances, conditions, or observations that may be relevant to this test.

Examples of additional evidence of impairment emerging during WAT test.



***Give examples of facts, circumstances, etc., that should be noted in this section of the note taking guide.***

- ***Subject verbally miscounts steps***
- ***Subject utters incriminating statements***

Examples of conditions that may interfere with subject's performance of the WAT test are wind/weather conditions, subject's age, and subject's footwear.



***Ask participants to give additional examples of facts, circumstances, etc., that should be noted.***

***Subjects with heels 2" or higher should be given the opportunity to remove their footwear. Point out subjects with heels two inches or more or any other form of unusual footwear (i.e., flip flops, platform shoes, etc.) should be afforded the opportunity to remove that footwear prior to the test.***

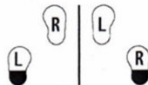
Session 8 – Concepts and Principles of the SFSTs

## One Leg Stand Field Notes

ONE LEG STAND

L	R

Sways while balancing  
 Uses arm(s) to balance  
 Hopping  
 Puts foot down



Type of Footwear

OTHER: \_\_\_\_\_

**Slide 69.**

Record the subject's performance separately. For each clue, record how often it appears with a check mark (✓).



***Point out, by recording when things happen as well as what happens, a more descriptive arrest report can be prepared.***

If subject sways, indicate how often with a (✓) check mark.

Indicate above the feet the number they were counting when they put their foot down.

Place check marks (✓) or a number in or near the small boxes to indicate how many times you observed each of the clues. In addition, if the subject puts the foot down during the test, record when it happened. To do this, write the count number at which the foot came down.



***Demonstrate the proper documentation for observed clues.***

For example, suppose, when standing on the left leg, the subject lowered the right foot at a count of "one thousand thirteen," and again at "one thousand twenty."

If subject uses arm(s) to balance, indicate how often arms were raised.

If subject is hopping, indicate how many hops were taken.

If subject puts foot down, indicate how many times the foot came down.



***Remind participants, even if a clue shows up more than once, each clue is counted only once.***

***Remind participants "number" of clues is utilized only for administrative purposes and for courtroom testimony a complete description of each clue observed is essential.***

In the section labeled "Type of Footwear", record the type of footwear worn.

In the section labeled "other", record any facts, circumstances, conditions, or observations that may be relevant to this test. Examples of additional evidence of impairment emerging during OLS test: Subject verbally miscounts 30 seconds; Subject utters incriminating statements.



***Ask participants to give additional examples of facts, circumstances, etc., that should be noted. Give examples of facts, circumstances, etc., that should be noted in this section of the note taking guide (i.e., untied shoelaces, removed footwear, etc.). Examples of conditions that may interfere with subject's performance of OLS:***

- ***Wind/Weather conditions***
- ***Subject's age***
- ***Weight***
- ***Subject's footwear***

***Subjects with heels 2" or higher should be given the opportunity to remove their footwear. Point out subjects with heels two inches or more or any other form of unusual footwear (i.e., flip flops, platform shoes, etc.) should be afforded the opportunity to remove that footwear prior to the test.***

***Solicit participants' questions concerning field note taking.***

At end of the test, examine each factor and determine how many clues have been recorded. Remember, each clue may appear several times, but still only constitutes one clue. Officers who are video recording the SFSTs may choose to document any observed clues by voicing them into the recording as the clues are observed. If the subject is unable to safely complete the test, you may stop the test early. Document the reason(s) the test was stopped.



**Questions?**

**Slide 70.**



## Test Your Knowledge

1. WAT is an example of a \_\_\_\_\_-attention field sobriety test.
2. The WAT requires a real or imaginary line, and a reasonably \_\_\_\_\_, non-slippery surface.
3. During the \_\_\_\_\_ stage of the WAT, the subject is required to count their steps out loud.

DWI DETECTION &amp; SFST

8-71

**Slide 71.**

### Test Your Knowledge

1. WAT is an example of \_\_\_\_\_ - attention field sobriety test.
2. The WAT requires a real or imaginary line, and a reasonably \_\_\_\_\_, non-slippery surface.
3. During the \_\_\_\_\_ stage of the WAT, the subject is required to count their steps out loud.



- 1. A divided attention**
- 2. dry, hard, level**
- 3. Walking**



## Test Your Knowledge

4. Based upon the San Diego study, the WAT test can determine whether a subject's BAC is above or below 0.08, \_\_\_\_\_ % of the time
5. In the WAT test, a subject who steps off the line during the first 9 steps and once again during the second 9 steps and who uses arm(s) to balance twice during the second 9 steps has produced \_\_\_\_\_ distinct clue(s).

DWI DETECTION &amp; SFST

8-72

### Slide 72.

4. Based upon the San Diego study, the WAT test can determine whether a subject's BAC is above or below 0.08, \_\_\_\_\_ % of the time.

5. In the WAT test, a subject who steps off the line during the first 9 steps and once again during the second 9 steps and who uses arm(s) to balance twice during the second nine steps has produced \_\_\_\_\_ distinct clue(s).

**4. 79%****5. Two**



## Test Your Knowledge

6. The WAT test has \_\_\_\_\_ possible clues.
7. During the \_\_\_\_\_ stage of the OLS test the subject must maintain balance while standing on one foot
8. The OLS test requires the subject keep the foot raised for \_\_\_\_\_ seconds.

DWI DETECTION &amp; SFST

8-73

### Slide 73.

6. The WAT test has \_\_\_\_\_ possible clues.
7. During the \_\_\_\_\_ stage of the OLS test the subject must maintain balance for 30 seconds.
8. The OLS requires the subject keep the foot elevated for \_\_\_\_\_ seconds.

**6. 8****7. Balance and counting****8. 30**





## Test Your Knowledge

9. Based upon the San Diego study, the OLS test can determine whether a subject's BAC is above or below 0.08, \_\_\_\_\_ % of the time
10. In the OLS test, a subject who sways has produced \_\_\_\_\_ clue(s)
11. In the OLS test, a subject who uses arm(s) to balance, is hopping, and puts foot down has produced \_\_\_\_\_ clue(s).

DWI DETECTION &amp; SFST

8-74

### Slide 74.

9. Based upon the San Diego study, the OLS test can determine whether a subject's BAC is above or below 0.08, \_\_\_\_\_ % of the time.
10. In the OLS test, a subject who sways has produced \_\_\_\_\_ clue(s).
11. In the OLS test, a subject who uses arm(s) to balance, is hopping, and puts foot down has produced \_\_\_\_\_ clue(s).



Instructor  
Note

**9. 83%**

**10. One**

**11. Three**



## Test Your Knowledge

12. The maximum number of clues for HGN that can appear in one eye is \_\_\_\_\_.
13. Based upon the San Diego study, the HGN test can determine whether a subject's BAC is above 0.08, \_\_\_\_\_ % of the time.
14. The third clue of HGN is an Onset of Nystagmus Prior to \_\_\_\_\_ Degrees.

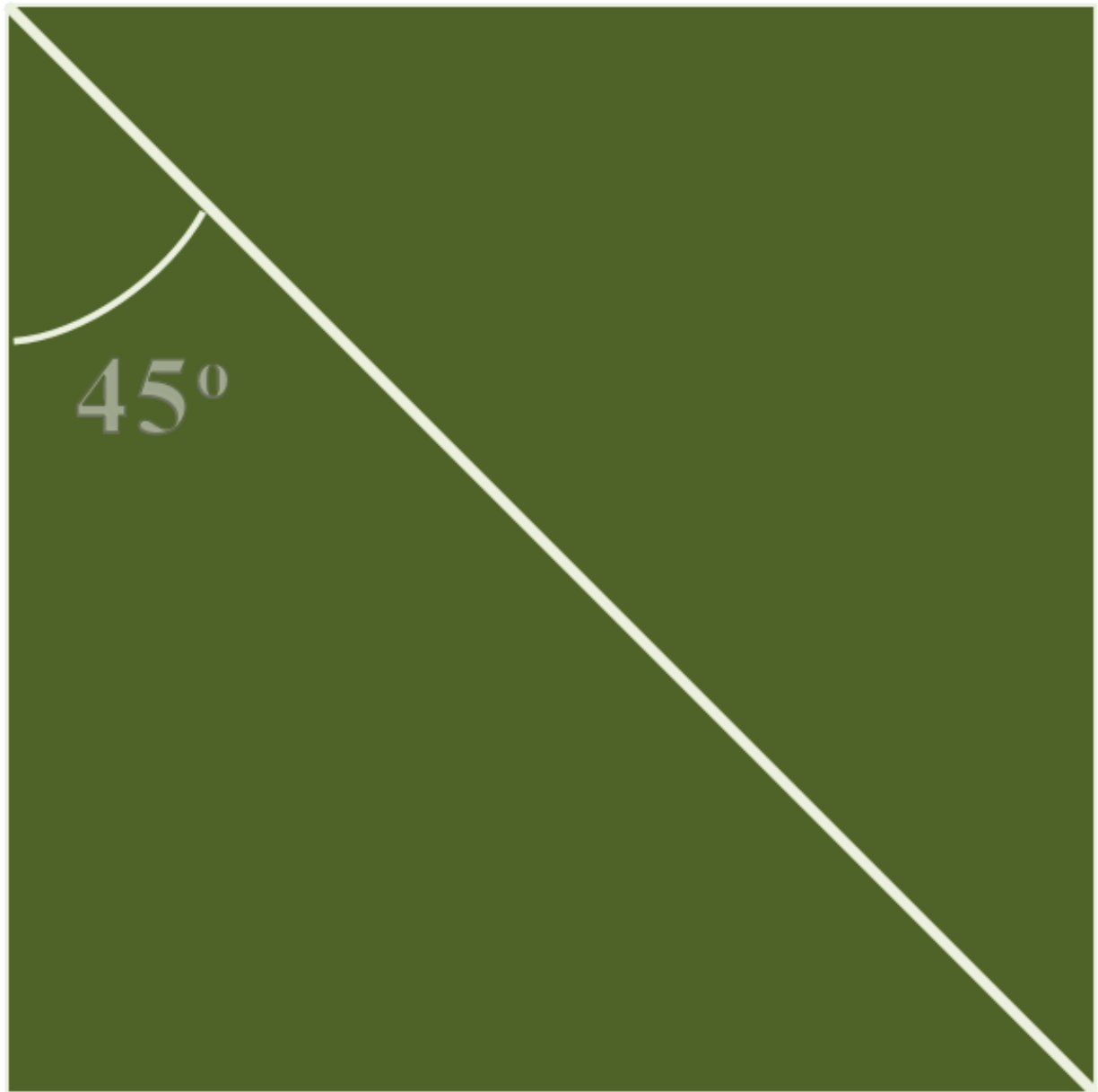
DWI DETECTION &amp; SFST

8-75

### Slide 75.

12. The maximum number of clues for HGN that can appear in one eye is \_\_\_\_\_.
13. Based upon the San Diego study, the HGN test can determine whether a subject's BAC is above 0.08, \_\_\_\_\_% of the time.
14. The third clue of HGN is an Onset of Nystagmus Prior to \_\_\_\_\_ Degrees.

**12. Three****13. 88%****14. 45°**





# 9

## SFST

### SFST Demonstrations and Practice

#### LEARNING OBJECTIVE

- Demonstrate the appropriate administrative procedures for the Standardized Field Sobriety Tests (SFSTs)

#### CONTENTS

A. Live Classroom Demonstrations .....	4
B. Procedures and Group Assignments .....	5
C. Live Administration of SFSTs .....	6
D. Hands On Practice .....	6

#### LEARNING ACTIVITIES

- Instructor-Led Presentation
- Participant-Led Demonstration
- Participant Practice Session



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***




***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

Session 9 – SFST Demonstrations and Practice

## Learning Objective

- Demonstrate appropriate administrative procedures for SFSTs



DWI DETECTION & SFST 9-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

***Explain in this session participants will have the opportunity to observe several demonstrations of the three SFSTs. The instructors will conduct some of these demonstrations.***

***Participants will work with each other taking turns administering the SFSTs to each other. When they are not administering a test or serving as the test subject, they are expected to observe the test administrator and subsequently help critique their performance.***

***The Participant Proficiency Examination should be used to help you monitor a fellow participant's performance as a test administrator.***

***It is desirable to have at least one instructor for every six participants for this session.***

## A. Live Classroom Demonstrations

Session 9 – SFST Demonstrations and Practice

### Instructor-Led Presentation

Three tests:

- HGN and VGN
- WAT
- OLS

DWI DETECTION & SFST 9-3

**Slide 3.**



***Instructor-Led Presentation - Carefully articulate all verbal instructions and physical demonstrations. Choose a participant subject.***

***Administer the three tests to the participant-subject, in sequence.***

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

***Discuss participant-subject's test performances. Choose a second participant-subject and repeat the sequence of test administrations.***

***Participant-Led Demonstration - Choose a participant to serve as the test demonstrator. Choose another participant to serve as the test subject.***

- ***HGN and VGN***
- ***WAT***
- ***OLS***

***Monitor and critique demonstrator's administration of the three tests.***



## B. Procedures and Group Assignments

Session 9 – SFST Demonstrations and Practice

### Procedures and Group Assignments

**Practice procedures**

- HGN and VGN
- WAT
- OLS
- Participants record each other's performance

DWI DETECTION & SFST9-4

Slide 4.



***Assign participants to work in teams of three or four. Make team assignments. Each participant will conduct a complete series of tests using a fellow team member as a subject. Make sure all participants understand the practice procedures:***

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

***Team members who are not immediately participating in a series of tests (either as test administrator or as test subject) are expected to take notes on test administrator's performance and to offer constructive criticism.***

***Once one team member has administered a complete series of tests, other members of the team follow in turn.***

***Participants should use the checklist to record each other's performance. Practice is to continue until every participant has administered a complete series of the three tests at least once.***

### C. Live Administration of SFSTs



***Conduct the three SFSTs on an instructor. Participants observe technique and recording only.***

---

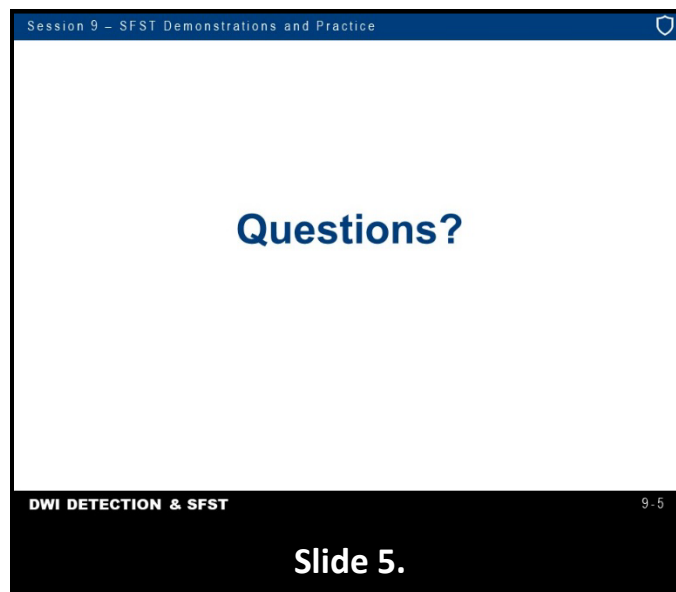
### D. Hands On Practice



***Participants carry out "dry run" practice procedures.***



***Circulate among teams to observe and coach participants' performance, as necessary.***



***Solicit and answer participant questions concerning SFST administrative procedures.***

**PARTICIPANT PROFICIENCY EXAMINATION  
STANDARDIZED FIELD SOBRIETY TESTs**

Name \_\_\_\_\_ Date \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Agency \_\_\_\_\_

**I. HORIZONTAL GAZE NYSTAGMUS**

1. \_\_\_\_\_ Have subject remove glasses if worn.
2. \_\_\_\_\_ Gives proper verbal instructions.
3. \_\_\_\_\_ Stimulus held in proper position (approximately 12"-15" from nose, just slightly above eye level).
4. \_\_\_\_\_ Check for equal pupil size and resting nystagmus.
5. \_\_\_\_\_ Check for equal tracking.
6. \_\_\_\_\_ Lack of Smooth Pursuit: Smooth movement from center of nose to maximum deviation in approximately 2 seconds and then back across subject's face to maximum deviation in right eye, then back to center.  
Check left eye, then right eye. (Repeat)
7. \_\_\_\_\_ Distinct & Sustained Nystagmus at Maximum Deviation: Eye held at maximum deviation for a minimum of 4 seconds (no white showing).  
Check left eye, then right eye. (Repeat)
8. \_\_\_\_\_ Onset of Nystagmus Prior to 45 Degrees: Eye moved slowly (approximately 4 seconds) from center to 45 angle.  
Check left eye, then right eye. (Repeat)
9. \_\_\_\_\_ Total the clues.
10. \_\_\_\_\_ Check for Vertical Gaze Nystagmus. (Repeat)

**II. WALK AND TURN**

1. \_\_\_\_\_ Instructions given from a safe position.
2. \_\_\_\_\_ Tells subject to place feet on a line in heel-to-toe manner (left foot behind right foot) with arms at sides and gives demonstration.
3. \_\_\_\_\_ Tells subject not to begin test until instructed to do so and asks if subject understands.
4. \_\_\_\_\_ Tells subject to take nine heel-to-toe steps on the line and demonstrates.
5. \_\_\_\_\_ Explains and demonstrates turning procedure.
6. \_\_\_\_\_ Tells subject to return on the line taking nine heel-to-toe steps.
7. \_\_\_\_\_ Tells subject to count steps out loud.

8. \_\_\_\_\_ Tells subject to look at feet while walking.
9. \_\_\_\_\_ Tells subject not to raise arms from sides.
10. \_\_\_\_\_ Tells subject not to stop walking once they begin.
11. \_\_\_\_\_ Asks subject if all instructions are understood.

### III. ONE LEG STAND

1. \_\_\_\_\_ Instructions given from a safe position.
2. \_\_\_\_\_ Tells subject to stand straight, place feet together, and hold arms at sides.
3. \_\_\_\_\_ Tells subject not to begin test until instructed to do so and asks if subject understands.
4. \_\_\_\_\_ Tells subject to raise one leg, either leg, approximately 6" from the ground, keeping raised foot parallel to the ground and gives demonstration.
5. \_\_\_\_\_ Tells subject to keep both legs straight and to look at elevated foot.
6. \_\_\_\_\_ Tells subject to count out loud in the following manner: one thousand one, one thousand two, one thousand three, and so on until told to stop, and gives demonstration.
7. \_\_\_\_\_ Asks subject if all instructions are understood.
8. \_\_\_\_\_ Checks actual time subject holds leg up. (Time for 30 seconds.).

Instructor: \_\_\_\_\_

Note: In order to pass the proficiency examination, the participant must explain and proficiently complete each of the steps listed.

10

SFST

Alcohol Workshop: First Session

LEARNING OBJECTIVES

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject’s performance utilizing the standard note-taking guide
- Properly interpret the subject’s performance
- Properly use and maintain the SFST Log

CONTENTS

A. Procedures .....	4
B. Hands on Practice .....	5
C. Use and Maintenance of SFST Log.....	5
D. Session Wrap Up .....	6

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Presentation
- Instructor-Led Discussion



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***



## Learning Objectives

- Properly administer SFSTs
- Properly observe and record subject's performance utilizing standard note-taking guide
- Properly interpret subject's performance
- Properly use and maintain SFST Log



DWI DETECTION &amp; SFST

10-2

**Slide 2.**

***Briefly review the objectives, content, and activities of this session.***

***Explain participants will work as teams to administer SFSTs to volunteers who have consumed alcoholic beverages. Some of these volunteers will have BACs above 0.08, others will be below that level. Participants will carefully note and record the volunteers' performance and attempt to distinguish those above 0.08 from those below 0.08.***

***Participants will also learn to record observations on a SFST Log.***

***It is recommended to have at least one instructor for every six participants for this session.***

## A. Procedures

Session 10 – Alcohol Workshop: First Session

### Procedures

- Same teams as dry run
- Each team member administers one complete series of tests to at least one drinking volunteer
- Prepare descriptive written test record on each volunteer tested
- Other team members observe and record performance

DWI DETECTION & SFST10-3

Slide 3.



***Participants work in the same teams constituted for the Dry Run Practice Session.***

***Make sure all participants understand the practice procedures. Each team will test at least as many drinking volunteers as the team has members. Example: If a team has four members, that team will administer a complete set of tests to at least four volunteers***

***Each team member will administer one complete series of tests to at least one drinking volunteer. If time permits, teams will test additional volunteers. Emphasize each team is to prepare a descriptive, written test record on each volunteer tested (using the standard note-taking guide).***



***While one participant is administering tests to a volunteer, the other team members will observe and record the volunteer's performance.***

***As soon as the team has completed the SFSTs on a particular volunteer, the volunteer must be escorted by a monitor to the next scheduled team.***

***Define the sequence in which volunteers will circulate among teams.***

***Upon termination of this practice segment, monitors will escort the volunteer subjects to the breath testing station.***

***Emphasize teams will not be informed of the volunteers' BACs until the session "Wrap Up".***



## B. Hands on Practice



***Participants carry out the "drinking subjects" practice procedures.***

***Instructors circulate among teams to observe and coach participant performance, as necessary.***

***Upon completion of practice, teams escort volunteers to the Breath Testing Station.***

***Teams return to classroom to complete report writing assignment. An instructor records the BACs of the volunteers.***

## C. Use and Maintenance of SFST Log

Session 10 – Alcohol Workshop: First Session

### SFST Log

SFST Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest/ Not Arrest	Measured BAC	Remarks

DWI DETECTION & SFST 10-4

**Slide 4.**

The SFST log is used to record the results of the SFSTs performed on suspected impaired subjects. The SFST log used in the course is located in the Participant Manual.



***Point out log should be used to record the results of all SFSTs administered. Emphasize the logs may be used as evidence in court.***

This log is important in documenting an officer's experience and proficiency in performing and interpreting SFSTs. It is highly recommended by the IACP and the National Highway Traffic Safety Administration (NHTSA), that officers utilize an SFST log to record training proficiency, records field proficiency, and documents the officer's experience. All of these combined helps to establish the officer's credibility in administering the SFSTs and may be used as evidence in court.

This log has the following components:

- The actual date the SFSTs were administered
- Subject's full name
- Results of each SFST test
- Classification of BAC as above or below 0.08 BAC
- Arrest/Not Arrest
- Subject's measured BAC (if available)
- Remarks



***Direct participants to transfer their documentation from the note-taking guide to the log.***

---

## D. Session Wrap Up



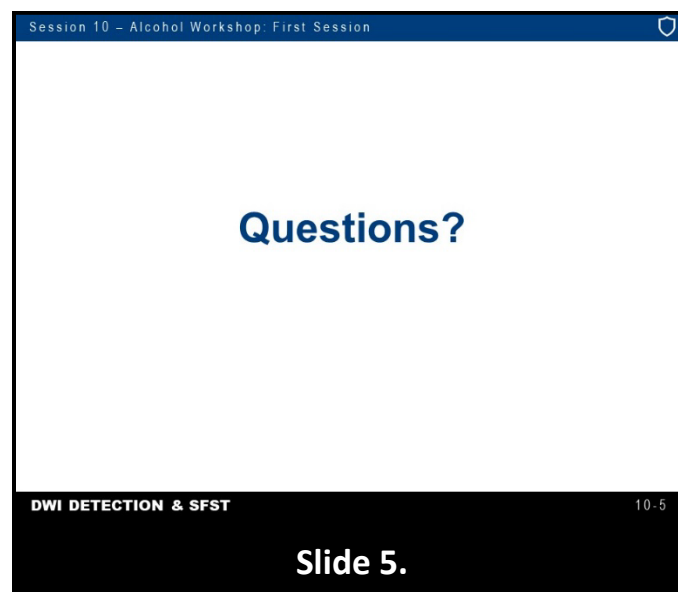
***Teams report their observations of volunteers.***

***Solicit SFST results on each volunteer. Record results on dry erase board (See sample chalkboard array on next page).***

***Notify participants of volunteers' BACs, as obtained during the breath tests.***

***Write BACs next to volunteers' names or code letters on the dry erase board.***

***Solicit participant comments, questions, or observations concerning the relationship between volunteers' BACs and their performances on the tests.***



### Sample Dry Erase Board Array for Tabulating Results

"Designated Subjects"	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
"A"				
"B"				
"C"				
"D"				
"E"				
"F"				
"G"				
"H"				
"I"				
"J"				

SFST Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest/ Not Arrest	Measured BAC	Remarks

## ALCOHOL WORKSHOP PARTICIPANT STATEMENT OF INFORMED CONSENT

I, \_\_\_\_\_, hereby agree to participate in the alcohol  
(Print Name)

workshop conducted on \_\_\_\_/\_\_\_\_/\_\_\_\_ by \_\_\_\_\_.  
(Agency/Department)

I understand that I will consume alcohol and may become impaired or intoxicated. I specifically agree that my participation as a volunteer drinker in this program makes it imperative that I refrain from driving for at least twelve hours following completion of the program.

I understand that, while participating in the program, I will be required to submit to breath tests to determine my blood alcohol concentration. I also understand that I will be required to submit to psychophysical examinations and other non-intrusive clinical tests to assess the extent of my impairment.

I represent that I am in good physical health, and that I am not an alcoholic. I attest that I am not now under the influence of alcohol or any other drug. I attest that I have not consumed any drug, medication, or other substance that would make my consumption of alcohol at this time inadvisable. I affirm that there exists no condition that should preclude my participation in this alcohol workshop as a volunteer drinker.

I have been informed of the purpose of this workshop, namely, to assist in training police officers to recognize and investigate persons impaired by alcohol and other drugs. I acknowledge that I may refuse to consume any or all of the alcohol offered to me during this workshop.

I also consent to being photographed or video recorded, by instructors, for training purposes only.

\_\_\_\_\_  
Signature

Date \_\_\_\_/\_\_\_\_/\_\_\_\_

\_\_\_\_\_  
Witness

## VOLUNTEER DRINKER QUESTIONNAIRE

VOLUNTEER: \_\_\_\_\_

DATE: \_\_\_\_\_

LOCATION: \_\_\_\_\_

Wearing Glasses? ☐ Yes ☐ No

Wearing Contacts? ☐ Yes ☐ No

Eye Problems? \_\_\_\_\_

Sick or Injured? \_\_\_\_\_

Diabetic? \_\_\_\_\_

Epileptic? \_\_\_\_\_ Other: \_\_\_\_\_

Physical Defects? \_\_\_\_\_

Under Doctor's Care? \_\_\_\_\_

Taking Any Medications or Drugs? ☐ Yes ☐ No What: \_\_\_\_\_

Been Drinking? ☐ Yes ☐ No What: \_\_\_\_\_ When: \_\_\_\_\_

Last Sleep? \_\_\_\_\_

Number of Hours? \_\_\_\_\_

Last Ate – Time: \_\_\_\_\_ What: \_\_\_\_\_

Age \_\_\_\_\_ Eye Color \_\_\_\_\_

Height \_\_\_\_\_ Sex ☐ M ☐ F

Weight \_\_\_\_\_ Build \_\_\_\_\_

## DOSING CHART

MIX: \_\_\_\_\_

TOTAL NUMBER OZ    ETOH \_\_\_\_\_    TYPE \_\_\_\_\_    PROOF \_\_\_\_\_

	BEFORE DRINKING	PRE-TESTING	POST TESTING
Lack of Smooth Pursuit	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Maximum Deviation	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Angle of Onset			
Pupil Size	MM	MM	MM
Pulse	BPM	BPM	BPM
Blood Pressure	/	/	/
BAC/Time	/	/	/





# SFST

---

## Session 10-A

### Dry Lab: First Session

**LEARNING OBJECTIVES**

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject’s performance utilizing the field note-taking guide
- Properly interpret the subject’s performance
- Properly use and maintain the SFST Log

**CONTENTS**

A. Procedures .....	3
B. Hands On Practice .....	4
C. Use and Maintenance of SFST Log.....	5
D. Session Wrap Up .....	6

**LEARNING ACTIVITIES**

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Presentation
- Instructor-Led Discussion



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***




***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

Session 10-A – Dry Lab

## Learning Objectives

- Properly administer SFSTs
- Properly observe and record subject's performance utilizing standard note-taking guide
- Properly interpret subject's performance
- Properly use and maintain SFST Log



DWI DETECTION & SFST 10A-2

**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

***Explain participants will view the administration of SFSTs to volunteers who have consumed alcoholic beverages. Some of these volunteers will have BACs above 0.08. Others will be below that level. Participants will carefully note and record the video subjects' performance and attempt to distinguish those above 0.08 from those below 0.08.***

***Participants will also learn to record observations on a SFST Log.***

---

### A. Procedures

Session 10-A – Dry Lab

## Procedures

- Same teams as dry run
- Each subject will be viewed performing all three tasks
- Only one opportunity to view each subject
- Record number of clues observed in appropriate boxes on video recording worksheet

DWI DETECTION & SFST 10A-3

**Slide 3.**



Participants work in the same teams constituted for the Dry Run Practice Session.

Make sure all participants understand the practice procedures.

Distribute video recording sheets and have participants fill in their name and team number.

Have sufficient copies of handout 10-A available (Minimum of eight copies per participant).

Advise participants each subject will be viewed performing all three tasks. Pauses are provided between each test to allow participants to record observed clues.

Point out participants will have only one chance to view each subject. Review can be conducted after the “wrap-up.”

Participants shall record the number of clues observed, in the boxes located opposite each test.

---

## B. Hands On Practice



***Divide class into two groups.***

***Each team member will administer a complete SFSTs on another participant under the direct supervision of an instructor.***



***It is recommended half the class perform the SFSTs under the direction of instructor while the remainder of the class views, records, and interprets the NHTSA/IACP-approved videos for this session. Once completed, the groups switch roles. Refer participants to the Proficiency Examination Checklist located in Session 9.***

***EACH team member viewing the videos must determine if the subject should or should not be arrested.***

***Emphasize each officer is to prepare a descriptive, written test record on each video subject using the field note-taking guide (located in Session 4).***

***Emphasize teams will not be informed of the volunteer’s BACs until the session “Wrap-up.”***

***If time permits, participants will administer additional tests to each other.***

## C. Use and Maintenance of SFST Log

Session 10-A – Dry Lab

### SFST Log

SFST Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest/ Not Arrest	Measured BAC	Remarks

DWI DETECTION & SFST 10A-4

Slide 4.



***If options using video subjects are used, maintaining the SFST Log is strongly recommended.***

The SFST Log is used to record the results of the SFSTs performed on suspected impaired subjects.



***Point out log should be used to record the results of all SFSTs administered.***  
***Emphasize the logs may be used as evidence in court.***

This log is important in documenting an officer's experience and proficiency in performing and interpreting SFSTs. It is highly recommended by the IACP and the National Highway Traffic Safety Administration (NHTSA), that officers utilize an SFST log for the following reasons:

- Records training proficiency
- Records field proficiency
- Documents the officer's experience

All of these combined helps to establish the officer's credibility in administering the SFSTs and may be used as evidence in court. This log has the following components:

- The actual date the SFSTs were administered
- Subject's full name
- Results of each SFST test
- Classification of BAC as above or below 0.08 BAC
- Arrest/Not Arrest

- Subject's measured BAC (if available)
- Remarks



***Direct participants to transfer their documentation from the note-taking guide to the log.***

---

#### D. Session Wrap Up



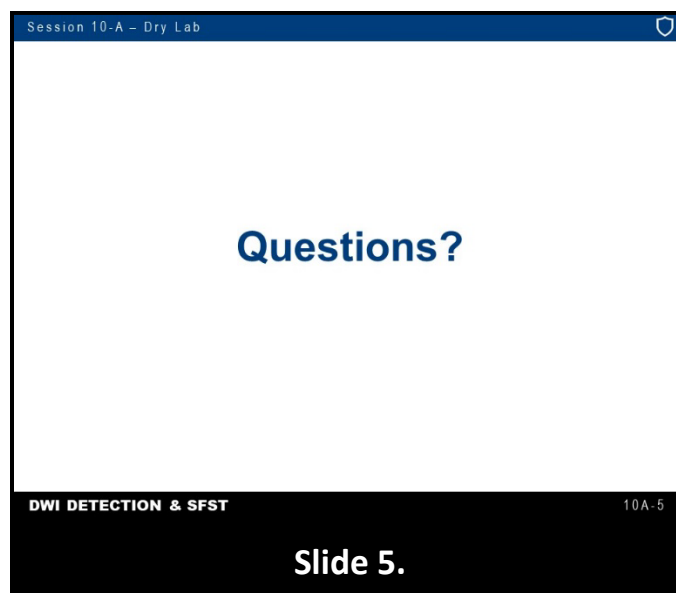
***Teams report their observations of video subjects.***

***Solicit SFST results on each video subject. Record results on dry erase board (See sample dry-erase board array at the end of this session).***

***Notify participants of video subjects' BACs.***

***Write BACs next to video subjects' names or code letters on the dry erase board.***

---



***Solicit participant comments, questions, or observations concerning the relationship between video subjects' BACs and their performances on the tests.***

---

### Sample Dry Erase Board Array for Tabulating Results

"Designated Subjects"	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
"A"				
"B"				
"C"				
"D"				
"E"				
"F"				
"G"				
"H"				
"I"				
"J"				

SFST Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest/ Not Arrest	Measured BAC	Remarks



## Video Recording Sheet

SUSPECT'S NAME: \_\_\_\_\_ OFFICER'S NAME: \_\_\_\_\_

<b>Pupil Size:</b> <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	<b>Tracking:</b> <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	<b>Unequal Pupil Size:</b> Explain:	
<b>Resting Nystagmus</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Eyelids:</b> <input type="checkbox"/> Normal <input type="checkbox"/> Droopy		
<b>Lack of Smooth Pursuit</b>	<b>Left Eye</b>	<b>Right Eye</b>	<b>Vertical Nystagmus</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Distinct and Sustained Nystagmus at Maximum Deviation</b>	<b>Left Eye</b>	<b>Right Eye</b>	<b>Eyes:</b> <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery
<b>Onset of Nystagmus Prior To 45 Degrees</b>			

### HGN CLUES

Observed	Actual

WALK AND TURN TEST    Cannot keep balance \_\_\_\_\_ Starts too soon \_\_\_\_\_



Stops Walking  
 Misses Heel-to-Toe  
 Steps Off Line  
 Uses Arms  
 Actual Steps Taken

1<sup>st</sup> Nine    2<sup>nd</sup> Nine

1 <sup>st</sup> Nine	2 <sup>nd</sup> Nine

### WALK AND TURN

Observed	Actual

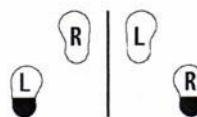
Improper Turn (Describe)	Cannot Do Test (Explain)
--------------------------	--------------------------

<b>Team Information</b> Team No: _____ Arrest Decision: Yes: _____ No: _____  BAC: Above 0.08: _____ Below 0.08: _____
--

### ONE LEG STAND

L                  R

☐    ☐  
☐    ☐  
☐    ☐  
☐    ☐



Sways while balancing  
 Uses arms to balance  
 Hopping  
 Puts foot down

### ONE LEG STAND

Observed	Actual

## SFST Option Video Subject Results – CD/Video Day 1

Subject's Name: <b><u>Chanel</u></b> BAC: <b><u>.124</u></b>		
HGN Clues	6	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes
WAT	3	Misses heel to toe, Stops while walking, Raises arms for balance
OLS	1	Places foot down
Teaching points/Comments: May be difficult to observe because of excessive blinking		

Subject's Name: <b><u>Robert</u></b> BAC: <b><u>.118</u></b>		
HGN Clues	6 +V	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes; vertical nystagmus present
WAT	5	Lost balance during instructions, Steps off line, Misses heel to toe, Raises arms for balance, Stops while walking
OLS	3	Raises arms for balance, Sways while balancing, Puts foot down
Teaching points/Comments: None		

Subject's Name: <b><u>Mary</u></b> BAC: <b><u>.114</u></b>		
HGN Clues	6	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes
WAT	5	Lost balance during instructions, Missed heel-toe, Used arms for balance, Improper turn, Wrong number steps
OLS	3	Raises arms for balance, Puts foot down, Sways while balancing
Teaching points/Comments: Camera angle may affect ability to observe the angle of onset		

Subject's Name: <b><u>Trevor G</u></b> BAC: <b><u>.099</u></b>		
HGN Clues	6	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes
WAT	2	Uses arms for balance, Improper turn
OLS	0	None
Teaching points/Comments: Camera angle may affect ability to observe the angle of onset		

Subject's Name: <b><u>Trevor L</u></b>		BAC: <b><u>.135</u></b>
HGN Clues	6 +V	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes; vertical nystagmus present
WAT	3	Steps off line, Stops while walking, Misses heel to toe
OLS	3	Sways, Puts foot down, arms
Teaching points/Comments: None		

Subject's Name: <b><u>Derek</u></b>		BAC: <b><u>.123</u></b>
HGN Clues	6 +V	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes; vertical nystagmus present
WAT	3	Misses heel to toe, Improper turn, Raises arms for balance
OLS	3	Puts foot down, Raises arms for balance, Sways while balancing
Teaching points/Comments: None		



# 11

# SFST

---

## Processing the Arrested Subject, Report Writing, and Preparation for Trial

### LEARNING OBJECTIVES

- Discuss the importance of correct processing and report writing procedures in DWI arrests
- Discuss the correct sequence of DWI processing procedures
- Discuss the essential elements of a DWI report
- Successfully complete a narrative arrest report
- Discuss the importance of trial preparation

### CONTENTS

A. The Processing Phase .....	4
B. Narrative DWI Arrest Report .....	11
C. Case Preparation and Pretrial Conference .....	22
D. Guidelines for Direct Testimony .....	25

### LEARNING ACTIVITIES

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



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

## Learning Objectives

- Discuss importance of correct processing and report writing procedures in DWI arrests
- Discuss correct sequence of DWI processing procedures



DWI DETECTION &amp; SFST

11-2

**Slide 2.**

## Learning Objectives

- Discuss the essential elements of a DWI report
- Successfully complete a narrative arrest report
- Discuss the importance of trial preparation



DWI DETECTION &amp; SFST

11-3

**Slide 3.**


***Briefly review the objectives, content, and activities of this session.***

## A. The Processing Phase

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

### Foundation for Successful Testimony

- Relationship between law enforcement officer(s) involved with arrest and prosecuting attorney(s)
- Effective communication and a clear understanding



DWI DETECTION & SFST 11-4

**Slide 4.**

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

You, as the State's primary witness, play an important part in illustrating to the judge/jury the impairment of the defendant. In addition to verbal testimony, visual aids are often helpful in painting the picture of the entire DWI detection process. Visual aids engage the judge/jury and increase the retention of information. In addition, it is important you do not use legal, law enforcement, or medical terms unless absolutely necessary. The use of plain English assists the judge, jury, and others involved in the case to understand the specifics of all the testimony.

---



## Testimony



- Be prepared to speak to evidence
- Take time
- Listen
- Organize response before answering questions

DWI DETECTION &amp; SFST

11-5

### Slide 5.

Since testimony constitutes the majority of time spent in trial, it is imperative, in addition to effective communication techniques, the witness be well prepared to speak to the evidence related to the case. Direct examination is your opportunity to tell the story. It should be an exchange between the prosecutor and the law enforcement officer.

Take the time to think and make sure you completely understand the question and organize your response before you answer. NEVER answer a question you do not fully understand. Cross examination is NOT the time to showboat. Always listen carefully to the question and again make sure you completely understand the question before you answer. If you do not understand the question, ask for clarification. If you are not able to fully understand the question during direct or cross examination, it is acceptable to say, “I do not know,” “I cannot answer that question,” or “I cannot answer that question without further explanation.” Always make sure you listen closely to the question and don’t answer a question you don’t understand. **Remember: When it comes to successful testimony, there is NO substitution for preparation.**

---

## Successful Prosecution

- Organize and present relevant evidence
- All evidence must be compiled during three phases of detection



DWI DETECTION &amp; SFST

11-6

### Slide 6.

The successful prosecution of a DWI case often depends upon the officer's ability to organize and present all relevant evidence of each element of the DWI violation. Keep in mind virtually all of this evidence must be compiled during the three phases of detection – vehicle in motion, personal contact, and pre-arrest screening. The officer must be able to establish the level of impairment at the time the violation occurred; therefore, observations are critical. Subsequent evidence of impairment, such as chemical test result(s) and/or the evidence gathered during a drug evaluation, will be admissible only when a proper arrest has been made. The efforts expended in detecting, apprehending, investigating, and testing/evaluating the DWI offender will be of little value if there is not sufficient evidence to prove every element of the violation.

No matter how much evidence you collect, if it is not presented clearly, completely, and convincingly in court, the case may be lost. Therefore, it is essential officers develop the ability to write a clear, complete, and concise report describing their observations and results. Additionally, the officer must be able to articulate that information to the judge/jury.




***Ask the class to suggest types of evidence that would likely be important in a DWI arrest. After most examples have been elicited, show slide. Possible answers include:***

- ***Physical***
- ***Established facts***
- ***Illustrative***
- ***Demonstrative***
- ***Written documentation***
- ***Testimony***

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Types of Evidence

- Physical
- Established facts
- Illustrative
- Demonstrative
- Written documentation
- Testimony



DWI DETECTION & SFST 11-7


**Slide 7.**

Evidence of a DWI violation may be of various types. Physical (or real) evidence can be something tangible, visible, audible (e.g., a blood sample or a partially empty can of beer). Well established facts for example judicial notice of accuracy of the breath test device when proper procedures are followed. Illustrative evidence includes visual aids (e.g., photo of the crash scene, defendant, or diagram of the roadway). Demonstrative evidence are demonstrations performed in courtroom (e.g., Standardized Field Sobriety Tests (SFSTs) or other field sobriety tests). Written documentation can be the citation, the alcohol influence report, the drug evaluation report, evidential chemical test results, etc. Testimony which can be the officer's verbal description of what was seen, heard, smelled, etc.

---

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Prosecutor



- Prove every element of offense
- Establish proper procedures were followed

DWI DETECTION & SFST 11-8

**Slide 8.**

The prosecutor must be able to establish and prove every element of the offense. The prosecutor also must establish the proper procedures were followed, including:

- There was a reasonable suspicion or another valid reason for stopping/contacting the driver.



***Remind participants the definition of reasonable suspicion is “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 criminal activity is taking, has taken, or is about to take place.”***

***Discuss with participants State-specific definitions.***

- The driver was operating or in actual physical control of the vehicle.
- There was probable cause to arrest the driver.



***Remind participants the definition of probable cause - “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 an offense has been or is being committed.”***

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial
🛡️

## Proper Arrest Procedures

- Miranda warning
- Subsequent observations/interview of defendant
- Chemical test

DWI DETECTION & SFST
11-9

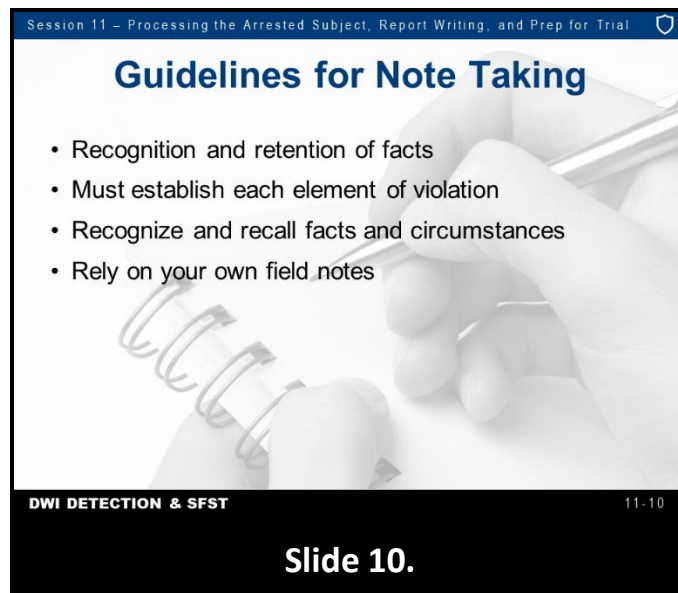
### Slide 9.

- Proper regard was given to the defendant’s Miranda rights
- Subsequent observations/interview of the defendant provided additional evidence relevant to the offense
- There was a proper request for a chemical test

The prosecutor's case will largely be based upon the thoroughness of the officer's investigation and the clarity of his/her testimony. While it is true many items which are critical to the

prosecution are documented on special forms, the officer must keep in mind the prosecutor may not have the time to search out relevant facts. The decision may be made to amend, reduce, or even dismiss the case on the basis of the arrest report alone. It is essential the report clearly, completely, and accurately describe the total sequence of events from the point the driver was first observed, through the arrest, the chemical test, and subsequent release or incarceration.

---



One of the critical tasks in the DWI enforcement process is the recognition and retention of facts that establish reasonable suspicion to stop the driver, investigate further, and the probable cause to arrest persons for DWI. The evidence gathered during the detection process must establish each element of the violation and must be documented to support successful prosecution of the defendant. This evidence is largely sensory (see, smell, hear) in nature and, therefore, is extremely short lived. Law enforcement officers must be able to recognize and act on facts and circumstances with which they are confronted. But the officer must also be able to recall those observations – and describe them clearly and convincingly – to secure a conviction. The officer is inundated with evidence of DWI (sights, sounds, smells, etc.), recognizes it, and bases the decision to stop, investigate, and arrest on their observations. Since evidence of a DWI violation is short lived, police officers need a system and tools for recording field notes at scenes of DWI investigations. Technological advances have made it possible to use audio, video, and digital recorders in the field. They provide an excellent means of documenting this short-lived evidence. However, the vast majority of officers must rely on their own field notes. One way of improving the effectiveness of field notes is to use a structured note-taking guide. This type of form makes it very easy to record brief notes on each step of the detection process and ensures vital evidence is documented. Field notes provide the information necessary for completion of required DWI report forms and assist the officer in preparing a written narrative of the investigation. Since they can be used to refresh the officer's memory, field notes could be useful if the officer is required to provide oral testimony.



## Processing Tasks



DWI DETECTION &amp; SFST

11-11

### Slide 11.



***Remind participants to become thoroughly familiar with their agency's guidelines for processing individuals. Ask a participant to suggest how a procedural error during the processing phase might cause some evidence to be ruled inadmissible.***

The Processing Phase of a DWI Enforcement incident is the bridge between arrest and conviction of a DWI offender. Processing involves the proper assembly and organization of all of the evidence obtained during the detection phase. This ensures the evidence will be available and admissible in court. Processing also involves obtaining additional evidence, such as a chemical test or tests of the subject's breath, blood, etc. Typically, the processing phase may involve the following tasks:

- Inform the driver they are under arrest
- "Pat down" or frisk the defendant
- Handcuff the defendant
- Secure the defendant in the patrol vehicle
- Secure the defendant's vehicle, passengers, property
- Transport the defendant to an appropriate facility
- Advise the defendant of rights and obligations under the implied consent law
- Administer the evidentiary chemical test(s)
- Advise the defendant of Constitutional Rights (Miranda Admonition)
- Interview the defendant
- Incarcerate or release the defendant
- Complete the required reports

---

## B. Narrative DWI Arrest Report

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

### Essentials of Prosecution's Case

- Reasonable suspicion for contact
- Probable cause for arrest
- Proper arrest procedures
- Post-arrest evidence
- Request for chemical test(s)/results
- Clear and concise report

DWI DETECTION & SFST11-12

Slide 12.

Report writing is an essential skill for a police officer. Good report writing becomes second nature with practice. While there is no one best way to write an arrest report, it is critical the report be detailed regarding every phase of the detection and arrest process. It is helpful to follow a simple format. Departmental policies and/or special instructions or requirements of the prosecutor provide some guidance.




***Point out good report writing becomes second nature with practice.***

It is important for officers to understand the essential ingredients of the prosecution's case. Clarity and completeness of an officer's observations and relaying this information in a clear and concise report is critical. Additionally, an officer must be able to establish he/she had reasonable grounds for the arrest and followed proper arrest procedures. Proper arrest procedures include advising the defendant of their constitutional rights and gathering additional post-arrest evidence. The admissibility of chemical test evidence requires a proper request in accordance with your State's guidelines.



Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Detection and Arrest



- Mentally note relevant facts
- Field notes
- Follow departmental policies

DWI DETECTION & SFST 11-13

**Slide 13.**

During the detection phase of the DWI arrest process, the arresting officer must mentally note relevant facts to support the decision to arrest. These facts are then recorded in the form of field notes and can be used to refresh officer's memory when the formal arrest/narrative report is prepared.




***Point out officers should be guided by departmental policies and/or instructions or requirements specified by the prosecutor.***

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Writing the Report – Vehicle in Motion

- Initial Observations
- Driving or Actual Physical Control
- Vehicle Stop



DWI DETECTION & SFST 11-14

**Slide 14.**



***Instructor should emphasize the report is chronological and should document the three phases of DWI detection.***

The following block outline format identifies some of the important components in a DWI arrest/narrative report:



Initial Observations – Describe your first observations of the driver’s actions. What drew your attention to the vehicle/driver? Your first observations are important because they help establish your reasonable suspicion to stop. This should include details about the driving before you initiated the traffic stop. Be sure to record the time and location of the first event.

Driving or Actual Physical Control – In some cases, you may not use the driving behavior as the basis for the contact. Your first contact could result from a crash investigation or a motorist assistance type of contact. Your observations and documentation must establish the driver was operating or in actual physical control of the vehicle. You can use circumstantial evidence, such as seat belt marks, ownership of the vehicle, location of the keys, admissions, witness statements, etc. to establish this element.

Vehicle Stop – Record any unusual actions taken by the driver. How did the driver react to the emergency light and/or siren? How far did the driver travel after emergency equipment was activated? How did the driver pull over? Was it a normal stop? Be detailed and specific.

---

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Writing the Report – Personal Contact

- Contact With Driver
- Preliminary Questions
- Exit From Vehicle



DWI DETECTION & SFST 11-15

**Slide 15.**

Contact with Driver – Record your observations of the driver's personal appearance, condition of the eyes, speech, odors, inappropriate or inconsistent responses to questions, etc. Record the name and condition of passengers in the vehicle and where they were located. Describe any unusual actions taken by the driver or passengers.

Preliminary Questions – Record the preliminary questions you ask of the driver as well as their responses. Pay close attention to any inconsistent responses and any other physical signs of impairment. For example: driver responds, “I’m just trying to get home” when asked “are you diabetic or epileptic?”




Exit from Vehicle – Record your observations of the driver's exit from the vehicle and include any unusual actions taken by the driver. Be specific about how the driver exits the vehicle. For example climbs out of the vehicle, uses the vehicle for support, leans on the vehicle, walks slowly and/or deliberately, stumbles, etc.

---

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Writing the Report – Pre-Arrest Screening

- SFSTs
- Other Field Sobriety Tests
- Arrest



DWI DETECTION & SFST11-16

Slide 16.

SFSTs – This should include specific details about the validated clues noted during the test. It should also include all other observations made during the SFSTs such as: did not follow directions, how quickly or slowly the driver performed the test, etc. Include specific details about the clues observed. For example, missed heel-to-toe on steps 3, 4, and 5 by at least three inches each step, etc.

Other Field Sobriety Tests – Describe the driver's actions when you administered other field sobriety tests. Be specific.

Arrest – Document the arrest decision and ensure all elements of the crime have been accurately described.

---

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Writing the Report – Post Arrest

**ON SCENE:**

- Disposition of Passengers
- Disposition of Vehicle and Property
- Witness' Statements
- Transport of Defendant

DWI DETECTION & SFST11-17

Slide 17.

## ON SCENE:

Disposition of Passengers – Make sure passengers are identified, interviewed, and safely released.

Disposition of Vehicle and Property – Indicate where the vehicle was secured or towed and the location of the keys. If the vehicle was released to another party or was driven by a backup officer, record that fact. Document disposition of any property seized.

Witness' Statements – List all witnesses (including other officers), contact information, and attach copies of their statements (if any). Additionally, make notes of any verbal statements made by witnesses.

Transport of Defendant – Describe where the defendant was transported for evidential testing. Document time of departure and arrival. (This information can be obtained from the radio log). Note any spontaneous or voluntary comments made by the defendant.


---

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

### Writing the Report – Post Arrest

**POST SCENE:**

- Implied Consent/Search Warrant
- Miranda Warning
- Evidentiary Test(s)
- Notifications
- Citation/Complaint
- Book or Release



DWI DETECTION & SFST 11-18

**Slide 18.**

The foregoing list is not intended to be all inclusive. In many cases, several points may not be applicable and additional information not listed may apply.

## POST SCENE:

Implied Consent/Search Warrant – Document the admonishments given at the appropriate point in the investigation.

Miranda Warning



***Emphasize the specific timing of the Miranda warning may vary from State to State.***

Evidentiary Test(s) – Document which test(s) were administered and by whom. If the defendant is authorized to request additional chemical tests and does so, record the type of test, time administered, location, and party administering the test.

Notification of Defendant's Attorney or Other Party – Document the time and result of defendant's telephone call to an attorney or other party.


Citation/Complaint – Document the traffic citation/complaint was issued at the appropriate time, if applicable.

Book or Release – Document the time and place of incarceration or the name and address of the responsible party to whom the defendant was released. Be sure to record the time.

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Writing the Report

- Narrative must be detailed and accurate
- Successful prosecution depends on your ability to describe events observed



DWI DETECTION & SFST 11-19

**Slide 19.**



***Point out not every report will require all of the components. Some may be missing or not relevant to a DWI investigation.***

***Briefly discuss each component.***

The narrative does not necessarily have to be lengthy, but it must be detailed and accurate. Remember, successful prosecution depends on your ability to describe the events you observed. Often a trial can be avoided (i.e., a defendant may plead guilty) when you do a thorough job in preparing your arrest report.

A sample report providing an example of the block outline format is at the end of the session.



***Solicit participants' questions concerning the narrative DWI arrest report elements.***

***Refer participants to sample report in their manual.***

***The following slides only include the validated clues of the SFSTs, however there are other observations of impairment evident in the video and included in the model report.***





***Hand out copies of DWI Investigation Field Note form.***

***Show video segment “Nighttime DWI Arrest”. Allow participants 4 - 5 minutes to complete notes.***

***Inform participants the defendant is assumed to have demonstrated six clues of HGN.***

***Report writing exercise consists of two sections. The first section employs a video to simulate the three phases of DWI Detection. Video begins with initial observation of a vehicle in operation, proceeds through the stop command and the observation of the stop, continues through the observation and interview with the driver, the observation of the driver's exit from the vehicle, and the SFSTs. The video used for the report writing exercise is somewhat longer than the videos viewed in previous sessions because this segment also includes the exit decision, observation of the exit, and the SFSTs.***

***Following the video, participants will have a minimum of 45 minutes to make notes and complete a narrative arrest report based on what was seen and heard in the video. The standardized note-taking guide/narrative arrest report form may be used to record all evidence depicted in the video. The report should include all the evidence portrayed in the video.***

***Instruct the participants in this exercise the subject refused to take the chemical test. They are to end their narrative report at the completion of the arrest.***

***Reports should be collected by instructors following the courtroom testimony exercise (if optional Session 12 Moot Court is delivered) or at such time designated by instructors.***

## DWI Incident Report

- Defendant: Jarod Primo Age:31
- Date of Arrest: XX/XX/XX
- Time of Arrest: 9:20 PM
- Initial Observation:
  - Defendant driving white SUV
  - Driving without license plate
  - Drifted over the center line twice

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## DWI Incident Report

- Initial Observation:
  - Weaving within lane
  - Four lane roadway, clear, breezy, traffic light
  - Slow response to stop command
  - Crossed over fog line
  - Failed to use turn signal
  - Failed to stop at stop sign

DWI DETECTION & SFST 11-22

**Slide 22.**



***Refer participants to sample DWI Incident Report at the end of this session.***

### *DWI Incident Report*

Defendant: Jarod Primo, Age:31

Date of Arrest: 4-14-XX

Time of Arrest: 9:20 PM

Initial Observation:

- Defendant driving white SUV
- Driving without license plate
- Drifted over the center line twice
- Weaving within lane
- Slow response to stop command
- Failed to stop at stop sign
- Four lane roadway, clear, breezy, traffic light
- Slow response to stop command
- Crossed over fog line
- Failed to use turn signal
- Failed to stop at stop sign

## DWI Incident Report

- Contact with Driver
  - Driver was sole occupant
  - Produced credit card instead of DL
  - Forgot to produce registration/insurance
  - Odor of alcoholic beverage in vehicle
  - Admissions of drinking
  - Unsteady on exit from vehicle

DWI DETECTION &amp; SFST

11-23

**Slide 23.**

Contact with Driver:

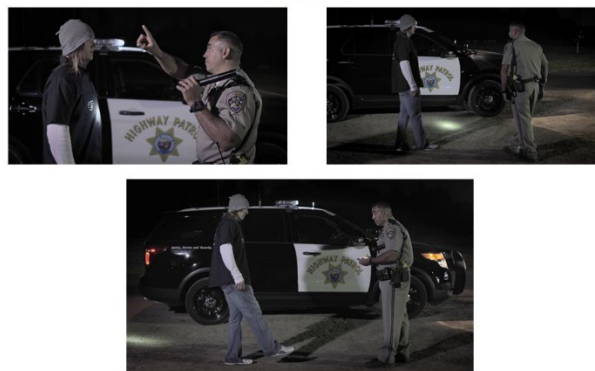
- Driver was sole occupant
- Produced credit card instead of DL
- Forgot to produce registration/insurance
- Odor of alcoholic beverage in vehicle
- Admissions of drinking (2 drinks)
- Unsteady on exit from vehicle
- Any other observations during contact with driver?



Instructor  
Note

***Any other observations during contact with driver? i.e., Subject was swaying during roadside interview***

## SFSTs



DWI DETECTION &amp; SFST

11-24

**Slide 24.**



## SFSTs

- Horizontal Gaze Nystagmus (HGN) – Lack of Smooth Pursuit, Distinct and Sustained Nystagmus at Maximum Deviation, and Onset of Nystagmus Prior to 45 Degrees in both eyes
- Walk and Turn (WAT) – Could not maintain balance during instructions, improper turn, used arms for balance (2x), steps off line, and stops while walking
- One Leg Stand (OLS) – Raised right foot, put foot down on 1010 and 1014, raised left arm for balance, hopped, and reached the count of 1014 in 30 seconds

Any other observations?



***Any other observations? i.e. swaying during instructions during OLS, did not look at foot during OLS, etc.***

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

### The Arrest

Based on observations of defendant's driving, physical appearance, and performance of SFSTs, she was placed under arrest for DWI.

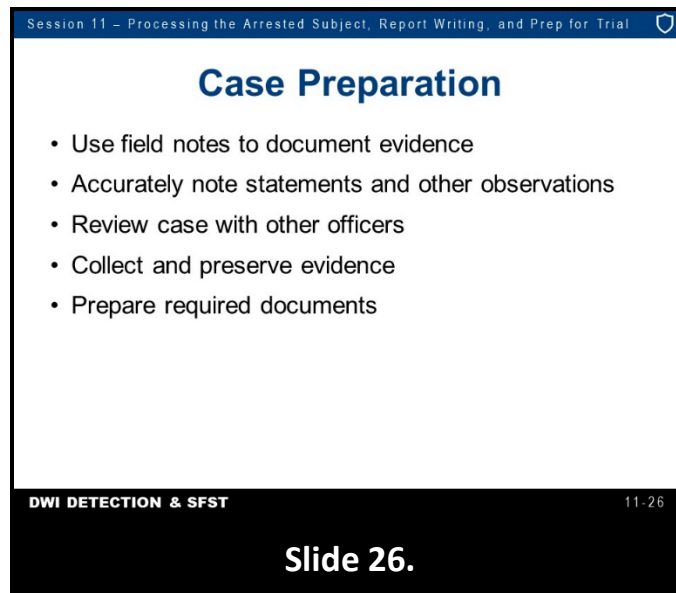
DWI DETECTION & SFST 11-25

**Slide 25.**



***Emphasize the defendant in a DWI case could be acquitted if the officer's testimony was not sufficient to establish probable cause for the arrest or prove beyond a reasonable doubt the defendant was impaired.***

## C. Case Preparation and Pretrial Conference



Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

### Case Preparation

- Use field notes to document evidence
- Accurately note statements and other observations
- Review case with other officers
- Collect and preserve evidence
- Prepare required documents

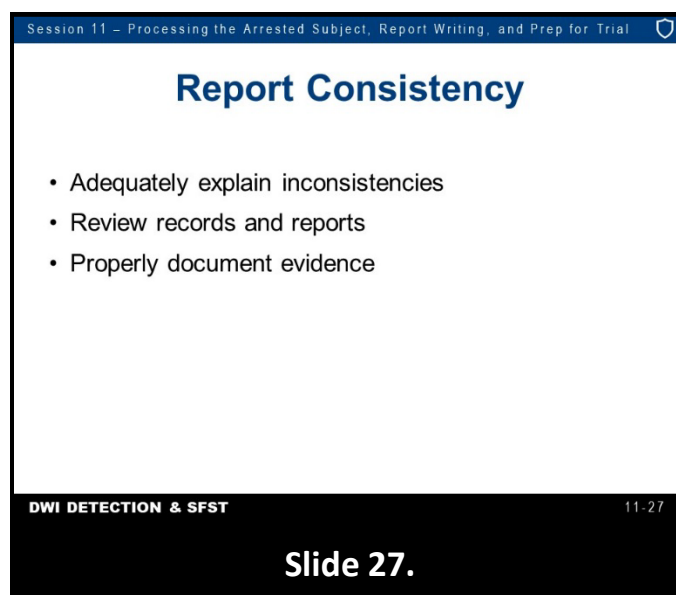
DWI DETECTION & SFST 11-26

**Slide 26.**

As was discussed in Session 4, case preparation begins with your first observation and contact with the driver. It is essential all relevant facts and evidence are mentally noted and later documented in field notes, narrative report, or other official forms.

*Guidelines for Case Preparation:* Use field notes to document evidence. Accurately note statements and other observations. Review case with other officers who witnessed the arrest or otherwise assisted you and write down relevant facts. Collect and preserve all physical evidence. Prepare all required documents and a narrative report.

---



Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

### Report Consistency

- Adequately explain inconsistencies
- Review records and reports
- Properly document evidence

DWI DETECTION & SFST 11-27

**Slide 27.**

Remember, it is essential all reports be consistent. If differences occur, be sure to adequately explain them. The defense will try to impeach your testimony by pointing out seemingly minor inconsistencies.



***Point out it is essential reports are corroborative or, when differences occur, they be adequately explained. The defense will try to impeach your testimony over any inconsistencies.***

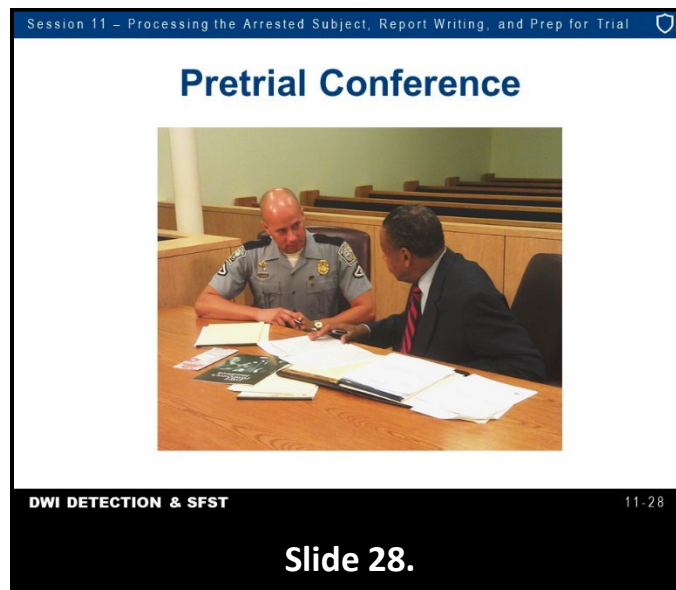
***Ask participants to identify relevant records/reports to be reviewed. Probe until appropriate items are identified.***

*Preparation for Trial:* Upon receipt of a subpoena or other notification of a trial date, review all records and reports to refresh your memory. If appropriate, revisit the scene of the arrest. Compare notes with assisting officers to ensure all facts are clear. During discovery, list all evidence and properly document it. Remember, evidence may be excluded if proper procedures are not followed.



***Point out evidence will not be admitted if these procedures are not followed.***

Attention to detail is very important.



***Emphasize the importance of the discussion of a DWI case between the arresting officer and the prosecuting attorney prior to going to trial.***

***Solicit participant questions concerning the pretrial conference.***

D.

## Pretrial Conference

- Be prepared
- Discuss all evidence/conclusions
- Identify strengths and issues
- Review potential questions
- Identify defense challenges

DWI DETECTION &amp; SFST

11-29

### Slide 29.

Successful prosecution is dependent upon the prosecutor's ability to present a clear and convincing case based on your testimony, physical evidence, and supporting evidence/testimony from other witnesses and/or experts.



***Point out a prosecutor should be able to elicit key points from an officer's testimony to bring out the facts necessary to convict the defendant.***

If at all possible, arrange a pretrial conference with the prosecutor. In preparation for the pretrial conference, you should review the entire case file. During the conference, discuss with the prosecutor all evidence and all bases for your conclusions. If there are strengths or issues in your case, bring them to the prosecutor's attention. Ask the prosecutor to review the questions that will be asked on the witness stand. Identify questions of which you do not have the answer to the prosecutor. Ask the prosecutor to review questions and challenges the defense attorney may use. Review your credentials and qualifications with the prosecutor. If you cannot have a pretrial conference, try to identify the main points and weaknesses about the case and be sure to discuss these with the prosecutor during the few minutes you will have just before the trial.



***Point out there should be no surprises during the trial. Ask the participants to give examples of items to be discussed at a pretrial conference.***


***Point out due to a variety of reasons, prosecutors are not able to have pre-trial conferences. That does not mean they are unconcerned. Try to see it from their viewpoint.***

## E. Guidelines for Direct Testimony

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

### Direct Testimony

- Describe in detail case facts, all observations, SFSTs clues/observations
- Be professional
- Use plain language
- Make eye contact with judge/jury
- Repeat important points



DWI DETECTION & SFST 11-30

**Slide 30.**

Your basic task is to establish the facts of the case: *The subject was driving or in actual physical control of a vehicle on a highway or other specified location within the court's jurisdiction and was impaired by alcohol and/or other drugs.* In other words, to present evidence to establish reasonable suspicion for the stop, probable cause for the arrest, and conclusive evidence regarding every element of the offense.



***Point out if officer testifies on subject matter that was excluded, it could result in suppression of the evidence or a mistrial.***

Describe in a clear, detailed, and convincing manner all relevant observations during the three detection phases and those subsequent to the arrest. Describe clearly how the defendant performed (e.g., stepped off the line twice on steps 2 and 4, raised the arms on steps 5 and 7 going out and step 3 coming back, etc.). By presenting your observations clearly and convincingly, you will allow evidence of the defendant's impairment to speak for itself. Direct testimony should include all relevant information about this incident. Always keep in mind juries typically focus on an officer's demeanor as much or more than on the content of the testimony. Strive to maintain your professionalism and impartiality. Be clear in your testimony, explain technical terms in layman's language, don't use jargon, abbreviations, acronyms, etc. Make eye contact with the judge/jury; they are the people you are trying to convince. Repeat important points and continued observations about the defendant.



***Solicit examples from the participants to include bloodshot, watery eyes, odor of alcoholic beverage on breath, etc.***

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Cross Examination

- Be polite
- Don't become agitated
- If you don't know the answer
  - Don't guess
  - "I don't know"

DWI DETECTION & SFST 11-31

**Slide 31.**

In many cases, you will be the key witness for the prosecution. Therefore, the defense will try very hard to cast doubt on your testimony.



***Remind participants both sides have a different role in the case.***

Be polite and courteous. Do not become agitated in response to questions by the defense. Above all, if you don't know the answer to a question, say so. Don't guess at answers or compromise your honesty in any way. Be professional and present evidence in a fair and impartial manner.



***Point out the officer should be polite and courteous during testimony...do not become agitated as a result of defense questions. Do not take personal issue with defense statements, stick to the facts.***

## Defense Challenges

- Your observations/interpretations
- Your credentials



DWI DETECTION &amp; SFST

11-32

### Slide 32.

The defense will ask questions to challenge your observations and interpretations. For example, you may be asked whether the signs, symptoms, and behaviors you observed of the defendant could have been caused by an injury or illness or by something other than the alcohol/drugs. You will be asked questions to create doubt about your observations. Answer these questions honestly, but carefully. If your observations are not consistent with an illness or injury, explain why not. Clearly testify your opinion is based on everything observed during the DWI investigation.

The defense will attempt to challenge your credentials by asking questions to cast doubt on your formal training. They will ask questions to "trip you up" on technical or scientific issues. Answer all questions about your training and experience completely and accurately, but don't embellish. Answer scientific or technical questions only if you have been trained in that area.




***Point out officers should not embellish their testimony...be careful not to open any doors for the defense.***

***Point out the defense attorney's job is to try to create a "reasonable doubt."  
Don't take it personally.***

Session 11 – Processing the Arrested Subject, Report Writing, and Prep for Trial

## Defense Challenges

- Your credibility
- SFSTs



DWI DETECTION & SFST 11-33

**Slide 33.**

The defense will ask questions to challenge your credibility. You may be asked several very similar questions in the hope your answers will be inconsistent. You may be asked questions designed to imply you had already formed your opinion before the defendant completed the SFSTs. Listen to the questions carefully and emphasize your arrest decision was made at the completion of your DWI investigation and based on ALL available evidence.



***Point out if the defense can discredit your training and/or experience your testimony will have little weight with the jury. Emphasize arrest decisions should be based on the totality of the circumstances.***

You may be asked questions that suggest you deviated from your training. These questions may suggest you eliminated portions of the tests or gave incomplete or confusing instructions. One way you can refute these defense challenges is by administering the SFSTs as you were trained. If deviations to the protocol occur, it is important to explain why. Standardization ensures both consistency and credibility.



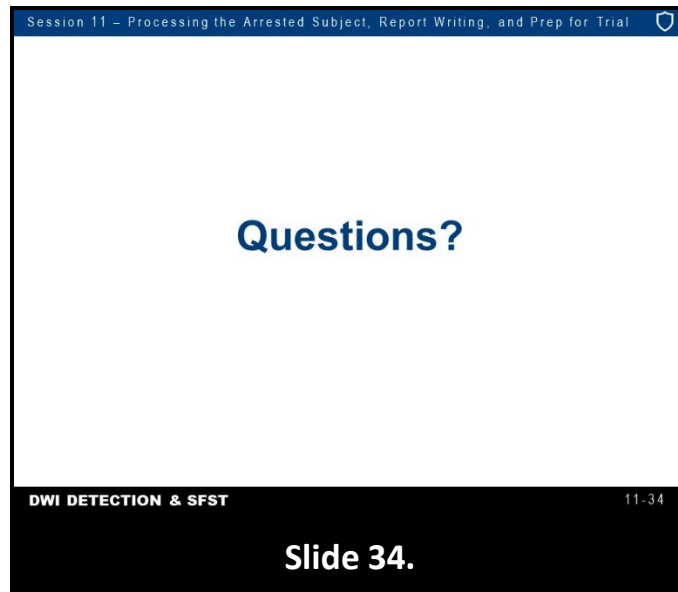
***Point out SFSTs should be administered according to the training.***

Avoid using “I didn’t do XYZ” versus “I couldn’t do XYZ.” If you deviated from the standard, “didn’t” implies it was your choice. “Couldn’t” implies you had no choice (i.e., inclement weather, gross impairment of the defendant, the defendant was not cooperative, physical injury, geographical location, etc.).



You may be asked questions that suggest the SFSTs are not relevant. These questions will suggest SFSTs have no relationship to driving. For example, a defense attorney may suggest standing on one leg does not correlate with the ability to drive safely. The divided attention tests assess the same mental and physical capabilities a person needs to drive safely. These include information processing; short term memory; judgment and decision making; balance; steady, sure reactions; clear vision; small muscle control; and coordination of limbs.

---



## **Trial Tips and Techniques**

### **Courtroom Decorum**

1. **TELL THE TRUTH.** Honesty is the best policy. Telling the truth requires a witness testify accurately as to what he knows. If you tell the truth and are accurate, you have nothing to fear on cross examination.
2. Provide your professional Curriculum Vitae to the prosecutor and, if requested, bring it to court with you.
3. **READ YOUR INCIDENT REPORT** prior to arrival at court. Go over the details and refresh your memory of the events of the arrest. If you cannot locate a copy of your report, ask the prosecutor prior to the court date.
4. Dress neatly and professionally; leave sunglasses, gloves, flashlight and other cumbersome equipment in your car before coming into the courtroom, unless needed for a demonstration.
5. Do not guess the answer to any question asked. It is OKAY to say “I don’t know” or “I can’t remember” in response to questions. Do not give the impression that you are guessing the answer by prefacing your response with “I think” or “I believe.” If you do not know the answer, it is okay to look at your report and refresh your memory. Always give definitive, positive, sure answers.
6. Listen carefully to the question asked. Do not begin your answer until the attorney has finished asking the question. Be sure you understand the question before you attempt to give an answer. It is appropriate if you don’t understand the question to say, “I don’t understand your question.” If necessary, ask that the question be repeated or rephrased.
7. Take your time. Do not feel pressured to give a quick answer. Take time after the question is asked to think before you answer. After a question is asked, there may be an objection. When you hear the word, “objection,” stop testifying.
8. Answer the question that is asked, then stop. Do not volunteer information not asked. Explain an answer if you feel your answer appears ambiguous or incomplete. You are always permitted to explain your answer. Tell the prosecutor prior to your testimony if there is anything you feel they do not know about the case.
9. Always be professional in the courthouse. Jurors could be anywhere at any time.
10. Speak loud and clear so that you can be easily heard.

11. Look at the judge/jury when testifying. Always make eye contact with who you are trying to convince. During a bench trial, look at the judge. During a jury trial, look at the jury. This applies even when the attorney asking the question is not standing near the judge or jury box. Always talk to the judge or jury and maintain eye contact with them, even if it feels unnatural.
12. Always be courteous, even when the defense attorney is not. Control your emotions, and never allow yourself to be drawn into an argument. Remember, the best way to make a good impression with the judge/jury is to be courteous and professional. You were just doing your job during the arrest and presenting the facts in court as they occurred.
13. Testify in plain language. Do not say, “The perpetrator exited the vehicle” when in reality “the defendant got out of his car.” The person on trial is never a “lady” or “gentlemen,” but is always “the defendant.” Do not use military times without clarifying the time in laymen’s terms. Do not use call signals. It makes more sense to the jury when you speak the same language they do.
14. It is the best practice to discuss the case with the prosecutor before trial. A defense attorney may ask if you’ve had a pretrial conference with the prosecutor. Tell the truth. Preparation for court is acceptable. Be straight forward in answering all questions.
15. Always tell the truth. No case is worth sacrificing your credibility.

### **Specific DWI Trial Recommendations**

1. Never give the numerical PBT reading of the defendant when asked by the prosecutor. However, if the defense attorney asks you for the NUMERICAL reading, give it to him/her. The prohibition of PBT results of a defendant do not apply to witnesses, such as passengers in the car.
2. Discuss with the prosecutor, pre-trial, whether or not to demonstrate how you conducted field sobriety tests. Be certain that you can do in court all the tests you asked the defendant to perform at the time of the arrest. If you cannot do them, the jury will not expect that the defendant could have done them properly.
3. Know the reasons for giving field sobriety tests:
  - They are **divided attention tests**, designed to detect when a person is impaired by alcohol and/or drugs
  - They provide evidence of impairment in cases where the defendant refuses to take a chemical test under implied consent
  - They prevent an arbitrary decision to arrest, and allow an officer to articulate the reasons for concluding that a driver was DWI

4. If you testify to the accuracy of the field sobriety tests, make sure you know the studies, percentages, and their significance. Considered independently, the nystagmus test was 88% accurate, the Walk and Turn, 79% accurate, and the One Leg Stand, 83% accurate in identifying subjects whose BAC were .08 or more.
5. Remember, you should not testify that the defendant passed or failed the SFSTs. The tests are not “pass” or “fail.” You should testify if the defendant completed the tests as instructed. These tests simply identify impairment.

## Sample DWI Incident Report

Defendant: Jarod Primo  
Age: 31  
Date of Birth: 10/03/XX  
Date of Arrest: XX-XX-XX  
Time of Arrest: 9:20 pm  
CA - D.L. #: CA 1234567

### **First Observations:**

On XX-XX-XX at approximately 9:00 p.m., I was patrolling northbound on State Road 113, a four-lane divided highway, traveling toward Woodland, California in Yolo County. I observed a white sport utility vehicle traveling ahead of me northbound in the right lane of SR 113. I noticed the S/V drift outside of its travel lane to the left, crossing the line divider the entire width of its left side tires. The vehicle corrected its path, returned to the right lane, and then drifted to the left again. The left side tires again crossed completely over the center line before the vehicle corrected and returned to the right lane. As I moved closer to the vehicle, I noticed there was no license plate displayed on the rear of the S/V. I signaled for the vehicle to stop by activating my emergency lights. The driver did not respond for approximately 700-800 feet, so I activated an audible siren to alert the driver. After a few more seconds, the driver reacted to my signal and exited the freeway at exit 34, County Road 25A and crossed over the fog line. At the foot of the ramp the S/V did not stop at the stop sign or signal his turn but rolled through it during a right turn onto CR 25A. The S/V made another right turn and came to a stop on County Road 100 approximately 300 feet south of CR 25A.

### **Observations After the Stop:**

I approached the S/V on the passenger side and made contact with the driver who was the sole occupant. I immediately noticed the driver had red, bloodshot, watery eyes. I advised him of the reasons for the stop and asked if his vehicle had any mechanical problems. He stated, "no." I requested his driver's license, registration, and insurance. The driver handed me a visa credit card, which was removed from his wallet located in a storage pocket in the center of his vehicle dashboard. He did not attempt to produce his registration or insurance card. I asked him where he was coming from. He replied "Downtown," and that he had been "with some friends." I noticed his speech was slurred when he was speaking to me and I detected the odor of an alcoholic beverage that was greater when he spoke. I asked him where he was headed and he replied, "just going home." I informed him he had produced a credit card and asked again for him to produce his driver license. When he provided his driver license, I identified the driver by the photo on his California driver license (#CA1234567) as Jared Primo. I asked him how much alcohol he had consumed tonight, and he replied, "Just a couple of drinks." I asked him again for his registration and proof of insurance and he reached into his glove box and retrieved his vehicle registration.

I noticed his movements were uncoordinated as he leaned over and retrieved this document. I asked him to exit the vehicle and step to the front of his vehicle car. He asked "Why? What's going on?" I informed him I detected the odor of an alcoholic beverage coming from within the vehicle and I wanted to ensure he was safe to drive. He rolled his eyes and muttered "Whatever," but complied with my request. When he stepped from the vehicle he was

unsteady on his feet and staggered slightly as he walked towards the front of the vehicle. I asked him several pre-field sobriety test questions. As I communicated with him, I continued to smell an odor of alcoholic beverage emitting from his breath. The defendant stated he had no mechanical problems with his vehicle, he was not sick or injured, and he had no physical problems. He stated he ate some pizza “a few hours ago,” he was not aware of the location where we were stopped, and that he had consumed two beers between 2-3 hours ago when he was downtown. While questioning the defendant, he occasionally swayed forward and backward.

### **Field Sobriety Tests:**

This evaluation was performed on the west shoulder of CR 100 Drive, just south of CR 25A. The evaluation surface was level packed dirt. Lighting conditions consisted of patrol vehicle headlights, spotlights, overhead lights, and my flashlight. The weather was clear with a slight breeze and Primo was wearing athletic shoes.

### **Horizontal Gaze Nystagmus (explained):**

In checking Primo’s eyes, I observed equal tracking in both eyes, equal pupil size in both eyes, and no resting nystagmus in either eye. I observed lack of smooth pursuit, distinct and sustained nystagmus at maximum deviation, and an onset of nystagmus prior to 45 degrees in both of Primo’s eyes. Vertical Gaze Nystagmus was not observed.

### **Walk and Turn (explained and demonstrated):**

Instruction Stage: Lost balance (feet broke apart) and swayed noticeably from side to side.  
Walking Stage: Raised left arm over 6 inches away from body to assist with balance at steps 3 and 5 during the first set of nine steps and raised his right arm during the second set of steps from 3-8. Missed heel to toe once (#6 during first set of nine steps). Turn: Primo only took one step during the turn instead of several small steps as instructed.

### **One Leg Stand (explained and demonstrated):**

Primo raised his right foot and began counting. He put his foot down on counts 1010 and 1014. He used his arms for balance (6+ inches from body) and was swaying while balancing on many occasions. He hopped on 1013. He counted to 1014 during the thirty seconds of the test.

**Arrest:**

Based on the following information, I formed the opinion that Primo was driving under the influence:

- Driving at night with no license plate
- Weaving out of his lane into another lane
- Driving to the right of the solid white fog line freeway
- Failing to stop for stop sign when exiting SR 113 at CR 25A
- I observed divided attention problems while retrieving his license/registration and insurance
- His red, bloodshot, watery eyes and slurred speech
- His admissions to consuming alcoholic beverages
- Staggering after exiting vehicle
- Odor of alcoholic beverage emitting from his breath
- I observed signs of impairment as he performed the standardized field sobriety tests

I arrested Primo for driving under the influence of an alcoholic beverage at 9:20 p.m. Primo was given the proper chemical testing advisement. He chose a breath test and was transported to the breath testing facility. He provided two breath samples of 0.095 and 0.092 at 9:50 p.m. and 9:52 p.m. He was then booked along with his property.

**Recommendations:**

I recommend a copy of this report be forwarded to the district attorney's office for review and prosecution of Primo for driving under the influence and driving with a blood alcohol concentration at or above the legal state limit.

**Vehicle Disposition:**

Primo's vehicle was stored by Reliable Towing.





# 12

# SFST

---

## Moot Court

**LEARNING OBJECTIVES**

- Discuss the need for competent courtroom testimony
- Demonstrate the proper techniques of courtroom testimony

**CONTENTS**

A. Procedures ..... 4

B. Moot Court Exercise ..... 5

**LEARNING ACTIVITIES**

- Instructor-Led Presentations
- Participant’s Courtroom Testimony Exercise
- Instructor-Led Discussion



*While this session is optional, the experience provided to participants may prove valuable for testifying. It provides a practical application for the session objectives learned in Session 11. If this session is omitted, it does not affect the goals and objectives of the SFST curriculum in developing skills in DWI Investigation.*



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***




***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

Session 12 – Moot Court

## Learning Objectives

- Discuss need for competent courtroom testimony
- Demonstrate proper techniques of courtroom testimony



DWI DETECTION & SFST 12-2

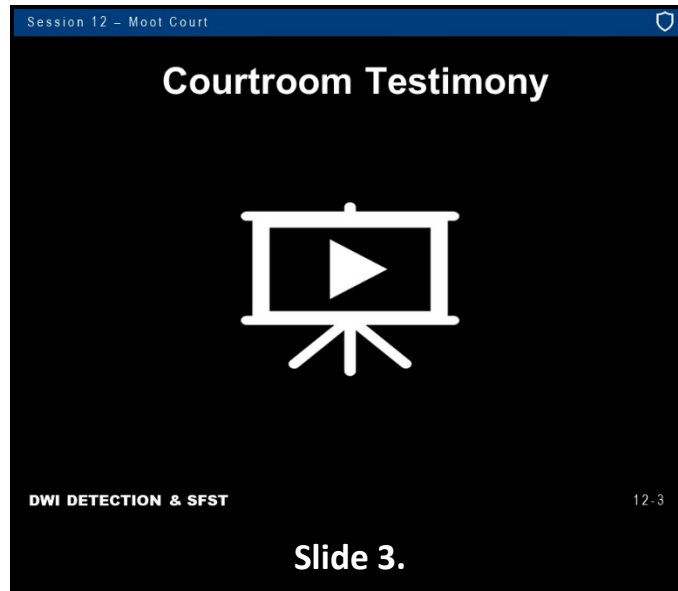
**Slide 2.**



***Briefly review the objectives, content, and activities of this session.***

***Explain participants will view a video of a simulated DWI arrest. Some participants subsequently will be selected to "testify" about the incident in a moot court. The purpose of this exercise is to have the participants demonstrate their ability to testify in a logical sequence to the evidence they collected during the three phases of DWI Detection with Report Writing video.***

## A. Procedures



The purpose of this exercise is to have you demonstrate your ability to testify in a logical sequence to the evidence you collected during the three phases of DWI Detection with Report Writing video.



**Instructor Note**



**Video**



**Activity**

***Advise participants they will be divided into groups to provide testimony regarding observations they make in the following video.***

***Do not reveal to the participants which topic they will be assigned until after the video has been shown.***

***Show video.***

***Assign participants into groups (minimum of 3 groups, one for each of the three SFSTs. Additional groups could include – initial observation of the vehicle in motion, observation of the stop, face-to-face interview, exit from the vehicle, etc.).***

***Attempt to solicit key indicators of impairment with primary focus on using the testimony skills discussed in this session.***

## B. Moot Court Exercise

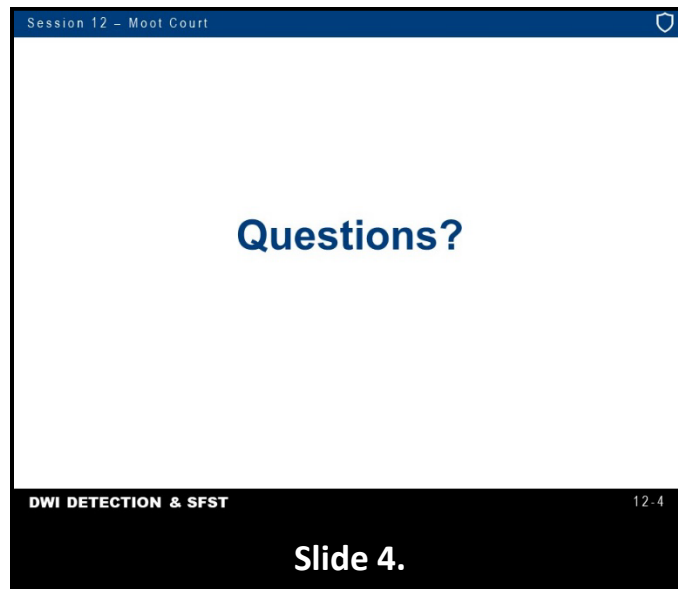
A representative from each group will be called to testify. You should only testify to what you actually observed. You may refer to your written reports if necessary.



***When one "arresting officer" testifies, the other will remain sequestered.  
Prosecutor and defense counsel will give closing statements (if applicable).  
Judge will direct jury to render a verdict (if applicable).***

***Discussion: Solicit participant comments as to the testimony of the two arresting officers.***

***(Optional): The "Prosecuting the Impaired Driver" video may be shown again if time permits.***





13

SFST

Alcohol Workshop: Second Session

LEARNING OBJECTIVES

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject’s performance utilizing the field note-taking guide
- Properly interpret the subject’s performance

CONTENTS

A. Procedures .....	4
B. Hands On Practice .....	5
C. Session Wrap Up .....	6

LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Discussion



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***





## Learning Objectives

- Properly administer SFSTs
- Properly observe and record subject's performance utilizing field note-taking guide
- Properly interpret subject's performance



DWI DETECTION &amp; SFST

13-2

**Slide 2.**

***See “Guidelines for Controlled Drinking Practice Session,” in the Administrator Guide.***

***Briefly review the objectives, content, and activities of this session.***

***Explain participants will work as teams to administer SFSTs to volunteers who have consumed alcoholic beverages. Some of these volunteers will have BACs above 0.08. Others will be below that level.***

***Participants will carefully note and record the volunteers' performance and attempt to distinguish those above 0.08 from those below 0.08.***

***Participants will also learn to record their observations on a SFST Log.***

***It is recommended to have at least one instructor for every six participants for this session.***

## A. Procedures

Session 13 – Alcohol Workshop: Second Session

### Administer SFSTs

- Volunteers who have consumed alcohol
- Each team member will administer one complete series of tests to at least one drinking volunteer
- Each team prepares a descriptive, written test record on each volunteer tested

DWI DETECTION & SFST13-3

Slide 3.



***Participants work in the same teams constituted for the Dry Run Practice Session.***

***Make sure all participants understand the practice procedures. Each team will test at least as many drinking volunteers as the team has members. Example: If a team has four members, that team will administer a complete set of tests to at least four volunteers.***

***Each team member will administer one complete series of tests to at least one drinking volunteer. If time permits, teams will test additional volunteers.***

***Emphasize each team is to prepare a descriptive, written test record on each volunteer tested (using the standard note-taking guide).***

***While one participant is administering tests to a volunteer, the other team members will observe and record the volunteer's performance.***

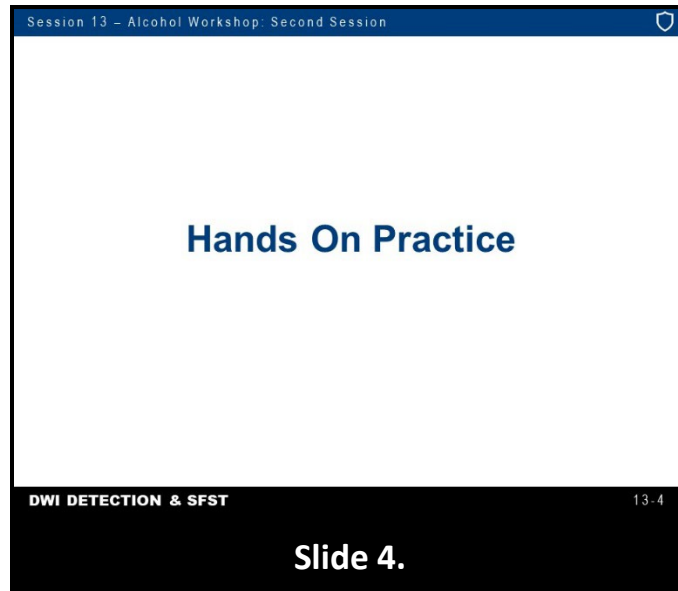
***As soon as the team has completed the SFSTs on a particular volunteer, the volunteer must be escorted by a monitor to the next scheduled team.***

***Define the sequence in which volunteers will circulate among teams.***

***Upon termination of this practice segment, monitors will escort the volunteer subjects to the Breath Testing Station.***

***Emphasize teams will not be informed of the volunteers' BACs until the session "Wrap Up".***

## B. Hands On Practice



***Participants carry out the "drinking subjects" practice procedures.***

***Circulate among teams to observe and coach participant performance, as necessary.***

***Upon completion of practice, teams escort volunteers to the Breath Testing Station.***

***Teams return to classroom to complete report writing assignment. An instructor records the BACs of the volunteer.***

## C. Session Wrap Up

Session 13 – Alcohol Workshop: Second Session

### Session Wrap Up

- SFST results on each volunteer
- Observations concerning the relationship between volunteers' BACs and their performances on the tests

DWI DETECTION & SFST13-5

Slide 5.



***Teams report their observations of volunteers.***

***Solicit SFST results on each volunteer. Record results on dry erase board (See sample array on next page).***

***Notify participants of volunteers' BACs as obtained during the breath tests.***

***Write BACs next to volunteers' names or code letters on the dry erase board.***

***Solicit participant comments, questions, or observations concerning the relationship between volunteers' BACs and their performances on the tests.***



**Questions?**

**DWI DETECTION & SFST**

13-6

**Slide 6.**

### Sample Dry Erase Board Array for Tabulating Results

"Designated Subjects"	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
"A"				
"B"				
"C"				
"D"				
"E"				
"F"				
"G"				
"H"				
"I"				
"J"				

### SFST Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest/ Not Arrest	Measured BAC	Remarks

## ALCOHOL WORKSHOP PARTICIPANT STATEMENT OF INFORMED CONSENT

I, \_\_\_\_\_, hereby agree to participate in the alcohol  
(Print Name)

workshop conducted on \_\_\_\_/\_\_\_\_/\_\_\_\_ by \_\_\_\_\_.  
(Agency/Department)

I understand that I will consume alcohol and may become impaired or intoxicated. I specifically agree that my participation as a volunteer drinker in this program makes it imperative that I refrain from driving for at least twelve hours following completion of the program.

I understand that, while participating in the program, I will be required to submit to breath tests to determine my blood alcohol concentration. I also understand that I will be required to submit to psychophysical examinations and other non-intrusive clinical tests to assess the extent of my impairment.

I represent that I am in good physical health, and that I am not an alcoholic. I attest that I am not now under the influence of alcohol or any other drug. I attest that I have not consumed any drug, medication, or other substance that would make my consumption of alcohol at this time inadvisable. I affirm that there exists no condition that should preclude my participation in this alcohol workshop as a volunteer drinker.

I have been informed of the purpose of this workshop, namely, to assist in training police officers to recognize and investigate persons impaired by alcohol and other drugs. I acknowledge that I may refuse to consume any or all of the alcohol offered to me during this workshop.

I also consent to being photographed or video recorded, by instructors, for training purposes only.

---

Signature

Date \_\_\_\_/\_\_\_\_/\_\_\_\_

---

Witness



## VOLUNTEER DRINKER QUESTIONNAIRE

VOLUNTEER: \_\_\_\_\_

DATE: \_\_\_\_\_

LOCATION: \_\_\_\_\_

Wearing Glasses? ☐ Yes ☐ No

Wearing Contacts? ☐ Yes ☐ No

Eye Problems? \_\_\_\_\_

Sick or Injured? \_\_\_\_\_

Diabetic? \_\_\_\_\_

Epileptic? \_\_\_\_\_ Other: \_\_\_\_\_

Physical Defects? \_\_\_\_\_

Under Doctor's Care? \_\_\_\_\_

Taking Any Medications or Drugs? ☐ Yes ☐ No What: \_\_\_\_\_

Been Drinking? ☐ Yes ☐ No What: \_\_\_\_\_ When: \_\_\_\_\_

Last Sleep? \_\_\_\_\_

Number of Hours? \_\_\_\_\_

Last Ate – Time: \_\_\_\_\_ What: \_\_\_\_\_

Age \_\_\_\_\_ Eye Color \_\_\_\_\_

Height \_\_\_\_\_ Sex ☐ M ☐ F

Weight \_\_\_\_\_ Build \_\_\_\_\_

## DOSING CHART

MIX: \_\_\_\_\_

TOTAL NUMBER OZ   ETOH \_\_\_\_\_   TYPE \_\_\_\_\_   PROOF \_\_\_\_\_

	BEFORE DRINKING	PRE-TESTING	POST TESTING
Lack of Smooth Pursuit	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Maximum Deviation	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Angle of Onset			
Pupil Size	MM	MM	MM
Pulse	BPM	BPM	BPM
Blood Pressure	/	/	/
BAC/Time	/	/	/

# SFST

---

## Session 13-A

### Dry Lab: Second Session

**LEARNING OBJECTIVES**

- Properly administer the Standardized Field Sobriety Tests (SFSTs)
- Properly observe and record subject’s performance utilizing the field note-taking guide
- Properly interpret the subject’s performance
- Properly use and maintain the SFST log

**CONTENTS**

A. Procedures .....	4
B. Hands On Practice .....	5
C. Use and Maintenance of SFST Log.....	5
D. Session Wrap Up .....	7

**LEARNING ACTIVITIES**

- Instructor-Led Presentations
- Participant Practice Session
- Instructor-Led Presentation
- Instructor-Led Discussion



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***




***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

Session 13-A – Dry Lab

Learning Objectives

- Properly administer SFSTs
- Properly observe and record subject's performance utilizing field note-taking guide
- Properly interpret subject's performance
- Properly use and maintain SFST Log



DWI DETECTION & SFST13A-2

Slide 2.



***Briefly review the objectives, content, and activities of this session.***

***Explain participants will view the administration of SFSTs to volunteers who have consumed alcoholic beverages. Some of these volunteers will have BACs above 0.08. Others will be below that level. Participants will carefully note and record the video subjects' performance and attempt to distinguish those above 0.08 from those below 0.08.***

***Participants will also learn to record observations on a SFST Log.***

## A. Procedures

Session 13-A – Dry Lab

### Procedures

- Same teams as dry run
- Each subject will be viewed performing all three tasks
- Only one opportunity to view each subject
- Record number of clues observed in appropriate boxes on video recording worksheet

DWI DETECTION & SFST13A-3

Slide 3.



***Participants work in the same teams constituted for the Dry Run Practice Session.***

***Make sure all participants understand the practice procedures.***

***Distribute video recording sheets and have participants fill in their name and team number.***

***Have sufficient copies of handout 14-A available (Minimum of eight copies per participant).***

***Advise participants each subject will be viewed performing all three tasks. Pauses are provided between each test to allow participants to record observed clues.***

***Point out participants will have only one chance to view each subject. Review can be conducted after the “wrap-up.”***

***Participants shall record the number of clues observed, in the boxes located opposite each test.***

## B. Hands On Practice



***Divide class into two groups.***

***Each team member will administer a complete SFSTs on another participant under the direct supervision of an instructor.***

***It is recommended half the class perform the SFSTs under the direction of instructor while the remainder of the class views, records, and interprets the NHTSA/IACP-approved videos for this session. Once completed, the groups switch roles. Refer participants to the Proficiency Examination Checklist located in Session 9.***

***EACH team member viewing the videos must determine if the subject should or should not be arrested.***

***Emphasize each officer is to prepare a descriptive, written test record on each video subject using the field note-taking guide (located in Session 4).***

***Emphasize teams will not be informed of the volunteer's BACs until the session "Wrap-up."***

***If time permits, participants will administer additional tests to each other.***

## C. Use and Maintenance of SFST Log

Session 13-A – Dry Lab

### SFST Log

SFST Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest/ Not Arrest	Measured BAC	Remarks

DWI DETECTION & SFST 13A-4

**Slide 4.**



***If options using video subjects are used, maintaining the SFST Log is strongly recommended.***

The SFST Log is used to record the results of the SFSTs performed on suspected impaired subjects.



***Point out log should be used to record the results of all SFSTs administered.***

***Emphasize the logs may be used as evidence in court.***

This log is important in documenting an officer's experience and proficiency in performing and interpreting SFSTs. It is highly recommended by the IACP and the National Highway Traffic Safety Administration (NHTSA), that officers utilize an SFST log for the following reasons:

- Records training proficiency
- Records field proficiency
- Documents the officer's experience

All of these combined helps to establish the officer's credibility in administering the SFSTs and may be used as evidence in court. This log has the following components:

- The actual date the SFSTs were administered
- Subject's full name
- Results of each SFST test
- Classification of BAC as above or below 0.08 BAC
- Arrest/Not Arrest
- Subject's measured BAC (if available)



***Direct participants to transfer their documentation from the note-taking guide to the log.***



## D. Session Wrap Up

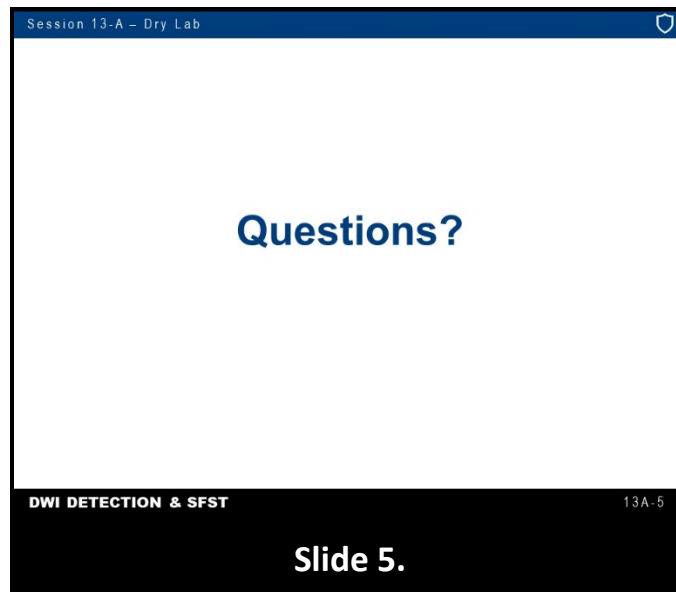


***Teams report their observations of video subjects.***

***Solicit SFST results on each video subject. Record results on dry erase board (See sample dry-erase board array at the end of this session).***

***Notify participants of video subjects' BACs.***

***Write BACs next to video subjects' names or code letters on the dry erase board.***



***Solicit participant comments, questions, or observations concerning the relationship between video subjects' BACs and their performances on the tests.***

### Sample Dry Erase Board Array for Tabulating Results

"Designated Subjects"	Horizontal Gaze Nystagmus	Walk and Turn	One Leg Stand	Arrest?
"A"				
"B"				
"C"				
"D"				
"E"				
"F"				
"G"				
"H"				
"I"				
"J"				

SFST Log

Date	Name	HGN	WAT	OLS	BAC +/- .08	Arrest/ Not Arrest	Measured BAC	Remarks

## Video Recording Sheet

SUSPECT'S NAME: \_\_\_\_\_ OFFICER'S NAME: \_\_\_\_\_

<b>Pupil Size:</b> <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	<b>Tracking:</b> <input type="checkbox"/> Equal <input type="checkbox"/> Unequal	<b>Unequal Pupil Size:</b> Explain:	
<b>Resting Nystagmus</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Eyelids:</b> <input type="checkbox"/> Normal <input type="checkbox"/> Droopy		
<b>Lack of Smooth Pursuit</b>	<b>Left Eye</b>	<b>Right Eye</b>	<b>Vertical Nystagmus</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>Distinct and Sustained Nystagmus at Maximum Deviation</b>	<b>Left Eye</b>	<b>Right Eye</b>	<b>Eyes:</b> <input type="checkbox"/> Normal <input type="checkbox"/> Bloodshot <input type="checkbox"/> Watery
<b>Onset of Nystagmus Prior To 45 Degrees</b>			

### HGN CLUES

Observed	Actual

WALK AND TURN TEST    Cannot keep balance \_\_\_\_\_ Starts too soon \_\_\_\_\_



Stops Walking  
 Misses Heel-to-Toe  
 Steps Off Line  
 Uses Arms  
 Actual Steps Taken

1<sup>st</sup> Nine    2<sup>nd</sup> Nine

--	--

### WALK AND TURN

Observed	Actual

Improper Turn (Describe)	Cannot Do Test (Explain)
--------------------------	--------------------------

<b>Team Information</b> Team No: _____ Arrest Decision: Yes: _____ No: _____  BAC: Above 0.08: _____ Below 0.08: _____
--

### ONE LEG STAND

L                  R  
☐                  ☐  
☐                  ☐  
☐                  ☐  
☐                  ☐

Sways while balancing  
 Uses arms to balance  
 Hopping  
 Puts foot down

### ONE LEG STAND

Observed	Actual

## SFST Option Video Subject Results – CD/Video Day 2

Subject's Name: <b><u>Chansel</u></b>		BAC: <b><u>.101</u></b>
HGN Clues	6 +V	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes; vertical nystagmus present
WAT	2	Stepped off the line, Uses arms for balance
OLS	1	Swayed while balancing
Teaching points/Comments: None		

Subject's Name: <b><u>Desiree</u></b>		BAC: <b><u>.187</u></b>
HGN Clues	6	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes
WAT	5	Lost balance during instructions, Steps off line, Misses heel to toe, Improper turn, Stops while walking
OLS	2	Sways while balancing, Put foot down
Teaching points/Comments: None		

Subject's Name: <b><u>Marquez</u></b>		BAC: <b><u>.000</u></b>
HGN Clues	0	None
WAT	2	Misses heel to toe, Improper turn
OLS	0	None
Teaching points/Comments: None		

Subject's Name: <b><u>Christina</u></b>		BAC: <b><u>.081</u></b>
HGN Clues	6 +V	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes; vertical nystagmus present
WAT	3	Loses balance during instructions, Incorrect number of steps, Missed heel to toe
OLS	1	Sways while balancing
Teaching points/Comments: None		

Subject's Name: <b>Roger</b>		BAC: <b>.121</b>
HGN Clues	6	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes
WAT	4	Lost balance during instruction, Missed heel to toe, Improper turn, Steps off line
OLS	2	Puts foot down, Sways while balancing
Teaching points/Comments: None		

Subject's Name: <b>Dalton</b>		BAC: <b>.125</b>
HGN Clues	6 +V	Lack of smooth pursuit present in each eye, Distinct and sustained nystagmus at maximum deviation present in each eye, Onset of nystagmus prior to 45 degrees present in both eyes; vertical nystagmus present
WAT	7	Cannot maintain balance during instructions, Missed heel to toe, Stepped off the line, Stopped walking, Used arms for balance, Wrong number of step, Improper turn
OLS	3	Sways while balancing, Uses arms for balance, Puts foot down
Teaching points/Comments: None		

# 14 **SFST**

---

## Review and Proficiency Examinations

### LEARNING OBJECTIVES

- Demonstrate knowledge and proficiency in administering the Standardized Field Sobriety Tests (SFSTs)

### CONTENTS

A. Review of Horizontal Gaze Nystagmus .....	4
B. Review Walk and Turn .....	12
C. Review of One Leg Stand .....	17
D. Proficiency Examination .....	21

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Instructor- and Participant-Led Demonstrations
- Video Demonstration (Second Showing IF TIME PERMITS)
- Participant Proficiency Examination



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***





## Learning Objective

- Demonstrate knowledge and proficiency in administering SFSTs



DWI DETECTION &amp; SFST

14-2

**Slide 2.****Instructor  
Note**

***Briefly review the objectives, content, and activities of this session.***

***Explain the participant will review the administrative procedures for the three SFSTs. They will participate in and observe demonstrations of those tests in the classroom and they will view video demonstrations.***

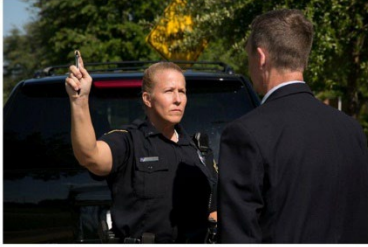
***Near the end of this session, they will be examined to determine proficiency in administering the three tests. Study the Participant's Performance Checklist. They must perform each administrative step correctly to pass the proficiency examination.***

## A. Review of Horizontal Gaze Nystagmus

Session 14 – Review and Proficiency Examinations

### Horizontal Gaze Nystagmus Review

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



DWI DETECTION & SFST 14-3

**Slide 3.**

Involuntary jerking of the eyes, occurring as the eyes gaze to the side. The subject is generally unaware of the nystagmus. Nystagmus is caused by alcohol and/or other drugs and some medical conditions.



***Review pupil size, Resting Nystagmus, and Equal Tracking.***

Session 14 – Review and Proficiency Examinations

## Three Clues of Horizontal Gaze Nystagmus

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

DWI DETECTION & SFST 14-4

**Slide 4.**


Three specific clues of HGN. Look for these clues in each eye:

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

Session 14 – Review and Proficiency Examinations

## Clue Number 1

Lack of Smooth Pursuit



DWI DETECTION & SFST 14-5

**Slide 5.**

Position stimulus approximately 12-15 inches (30-38 cm) in front of subject's nose, slightly above eye level.

Start with the left eye.



***Demonstrate initial positioning of object.***

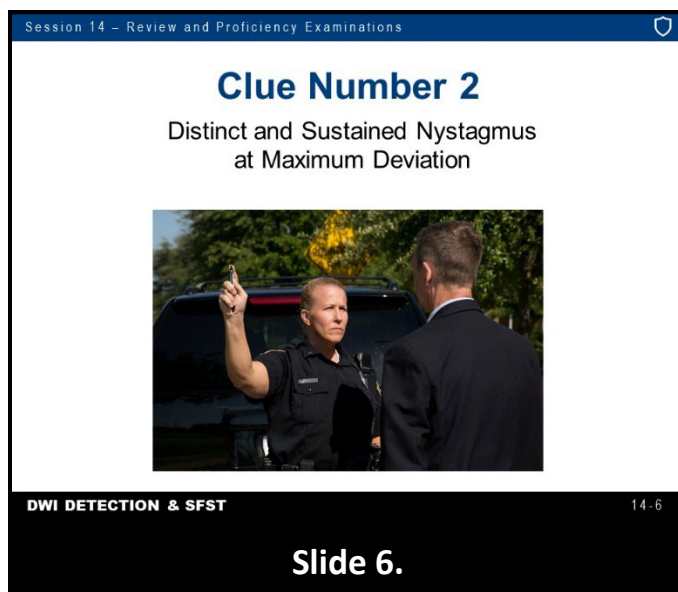
Move the stimulus smoothly all the way to the right (checking subject's left eye) then all the way to the left (checking subject's right eye).



***Demonstrate.***

Make at least two complete passes.

Observe eyes for lack of smooth pursuit as they move side to side.



***Select another participant to serve as a demonstration subject.***

Move the stimulus to the right until the subject's left eye reaches maximum deviation.



***Demonstrate.***

Verify no white is showing in the corner of the eye.



***Remind participants the nystagmus must be distinct.***

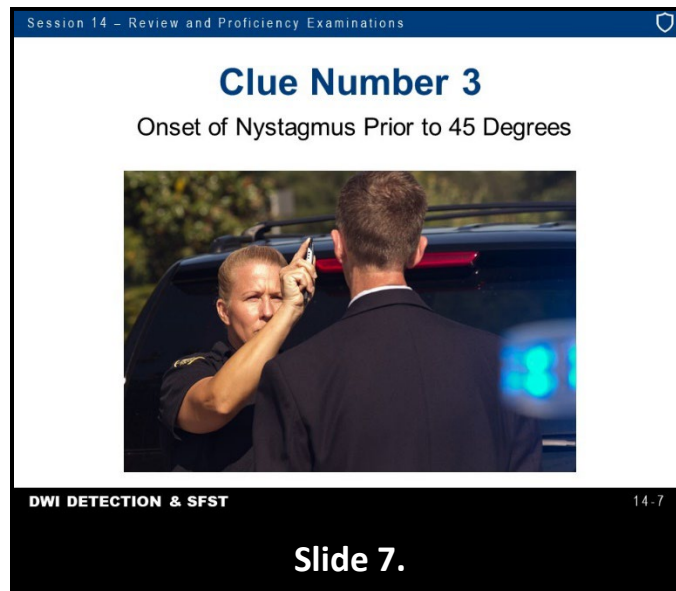
Hold the stimulus steady for a minimum of four seconds and watch for distinct and sustained nystagmus.

Repeat for right eye.



***Remind participants to conduct a second pass the same as the first.***

Check each eye twice for each clue.



***Select another participant to serve as a demonstration subject.***

Position stimulus approximately 12-15 inches (30-38 cm) in front of subject's nose, slightly above eye level.



***Demonstrate.***

Begin to make a slow pass in front of the left eye.



***Reminder: A slow pass should take 4 seconds or greater to move from center to 45 degrees. Demonstrate.***

When you see nystagmus, stop the stimulus.



***Demonstrate.***

Hold the stimulus steady and verify the nystagmus continues.



***Remind participants in most individuals there will be some white showing in the corner of the eye at 45 degrees.***

Verify there is still some white showing in the corner of the eye.



***(Some people's eyes may not exhibit white in the corner at 45 degrees.)***

Repeat for right eye.



***Remind participants to conduct a second pass the same as the first.***

Check each eye twice for each clue.

---



## Administrative Procedures

- Eyeglasses
- Verbal instructions
  - Feet together, arms down at sides
  - Head still
  - Look at stimulus
  - Follow movement with eyes
- Position stimulus (12-15 inches)(30-38 cm)
- Pupil size and Resting Nystagmus
- Equal Tracking

DWI DETECTION &amp; SFST

14-8

### Slide 8.

Step 1: Check for Eyeglasses

Step 2: Verbal Instructions

- Feet together, arms down at sides
- Head still
- Look at stimulus
- Follow movement with eyes

Step 3: Positioning the Stimulus

Step 4: Pupil Size and Resting Nystagmus

Step 5: Check for Equal Tracking



***Reminder: There should be a distinct break between the check for equal tracking and the check for lack of smooth pursuit.***



## Administrative Procedures

- Check for Lack of Smooth Pursuit
- Check for Distinct and Sustained Nystagmus at Maximum Deviation
- Check for Onset of Nystagmus Prior to 45 Degrees
- Total the clues
- Check for VGN

DWI DETECTION &amp; SFST

14-9

**Slide 9.**

Step 6: Check for Lack of Smooth Pursuit

Step 7: Check for Distinct and Sustained Nystagmus at Maximum Deviation

Step 8: Check for Onset of Nystagmus Prior to 45 Degrees

Step 9: Total the clues

Step 10: Check for Vertical Gaze Nystagmus (VGN)

Check each eye independently beginning with the subject's left and compare.


---



Session 14 – Review and Proficiency Examinations

## Horizontal Gaze Nystagmus Test Criterion

4 or more clues indicates BAC  
above 0.08 (88% accurate)



DWI DETECTION & SFST 14-10

**Slide 10.**

Maximum possible number of clues is 6. Test criterion is 4 or more. Test is 88% accurate based on the San Diego validation study.



***Choose a participant to serve as the test administrator.***

***Choose another participant to serve as a subject.***

***Have participant administrator conduct a complete test of the participant subject's eyes.***

***Instruct participant administrator to articulate each step in the testing procedure.***

Initial positioning of stimulus. Check for each clue. Estimate a 45-degree angle.



***At completion of test, have participant estimate a 45-degree angle.***

***Comment on, and solicit other participants' comments on, participant administrator's performance.***


## B. Review Walk and Turn

Session 14 – Review and Proficiency Examinations

### Walk and Turn

Divided Attention  
Mental Task and Physical Task

- Instruction stage
- Walking stage



DWI DETECTION & SFST 14-11

**Slide 11.**

1. Instruction stage
2. Walking stage

Place your right foot on the line ahead of the left foot, with the heel of your right foot against the toe of the left foot, keeping the arms at the sides. Maintain this position until I have completed the instructions. Do not start until told to do so.



***Demonstrate positioning for the instruction stage.***

***Remind participants it is important the subject be asked if he/she understands the instructions. Once the subject acknowledges his/her understanding of the instructions, instruct the subject to begin the test.***



## Administrative Procedures

### Verbal instructions:

- Assume heel-to-toe stance
- Arms down at sides
- Don't start until told
- 9 heel-to-toe steps turn, 9 heel-to-toe steps

### Turn procedures:

- Turn around on the line
- Several small steps

DWI DETECTION &amp; SFST

14-12

**Slide 12.**

### Verbal instructions:

- Assume heel-to-toe stance
- Arms down at sides
- Don't start until told
- 9 heel-to-toe steps turn, 9 heel-to-toe steps

### Turn procedures:

- Turn around on line
  - Several small steps
-



## Administrative Procedures

### While walking:

- Keep watching feet
- Arms down at sides
- Count steps out loud
- Don't stop during walk

DWI DETECTION &amp; SFST

14-13

**Slide 13.**

### While walking:

- Keep watching feet
  - Arms down at sides
  - Count steps out loud
  - Don't stop during walk
-



## Walk and Turn Test Clues

- Cannot keep balance
- Starts too soon
- Stops while walking
- Does not touch heel-to-toe
- Steps off the line
- Uses arm(s) to balance
- Improper turn
- Incorrect number of steps

DWI DETECTION &amp; SFST

14-14

### Slide 14.


There are eight possible clues for the WAT test:

- Cannot keep balance (feet break away from the heel-to-toe stance)
  - Starts too soon (subject starts walking before told to do so)
  - Stops while walking
  - Does not touch heel-to-toe
  - Steps off line
  - Uses arm(s) to balance
  - Improper turn
  - Incorrect number of steps
-

Session 14 – Review and Proficiency Examinations

## Walk and Turn Test Criterion

2 or more clues indicates BAC  
above 0.08 (79% accurate)



DWI DETECTION & SFST 14-15

**Slide 15.**

Eight specific clues of impairment. Test criterion is 2 or more. Test is 79% accurate based on the San Diego validation study.



***Choose a participant to serve as the test administrator.***

***Choose another participant to serve as the test subject.***



***Have participant administrator initiate the test of the subject.***

***Instructions positioning.***

***Verbal instructions.***

***Turn demonstration.***

***Terminate the test after the subject has taken two or three steps.***



***Comment on, and solicit other participants' comments on, participant administrator's performance.***


## C. Review of One Leg Stand

Session 14 – Review and Proficiency Examinations

### One Leg Stand

Divided Attention Test  
Mental Task and Physical Task

- Instruction stage
- Balance and counting stage



DWI DETECTION & SFST 14-16

**Slide 16.**

1. Instruction Stage
2. Balance and Counting stage

Session 14 – Review and Proficiency Examinations

### Administrative Procedures

**Instruction stage:**

- Stand straight, feet together
- Keep arms at sides
- Maintain position until told otherwise

DWI DETECTION & SFST 14-17

**Slide 17.**



***Demonstrate positioning for the instruction stage.***

Stand with your feet together with your arms down at your sides.

Hold position until told to begin.



## Administrative Procedures

### Balance and counting stage:

- Raise either leg
- Keep raised foot approximately six inches (15 cm) off ground, foot parallel to the ground
- Keep both legs straight and arms at your side
- Keep eyes on raised foot
- Count out loud in the following manner:  
“One thousand one, one thousand two, one thousand three and so on”, until told to stop

DWI DETECTION &amp; SFST

14-18

### Slide 18.



***Demonstrate the administrative procedures.***

Simple verbal instructions:

- When I tell you to start, raise either leg with the foot approximately six inches off the ground, keeping your raised foot parallel to the ground
- Keep both legs straight and your arms at your side
- Keep both legs straight and to look at elevated foot
- Count out loud in the following manner: “one thousand one, one thousand two, one thousand three,” and so on until told to stop



***Demonstrate count: one thousand one; one thousand two; one thousand three, etc.***

Simple physical demonstrations:

- Demonstrate OLS
- Demonstrate counting





## One Leg Stand Test Clues

- Sways while balancing
- Uses arm(s) to balance
- Hopping
- Puts foot down

DWI DETECTION &amp; SFST

14-19

**Slide 19.**

There are four specific clues of impairment for the OLS test

- Sways while balancing
- Uses arm(s) to balance
- Hopping
- Puts foot down




***If subject can't do the test, record observed clues and document the reason for not completing the test.***

Session 14 – Review and Proficiency Examinations

## One Leg Stand Test Criterion

Two or more clues indicates BAC above 0.08 (83% accurate)



DWI DETECTION & SFST 14-20

**Slide 20.**

Test criterion is 2 or more. Test is 83% accurate based on the San Diego validation study.



***Choose a participant to serve as the test administrator.***  
***Choose another to serve as the test subject.***



***Have participant administrator initiate the test of the subject.***

- ***Instructions positioning***
- ***Verbal instructions***
- ***Physical demonstrations***

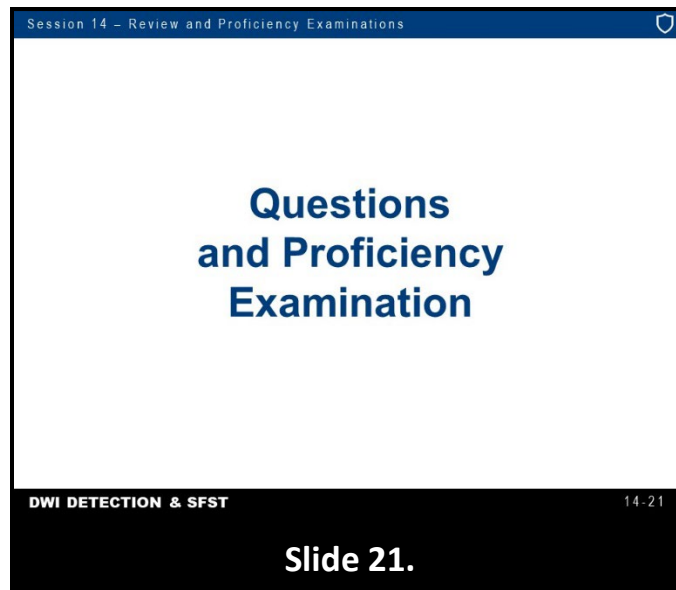
***Terminate the test after the subject has counted out three or four seconds.***



***Comment on, and solicit other participant comments on, participant administrator's performance.***

***Solicit and answer participants' questions concerning test administrative procedures.***

## D. D. Proficiency Examination



*Instructor  
Note*

***Make sure all participants understand the proficiency examination procedures.  
Each participant must demonstrate the ability to administer properly the three  
SFSTs.***



*Instructor  
Note*

***HGN: Inform participants each must satisfactorily administer the HGN test to  
one of the fellow participants.***

- Demonstrate ability to give proper verbal instructions
- Demonstrate ability to carry out the mechanics of testing for each clue
- Demonstrate ability to estimate a 45-degree angle



*Instructor  
Note*

***WAT: Inform the participants each must satisfactorily administer the WAT test  
to one of the fellow participants.***

- Demonstrate ability to give proper verbal instructions
- Demonstrate ability to carry out appropriate physical demonstrations to support the verbal instructions



*Instructor  
Note*

***OLS: Inform the participants each must satisfactorily administer the OLS test to  
a fellow participant.***

- Demonstrate ability to give proper verbal instructions
- Demonstrate ability to carry out appropriate physical demonstrations to support the verbal instructions



***Divide the class among the instructors.***



***Within each group, participants conduct their tests one at a time. While one participant is conducting the tests, another participant assists by serving as the test subject. Other participants in the group observe the participant administrator's performance.***

***Each participant conducts a complete test of HGN and VGN. Critique/comment on participant administrator's performance in conducting HGN test. (Use the performance checklist from the participant manual.)***

***Each participant administers the verbal instructions and physical demonstrations of the WAT test. Stops the test after the participant subject has taken two or three heel-to-toe steps. Critique/comment on participant administrator's performance in conducting WAT test.***

***Each participant administers the verbal instructions and physical demonstrations of the OLS test. Stops the test after the participant subject has counted out three or four seconds. Critique/comment on participant administrator's performance in conducting OLS test.***

***Use the SFST Proficiency Examination Checklist found in this session.***



***Participants who have failed to exhibit adequate proficiency in administering the tests will receive additional practice and a repeat examination before the conclusion of the course. Adequate proficiency for purposes of this session means the participant successfully administers all of the SFSTs prior to the completion of the training course.***

**PARTICIPANT PROFICIENCY EXAMINATION**  
**STANDARDIZED FIELD SOBRIETY TESTs**

Name \_\_\_\_\_ Date \_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_

Agency \_\_\_\_\_

**I. HORIZONTAL GAZE NYSTAGMUS**

1. \_\_\_\_\_ Have subject remove glasses if worn.
2. \_\_\_\_\_ Gives verbal instructions.
3. \_\_\_\_\_ Stimulus held in proper position (approximately 12"-15" from nose, just slightly above eye level).
4. \_\_\_\_\_ Check for equal pupil size and resting nystagmus.
5. \_\_\_\_\_ Check for equal tracking.
6. \_\_\_\_\_ Lack of Smooth Pursuit: Smooth movement from center of nose to maximum deviation in approximately 2 seconds and then back across subject's face to maximum deviation in right eye, then back to center.  
Check left eye, then right eye. (Repeat)
7. \_\_\_\_\_ Distinct & Sustained Nystagmus at Maximum Deviation: Eye held at maximum deviation for a minimum of 4 seconds (no white showing).  
Check left eye, then right eye. (Repeat)
8. \_\_\_\_\_ Onset of Nystagmus Prior to 45 Degrees: Eye moved slowly (approximately 4 seconds) from center to 45 angle.  
Check left eye, then right eye. (Repeat)
9. \_\_\_\_\_ Total the number of clues.
10. \_\_\_\_\_ Check for Vertical Gaze Nystagmus. (Repeat)

**II. WALK AND TURN**

1. \_\_\_\_\_ Instructions given from a safe position.
2. \_\_\_\_\_ Tells subject to place feet on a line in heel-to-toe manner (left foot behind right foot) with arms at sides and gives demonstration.
3. \_\_\_\_\_ Tells subject not to begin test until instructed to do so and asks if subject understands.
4. \_\_\_\_\_ Tells subject to take nine heel-to-toe steps on the line and demonstrates.
5. \_\_\_\_\_ Explains and demonstrates turning procedure.
6. \_\_\_\_\_ Tells subject to return on the line taking nine heel-to-toe steps.

7. \_\_\_\_\_ Tells subject to count steps out loud.
8. \_\_\_\_\_ Tells subject to look at feet while walking.
9. \_\_\_\_\_ Tells subject not to raise arms from sides.
10. \_\_\_\_\_ Tells subject not to stop walking once they begin.
11. \_\_\_\_\_ Asks subject if all instructions are understood.

### III. ONE LEG STAND

1. \_\_\_\_\_ Instructions given from a safe position.
2. \_\_\_\_\_ Tells subject to stand straight, place feet together, and hold arms at sides.
3. \_\_\_\_\_ Tells subject not to begin test until instructed to do so and asks if subject understands.
4. \_\_\_\_\_ Tells subject to raise one leg, either leg, approximately 6" from the ground, keeping raised foot parallel to the ground and gives demonstration.
5. \_\_\_\_\_ Tells subject to keep both legs straight and to look at elevated foot.
6. \_\_\_\_\_ Tells subject to count out loud in the following manner: one thousand one, one thousand two, one thousand three, and so on until told to stop, and gives demonstration.
7. \_\_\_\_\_ Asks subject if all instructions are understood.
8. \_\_\_\_\_ Checks actual time subject holds leg up. (Time for 30 seconds.).

Instructor: \_\_\_\_\_

Note: In order to pass the proficiency examination, the student must explain and proficiently complete each of the steps listed.

# 15 **SFST**

---

## Written Examination and Program Conclusion

### LEARNING OBJECTIVES

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

### CONTENTS

A. Post Test.....	11
B. Critique.....	12
C. Review of Post Test.....	13
D. Concluding Remarks.....	13
E. Certificates and Dismissal .....	14

### LEARNING ACTIVITIES

- Written Participant Examination
- Written Participant Critique
- Instructor-Led Presentation



***EXPLAIN*** that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***



***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***





## Learning Objectives

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



DWI DETECTION &amp; SFST

15-2

**Slide 2.**

***Briefly review the objectives, content, and activities of this session.***

***Explain participants will take a written test to demonstrate their knowledge of the key topics covered in this course. They should study the manual prior to the test and become familiar with its contents.***



## Deterrence and DWI

- What approximate percentage of fatal crashes involve drivers who have been drinking?
- On any typical weekend night, approximately what percentage of cars are driven by persons who are DWI?

DWI DETECTION &amp; SFST

15-3

**Slide 3.**

- ***Approximately one third***
- ***10% or more***

Suggested topics for review to prepare for the test.

- Approximately what percentage of fatal crashes involve drivers who have been drinking?
  - On any typical weekend night, approximately what percentage of cars are driven by persons who are DWI?
-

Session 15 – Written Examination and Program Conclusion

## Deterrence and DWI

- About how many times does the average DWI violator drive intoxicated before arrest?
- An alcohol-related crash at night is more likely to result in death than is a non alcohol related crash. How many times more likely?

DWI DETECTION & SFST 15-4

**Slide 4.**



- **80 times**
- **4 times**

- About how many times does the average DWI violator drive intoxicated before arrest?
  - An alcohol-related crash at night is more likely to result in death than is a non-alcohol-related crash. How many times more likely?
- 

Session 15 – Written Examination and Program Conclusion

## Detection Phases

- What are the three phases of detection?
- What is the definition of "DWI detection"?
- What is the police officer's principal decision during Detection Phase One?
- During Phase Two?
- During Phase Three?

DWI DETECTION & SFST 15-5

**Slide 5.**



- ***Vehicle in motion, Personal contact, and Pre- arrest screening***
- ***The entire process of identifying and gathering evidence to determine if a subject should be arrested for a DWI offense.***
- ***Should I stop the vehicle?***
- ***Should I have the driver exit?***
- ***Should I arrest the driver for DWI?***

- What are the three phases of detection?
  - What is the definition of "DWI detection"?
  - What is the police officer's principal decision during Detection Phase One?
  - During Phase Two?
  - During Phase Three?
- 

Session 15 – Written Examination and Program Conclusion

## Laws

- What does "Per Se" mean?
- The "illegal per se" law makes it an offense to operate a motor vehicle while \_\_\_\_\_.
- True or False: The implied consent law states suspected DWI drivers are deemed to have given their consent to submit to chemical testing.
- True or False: A person cannot be convicted of DWI if BAC was below 0.05.

**Slide 6.**



- ***Illegal in and of itself.***
- ***Having a statutorily prohibited blood alcohol content.***
- ***True***
- ***False***

- What does "Per Se" mean?
  - The "illegal per se" law makes it an offense to operate a motor vehicle while \_\_\_\_\_
  - True or False: The implied consent law states suspected DWI drivers are deemed to have given their consent to submit to chemical testing.
  - True or False: A person cannot be convicted of DWI if BAC was below 0.05.
- 

Session 15 – Written Examination and Program Conclusion

## Alcohol Physiology

- True or False: Alcohol is the most abused drug in the United States.
- Name three of the more commonly known alcohols.

DWI DETECTION & SFST 15-7

**Slide 7.**



- ***True***
- ***Methyl, Ethyl, and Isopropyl***

- True or False: Alcohol is the most abused drug in the United States.
  - Name three of the more commonly known alcohols.
-



## Field Sobriety Testing

- What does "nystagmus" mean?
- WAT is an example of a \_\_\_\_\_ attention test
- Name the eight distinct clues of WAT
- Name the four distinct clues of OLS
- Name the three distinct clues of HGN

DWI DETECTION &amp; SFST

15-8

**Slide 8.**



- *Involuntary jerking of the eyes, occurring as the eyes gaze to the side.*
- *Divided*
- *Cannot keep balance while listening to the instructions, starts too soon, stops while walking, does not touch heel-to-toe, steps off line, uses arm(s) to balance, improper turn, incorrect number of steps*
- *Sways while balancing, uses arm(s) to balance, hopping, puts foot down*
- *Lack of Smooth Pursuit, Distinct and Sustained Nystagmus at Maximum Deviation, Onset of Nystagmus Prior to 45 Degrees*

- What does "nystagmus" mean?
- Walk and Turn (WAT) is an example of a \_\_\_\_\_ attention test.
- Name the eight distinct clues of WAT.
- Name the four distinct clues of One Leg Stand (OLS).
- Name the three distinct clues of Horizontal Gaze Nystagmus (HGN).



## Field Sobriety Testing

- What is the critical angle for determining whether the third clue of HGN is present?
- How many steps in each direction must the subject take in the WAT test?
- How long must the subject stand on one foot in the OLS test?

DWI DETECTION &amp; SFST

15-9

**Slide 9.**

- **45 degrees**
- **9**
- **30 seconds**

- What is the critical angle for determining whether the third clue of HGN is present?
  - How many steps in each direction must the subject take in the WAT test?
  - How long must the subject stand on one foot in the OLS test?
-



## Field Sobriety Testing

- In the WAT test, a subject who steps off the line during the first 9 steps and once again during the second 9 steps and who uses arm(s) to balance twice during the second 9 steps has produced \_\_\_\_ distinct clue(s).
- How reliable is each test using the San Diego study?

DWI DETECTION &amp; SFST

15-10

### Slide 10.



- *Two*
- *HGN – 88%, WAT – 79%, OLS – 83%*

- In the WAT test, a subject who steps off the line during the first 9 steps and once again during the second 9 steps and who uses arm(s) to balance twice during the second 9 steps has produced \_\_\_\_ distinct clue(s).
  - How reliable is each test using the San Diego field validation study?
-



## A. Post Test

Session 15 – Written Examination and Program Conclusion

### Post Test

- “Closed book”
- Passing score is 80%
- Approximately 15-20 minutes to complete

DWI DETECTION & SFST15-11

Slide 11.

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



***“Closed book” test. Passing score is 80%.***

***Distribute Post Test.***

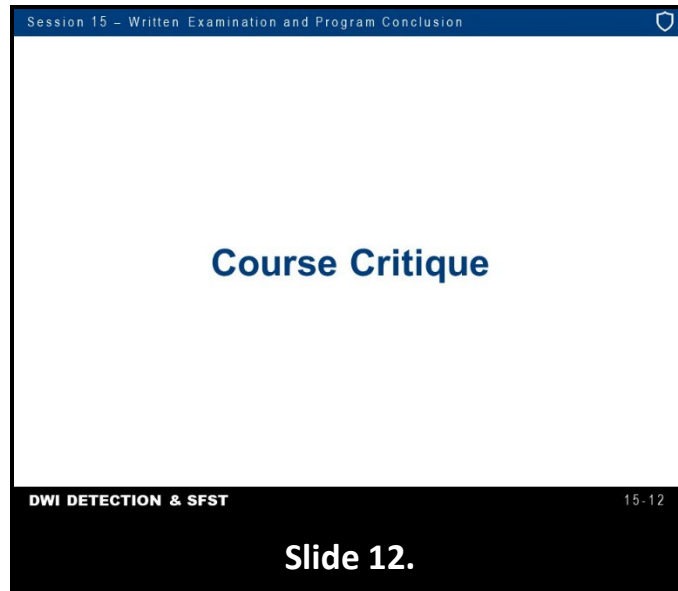
***Allow participants approximately 15-20 minutes to complete the post test.***

***Collect completed Post Tests.***

***Grade Post Test and redistribute to participants for review.***

---

## B. Critique



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



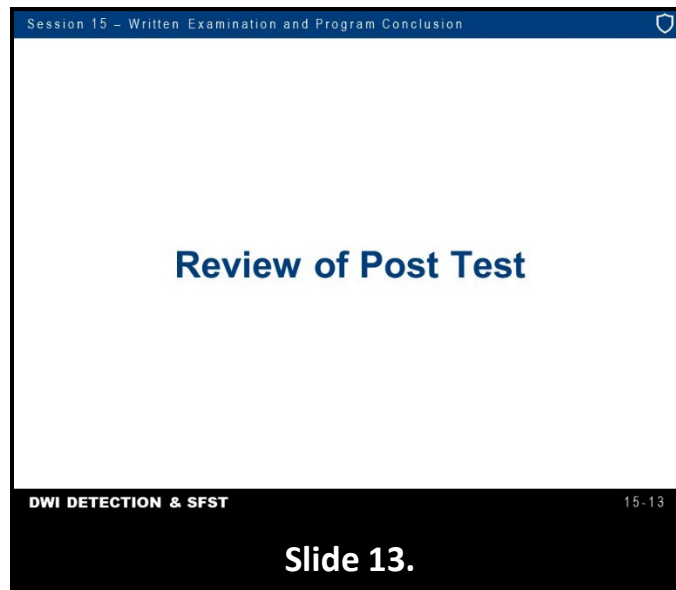
***Explain to participants they will be asked to complete -- anonymously -- a critique form. The instructors need their comments and suggestions to help improve the course.***

***Distribute critique forms.***

***Allow participants approximately 8 minutes to complete the critique form.***

***Collect completed critique forms.***

## C. Review of Post Test



If passing score is not achieved, participant(s) will be allowed to take a “make up” exam at a future date not less than fifteen days nor more than 30 days from the completion of the course.



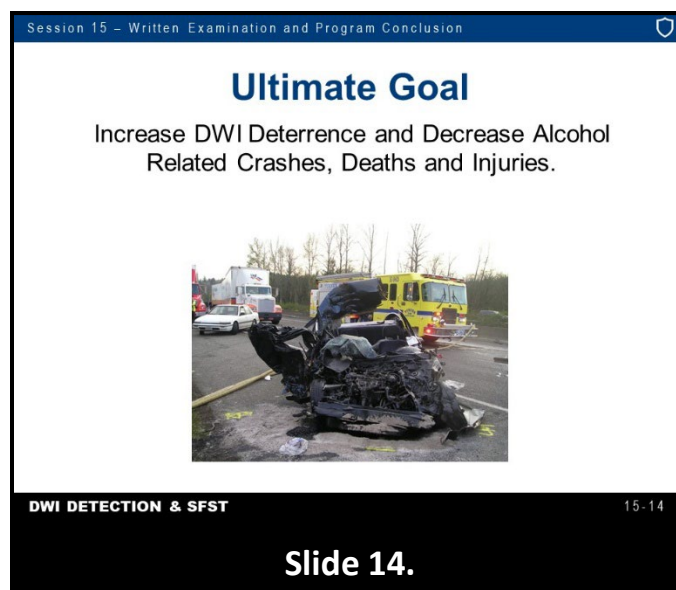
***Read aloud each question on the Post Test and ask participants to supply correct answer.***

***Correct class responses, as necessary.***

***Explain correct answers briefly, as necessary.***

---

## D. Concluding Remarks





**Overall Goal: Briefly remind participants of the importance of DWI deterrence.**

## E. Certificates and Dismissal

Session 15 – Written Examination and Program Conclusion

### Job Performance Objectives

**You will become better able to:**

- Recognize and interpret evidence of DWI violations
- Administer and interpret validated psychophysical SFSTs
- Describe DWI evidence clearly and convincingly

DWI DETECTION & SFST 15-15

**Slide 15.**



***Express the hope the participants will strive always to obtain and clearly convey all of the evidence that is present in their DWI contacts.***

***Hand out certificates.***

***Thank the participants for their time and attention.***

Session 15 – Written Examination and Program Conclusion

### Questions?

DWI DETECTION & SFST 15-16

**Slide 16.**

## DWI Detection and SFST - Course and Instructor Evaluation

For items 1-6, please select your level of agreement with the following statements. Include any additional information in the space provided.

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. This course enabled me to understand enforcement's role in general DWI deterrence. Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. This course enabled me to understand the detection phases. Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. This course enabled me to understand the requirements for organizing and presenting testimonial and documentary evidence in DWI cases. Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. This course enabled me to improve my ability to recognize and interpret evidence of DWI violations. Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. This course enabled me to administer and interpret validated psychophysical tests to DWI subjects. Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. This course enabled me to improve my ability to describe DWI evidence clearly and convincingly in written reports and verbal testimony. Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

***Please rate how helpful each workshop session was for you personally.***

Item	Poor	Fair	Good	Very Good	Excellent
Detection and General Deterrence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Legal Environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overview of Detection, Note Taking and Testimony	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phase One: Vehicle in Motion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phase Two: Personal Contact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Phase Three: Pre-Arrest Screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concepts and Principles of Standardized Field Sobriety Tests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Test Battery Demonstrations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
“Dry Run” Practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
“Drinking Subjects” Practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Processing the Arrested Subject and Preparation for Trial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Report Writing Exercise and Moot Court	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

Item	Agree	Disagree	Not Sure
The program contains some information that is not needed and that should be deleted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are some important topics missing from the program that should be added.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The program is too short.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel this program has improved my own ability to enforce DWI laws.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The instructors did a good job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very glad I attended the program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The program is too long.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The instructors should have been better prepared.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel fully qualified to use the nystagmus test now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Item	Agree	Disagree	Not Sure
I feel fully qualified to use the two divided attention tests now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Too much time was spent practicing with drinking volunteers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
These three new tests definitely will improve our ability to identify impaired drivers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wish we had more practice with drinking volunteers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you absolutely had to delete one session or topic from this course, what would it be?

---



---

If you could add one new topic or session to this course, what would it be?

---



---

	Poor	Fair	Good	Very Good	Excellent
Please rate the overall quality of the course.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

Instructor Name	Poor	Below Average	Average	Above Average	Excellent
Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comments: _____ _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Name (optional): \_\_\_\_\_





# SFST

---

## Introduction to Drugged Driving

### LEARNING OBJECTIVES

- Define the term “drug”
- Describe in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and in DWI enforcement
- Name the categories of drugs
- Describe the observable signs usually associated with the drug categories
- Describe medical conditions and other situations that can produce similar signs
- Describe appropriate procedures for dealing with drug or medically impaired subjects

### CONTENTS

A. Overview .....	4
B. Eye Examinations: Detecting Signs of Drug Influence .....	9
C. Medical Conditions That May Mimic Drug Impairment .....	15
D. Drug Categories and Their Observable Effects .....	15
E. Combinations of Drugs .....	30
F. Dealing with Suspected Drug Influence or Medical Impairment .....	31

### LEARNING ACTIVITIES

- Instructor-Led Presentations
- Participant Practice



***EXPLAIN that the course consists of live lecture, presentation slides, group activities, and supplemental materials. The participant guide is theirs to keep.***

***The following icons are used throughout the guide.***



***Indicates an activity such as a discussion, game, or work session.***



***Indicates a website resource (web address).***



***Indicates a playable video.***




***Indicates an instructor note***

***All instructor notes appear in bold, italic font. Instructor notes do not appear in the participant manual.***

Session Overview – Introduction to Drugged Driving

## Learning Objectives

- Define term "drug"
- Describe drug involvement in motor vehicle crashes
- Name categories of drugs




DWI DETECTION & SFST Intro-2

**Slide 2.**

Session Overview – Introduction to Drugged Driving

## Learning Objectives

- Describe signs associated with drug categories
- Describe medical conditions
- Describe procedures for dealing with drug- or medically-impaired subjects



DWI DETECTION & SFST Intro-3

**Slide 3.**



***Briefly review the objectives, content, and activities of this session.***

***Solicit participant questions concerning these objectives.***

## A. Overview

Session Overview – Introduction to Drugged Driving

### Session Purpose

Improve your ability to recognize subjects who may be medically impaired or impaired by drugs other than alcohol and, when you encounter such suspects, take appropriate action.

DWI DETECTION & SFSTIntro-4

Slide 4.

The purpose of this session is to improve your ability to recognize subjects who may be medically impaired or impaired by drugs other than alcohol and, when you encounter such subjects, take appropriate action.

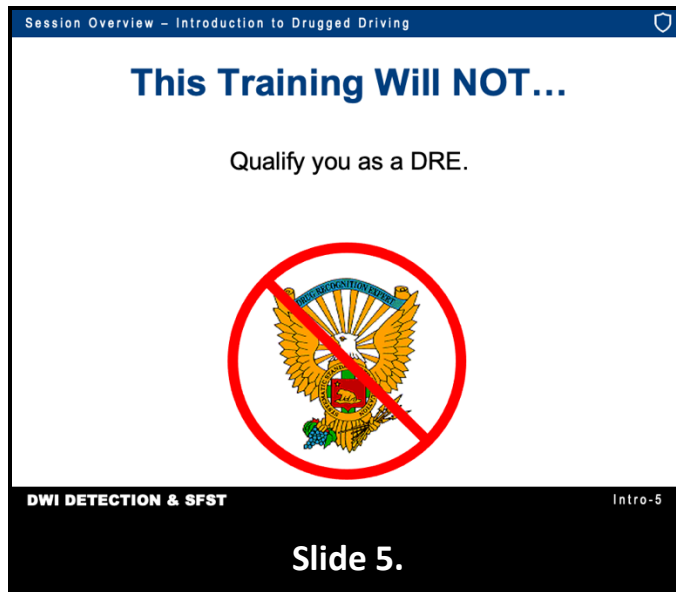
Alcohol certainly remains the most frequently abused drug and most impaired drivers are under the influence of alcohol.



***Ask participants: “What drug is responsible for most DWI violations in America?”***

Many other drugs also are routinely abused by drivers. It is likely every experienced DWI enforcement officer has encountered at least some drivers who were under the influence of drugs other than alcohol. Depending upon the specific types of drugs they have taken, some drug-impaired drivers may look and act like persons who are under the influence of alcohol, but others may look and act very differently from alcohol-impaired drivers. It is important you be able to recognize subjects who may be under the influence of other drugs, so you will know when to summon assistance from physicians or other appropriate persons or Drug Recognition Experts (DREs).

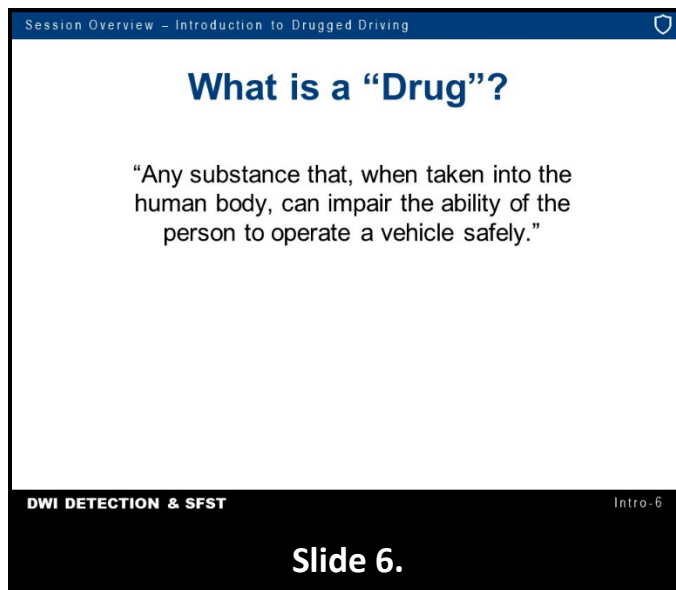
---



One important thing this session will not accomplish: it will NOT qualify you as a DRE. Officers become DREs only after they have completed a comprehensive program that includes nine days of classroom training and closely supervised on-the-job training. (Two-Day Pre-School followed by 7-Day classroom training.)



***Explain DRE School includes a two-day Pre-School followed by a 7-day classroom training.***



*A Simple, Enforcement-Oriented Definition of Drugs: "Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely." (Working definition derived from the California Vehicle Code.)*



***Point out this definition excludes many substances that ordinarily would be considered “drugs” by physicians, chemists, etc.***

***Ask participants: “What are some things physicians would consider to be “drugs” that would not be covered under this definition?” Examples: nicotine; Caffeine.***

This definition includes some substances physicians don't usually think of as drugs.



***Ask participants: “What are some common chemical substances doctors don’t usually consider drugs, but definitely impair driving ability?” Examples: model airplane glue; paint.***

***Emphasize, as traffic law enforcement officers, the participants’ concern has to remain focused on substances that impair driving.***

Within this simple, enforcement-oriented definition there are seven categories of drugs. Each category consists of substances that impair a person’s ability to drive. The categories differ from one another in terms of how they impair driving ability and in terms of the kinds of impairment they cause.




***It should be emphasized each State may have specific criteria related to the definition of a drug. Participants should become familiar with their State’s specific statutes in this area.***

Session Overview – Introduction to Drugged Driving

## How Many People Use Drugs?

- Difficult to determine
- Widespread issue



DWI DETECTION & SFST Intro-7

**Slide 7.**

Because many drugs are illegally manufactured, sold, and consumed, it is difficult to determine how many people actually use the various drugs. All available information shows drug use and abuse are widespread among large segments of the public.

---

Session Overview – Introduction to Drugged Driving

## NSDUH Self-Reported Drug Use

- In 2020, an estimated 37.3 million Americans aged 12 or older were current (past month) illicit drug users
- Marijuana was used by approximately 88 percent of all current illicit drug users

DWI DETECTION & SFSTIntro-8

Slide 8.

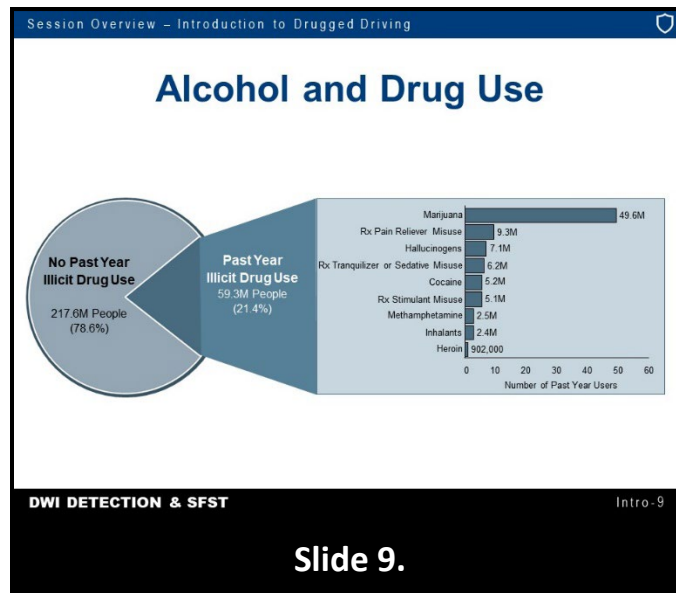
The following summarizes the self-reported drug use information from the 2020 National Survey on Drug Use and Health (NSDUH):

- In 2020, an estimated 37.3 million Americans aged 12 or older were current (past month) illicit drug users
- Marijuana was used by approximately 88 percent of all current illicit drug users



***Remind the participants the numbers are very conservative due to self-reporting.***

B.



NSDUH provides additional details on drugs used within the past 30 days in a manner other than prescription:

Type	Number of Users
Cocaine	1.8 Million
Hallucinogens	1.8 Million
Psychotherapeutics	16.8 Million
Pain Relievers	2.5 Million
Tranquilizers	2.2 Million
Stimulants	1.5 Million
Sedatives	2.2 Million

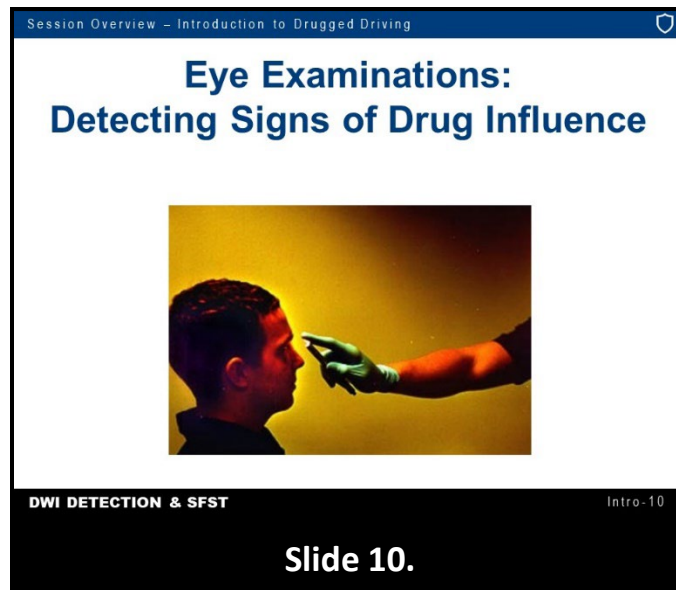


**Source:**

2020 National Survey on Drug Use and Health (NSDUH) Release. (2021, October). Retrieved from Substance Abuse and Mental Health Services Administration: <https://www.samhsa.gov/data/release/2020-national-survey-drug-use-and-health-nsduh-releases>



## C. Eye Examinations: Detecting Signs of Drug Influence



The eyes can disclose indicators of drug impairment or medical conditions.



***Ask participants: What is one of the most reliable signs of alcohol influence that can be observed in the eyes?***

Horizontal Gaze Nystagmus (HGN) is an excellent indicator of possible alcohol impairment. There are a number of drugs other than alcohol that can cause HGN. There are a number of other drugs that will not cause HGN. There are many other clues the eyes will disclose, all of which will suggest the presence or absence of drugs or medical impairment.

---

Session Overview – Introduction to Drugged Driving

## Gaze Nystagmus

- Resting Nystagmus – Occurs as eyes gaze straight ahead
- HGN
- VGN

DWI DETECTION & SFST Intro-11

**Slide 11.**


Resting Nystagmus is defined as the involuntary jerking of the eyes as they gaze straight ahead. This condition is not frequently observed. Its presence may indicate Dissociative Anesthetic usage, high levels of an impairing substance for that subject or certain medical problems. If detected, take precautions. As always, exercise sound officer safety techniques and consider calling for medical aid.

During this training we will focus on two types of nystagmus. Horizontal Gaze Nystagmus (HGN) occurs as the eyes gaze to the side. HGN is useful in determining alcohol influence as well as some drug categories. Vertical Gaze Nystagmus (VGN) occurs as the eyes gaze upward (vertical plane) to an elevated position as far as they can go. VGN is associated with high doses of alcohol and some drug categories for that individual. There is no known drug that will cause VGN without causing at least four clues of HGN.

---

Session Overview – Introduction to Drugged Driving

## Resting Nystagmus



DWI DETECTION & SFST Intro-12

**Slide 12.**


Sometimes persons impaired by Dissociative Anesthetics will exhibit Resting Nystagmus, i.e., the eyes jerk while they are looking straight ahead.



***Write “Resting Nystagmus” on dry-erase board or easel/easel pad.***

Session Overview – Introduction to Drugged Driving

## Horizontal Gaze Nystagmus



DWI DETECTION & SFST Intro-13

**Slide 13.**

HGN is defined as the involuntary jerking of the eyes as they gaze toward the side. (As defined in the current SFST curriculum.) Although this type of nystagmus is useful in determining alcohol influence, its presence may also indicate use of Central Nervous System (CNS) Depressants, Inhalants, and Dissociative Anesthetics (DID drugs). HGN becomes observable when a subject is impaired by alcohol, as the subject’s BAC increases the jerking will appear sooner, and/or when a subject is impaired by DID drugs.



The VGN test is very simple to administer.



***Point out VGN was not examined in the research that led to the validation of the SFSTs, HGN, WAT, and OLS.***

- Position the stimulus horizontally. Approximately 12-15 inches (30-38 cm) in front of the subject's nose
- Instruct the subject to hold their head still and follow the stimulus with the eyes only
- Raise the stimulus until the subject's eyes are elevated as far as possible, hold for a minimum of four seconds



***Select a participant or another instructor to serve as a subject and demonstrate the VGN test.***

- Watch closely for evidence of jerking (up and down).

VGN may be present in subjects under the influence of CNS Depressants, Dissociative Anesthetics, or Inhalants.




***Point out VGN usually develops after high doses of alcohol, other depressants, or inhalants.***

***Solicit participants' questions concerning nystagmus.***

Session Overview – Introduction to Drugged Driving

## Pupil Size Observations



DWI DETECTION & SFST Intro-15

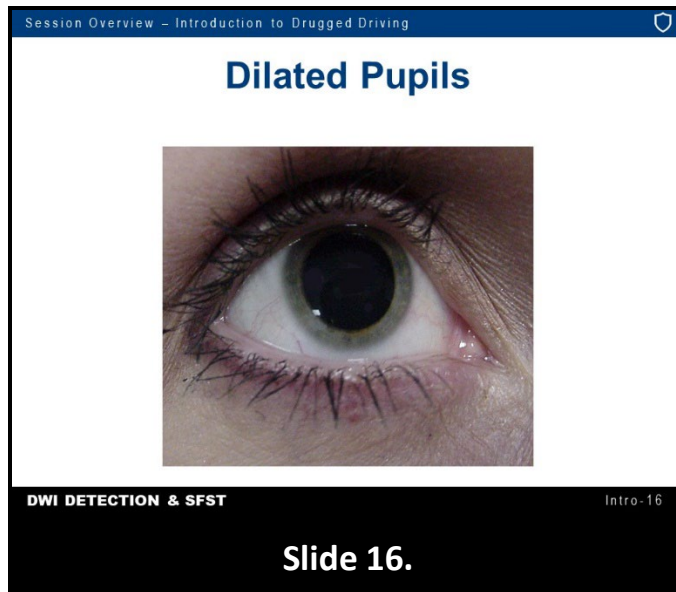
**Slide 15.**



*The eyes are often referred to as “the windows to the soul.”*

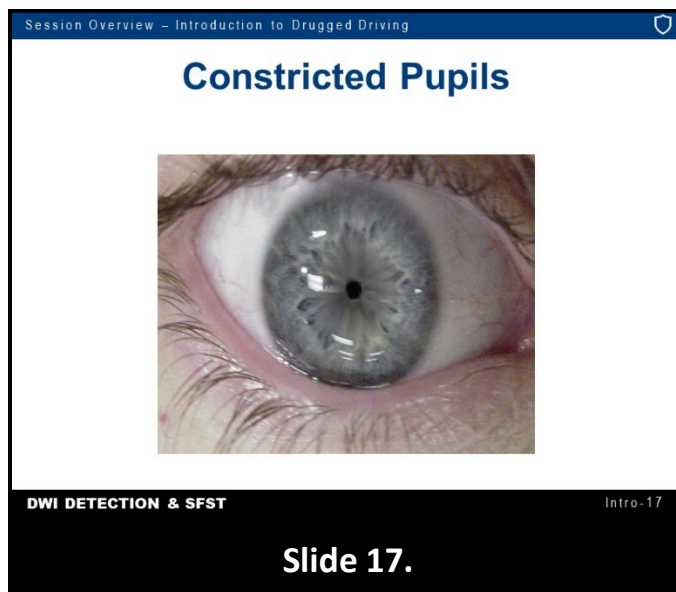
The pupil is basically a circular hole in the middle of the iris, which regulates the amount of light that passes through into the retina. The pupils of the eyes continually adjust in size to accommodate different lighting conditions and refocus according to focal length. When placed in a darkened environment, the pupils will normally expand in size, or dilate, to allow the eyes to capture as much light as possible. When the lighting conditions are very bright, the pupils will normally shrink or constrict, to limit the amount of light that passes through and to keep the eyes from being over stimulated. The effects drugs have on the eyes are involuntary reactions, which mean they cannot be controlled by the subject.

---



Dilated pupils are when the pupils appear larger than expected for the given lighting condition resulting in a noticeably larger opening (circle) in the center of the eye.

---



Constricted pupils are when pupils appear smaller than expected for the given lighting conditions, resulting in a noticeably smaller opening (circle) in the center of the eye.

---

## D. Medical Conditions That May Mimic Drug Impairment

Session Overview – Introduction to Drugged Driving

### Medical Conditions That May Mimic Drug Impairment

- Head Trauma
- Stroke
- Diabetes
- Conjunctivitis
- Shock
- Multiple Sclerosis
- Other Conditions

DWI DETECTION & SFST Intro-18

**Slide 18.**


There are various medical conditions and injuries that may cause subjects to appear to be impaired by alcohol and/or other drugs. Some of the more common medical conditions that may mimic drug impairment include: Head Trauma; Stroke; Diabetes; Conjunctivitis; Shock; Multiple Sclerosis; and, other conditions.

---

## E. Drug Categories and Their Observable Effects

Session Overview – Introduction to Drugged Driving

### Methods of Administration



DWI DETECTION & SFST Intro-19

**Slide 19.**

*Oral* - Oral administration is through the mouth.

*Injection* - Injection is a common method of administering drugs, such as heroin (narcotic analgesic). It is also used to introduce Stimulants, Hallucinogens, Dissociative Anesthetics, and

other Narcotic Analgesics into the body. CNS Depressants can also be injected but this is not common due to the size of the needle required to deliver the substance.



***Give some examples of the appearance and physical characteristics of injection sites.***

In addition to injecting drugs into the veins in the arms, users will find more creative and less conspicuous areas on the body to administer a substance since needles typically leave marks which can be difficult to conceal.

*Insufflation* - Insufflation is the act of introducing a substance by inhaling through the nose for the purpose of intranasal absorption through the mucous membrane. For a substance to be effective when insufflated it must be in a water-soluble powder so it can be readily absorbed through the mucous membranes. This method is commonly referred to as “snorting”.

*Inhalation* - Inhalation is the act of introducing a substance directly into the respiratory system through the nose and mouth for the purpose of absorbing the substance through the alveoli in the lungs. This is a very rapid method of absorption and is often referred to as huffing, sniffing, or smoking.

*Transdermal Absorption* - Transdermal absorption is a less common method of administering drugs. Transdermal means the chemical or drug is absorbed into a subject’s system through the skin.

---

Session Overview - Introduction to Drugged Driving

### Drug Categories and Their Observable Effects

- CNS Depressants
- CNS Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

DWI DETECTION & SFST Intro-20

**Slide 20.**

Definition of “Drug”: Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely. Within this simple, enforcement-oriented definition there are *seven categories of drugs*:

- CNS Depressants
- CNS Stimulants
- Hallucinogens



- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis




***Point out these seven drug categories are derived from the IACP DEC Program.***

Session Overview – Introduction to Drugged Driving

## CNS Depressants

- Alcohol
- Barbiturates (Secobarbital)
- Non barbiturates (GHB/Soma)
- Anti-Anxiety Tranquilizers (Valium/Xanax)
- Antidepressants (Prozac/Elavil)
- Muscle relaxants



DWI DETECTION & SFST Intro-21

**Slide 21.**

CNS Depressants slow down the operations of the brain and usually depress the heartbeat, respiration, and many other processes controlled by the brain. The most familiar CNS Depressant is alcohol. Other CNS Depressants include:



- Barbiturates (such as Secobarbital (Seconal), and Pentobarbital (Luminal))
- Non-Barbiturates (GHB-gamma-hydroxybutyrate and Soma)
- Anti-Anxiety Tranquilizers (Such as Valium, Librium, Xanax, and Rohypnol)
- Antidepressants (such as Prozac and Elavil)
- Muscle relaxants and many other drugs (Soma)

CNS Depressants usually are taken orally, in the form of pills, capsules, liquids, etc. However, CNS Depressants may be injected or insufflated. In general, people under the influence of any CNS Depressant look and act like people under the influence of alcohol.

Session Overview – Introduction to Drugged Driving

## Indicators of CNS Depressant Influence

- Drunk-like behavior
- Thick, slurred speech
- Uncoordinated



DWI DETECTION & SFST Intro-22

**Slide 22.**

General indicators of CNS Depressant influence are:

- Disoriented
- Drowsiness
- Drunk-like behavior
- Slow, sluggish reactions
- Thick, slurred speech
- Uncoordinated
- Unsteady walk

Eye indicators of CNS Depressant influence are:

- HGN usually will be present
- VGN may be present (with high doses)
- Pupil size usually will not be effected, except Methaqualone, Soma, and certain antidepressants may cause pupil dilation



***Solicit participants' questions concerning indicators of CNS Depressant influence.***

Session Overview – Introduction to Drugged Driving

## CNS Stimulants

- Cocaine
- Amphetamines
- Methamphetamine



DWI DETECTION & SFST Intro-23

**Slide 23.**


CNS Stimulants accelerate the heart rate, respiration, and many other processes of the body. The two most widely abused kinds of CNS Stimulants are Cocaine and methamphetamines. Cocaine is made from the leaves of the coca plant. Methamphetamines are chemically produced (manufactured) drugs. Cocaine abusers may take the drug by insufflation, smoking, (freebase, or “Crack”), injection, and/or orally. Abusers of amphetamines and methamphetamines may take their drugs by injection, orally, by insufflation, and/or smoked (methamphetamines only).

---

Session Overview – Introduction to Drugged Driving

## Indicators of CNS Stimulant Influence

- Hyperactive
- Nervousness
- Talkative



DWI DETECTION & SFST Intro-24

**Slide 24.**

People under the influence of CNS Stimulants tend to be hyperactive indicated by nervousness, talkativeness, and an inability to sit still. They also have difficulty concentrating for any length of time. General indicators of CNS Stimulant influence are:

- Anxiety
- Body tremors
- Euphoria
- Exaggerated reflexes
- Excited
- Grinding teeth (bruxism)
- Redness to nasal area
- Restlessness
- Talkative

Eye indicators of CNS Stimulant influence:

- Neither HGN nor VGN will be observed
- The pupils generally will be dilated




***Solicit participants' questions concerning indicators of CNS Stimulant influence.***

Session Overview – Introduction to Drugged Driving

## Hallucinogens

- Peyote
- Salvia Divinorum
- LSD
- MDMA (Ecstasy)



DWI DETECTION & SFST Intro-25

**Slide 25.**

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



***Definition from The Random House College Dictionary (Revised Edition, 1980).***

One common type of hallucination caused by these drugs is called synesthesia, which means a transposing of the senses. Sounds, for example, may be transposed into sights.



***Example: the user may “see” a flash of color whenever the telephone rings.***

Sights, for example, may be transposed into odors or sounds.



***Example: the user may “smell” a particular fragrance when he or she looks at something painted red.***

Some hallucinogenic drugs come from natural sources. Peyote is a Hallucinogen found in a particular species of cactus. Psilocybin is a Hallucinogen found in a number of species of mushroom.

Other Hallucinogens are synthetically manufactured: Lysergic Acid Diethylamide (LSD); 3,4-Methylenedioxyamphetamine (MDA); 3,4-Methylenedioxymethamphetamine or Ecstasy (MDMA); and, many others.

Session Overview – Introduction to Drugged Driving

## Indicators of Hallucinogen Influence

- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Hallucinations
- Nausea
- Paranoia
- Perspiring
- Piloerection (goose bumps)
- Uncoordinated

DWI DETECTION & SFST Intro-26

**Slide 26.**

Hallucinogen abusers usually take their drugs orally; however, some Hallucinogens can be smoked, injected or “snorted”. General indicators of Hallucinogen influence are:

- Body tremors
- Dazed appearance
- Difficulty with speech
- Disoriented
- Hallucinations
- Nausea
- Paranoia
- Perspiring
- Piloerection (goose bumps)
- Uncoordinated

Eye indicators of Hallucinogen influence:



***Point out the indicators of Hallucinogen influence are very similar to the indicators of CNS Stimulant influence.***

- Neither HGN nor VGN should be present
- The pupils usually will be noticeably dilated






***Solicit participants’ questions concerning indicators of Hallucinogen influence.***

Session Overview - Introduction to Drugged Driving

## Dissociative Anesthetics

- PCP
- Ketamine
- DXM



DWI DETECTION & SFST Intro-27

**Slide 27.**

Dissociative Anesthetics is the category of drugs that includes Phencyclidine (PCP), its various analogs, and Dextromethorphan (DXM). PCP is a synthetic drug first developed as an intravenous anesthetic.



***Point out PCP is a very powerful anesthetic or painkiller.***


Because PCP produces very undesirable side effects, it is no longer legally manufactured. Yet, an analog (chemical cousin) Ketamine is still being legally manufactured and available. However, it is easy to manufacture. The formula for making PCP and PCP analogs have been widely publicized. The manufacturing process involves readily available chemicals.

Many Dissociative Anesthetic users smoke the drug by using it to adulterate tobacco, marijuana, or various other substances. Dissociative Anesthetics can also be taken orally, by injection, or inhaled.

Session Overview - Introduction to Drugged Driving

## Indicators of Dissociative Anesthetic Influence

- Blank stare
- Confused
- Incomplete verbal responses
- Muscle rigidity
- Perspiring
- Possibly violent and combative
- Repetitive speech
- Warm to touch



DWI DETECTION & SFST Intro-28

## Slide 28.

General indicators of Dissociative Anesthetics are:

- Blank stare
- Confused
- Incomplete verbal responses
- Muscle rigidity
- Perspiring
- Possibly violent
- Slow, slurred speech

Eye Indicators of Dissociative Anesthetic influence:

- HGN generally will be present often with very early onset and very distinct jerking (Resting Nystagmus may be observed with high doses of dissociative anesthetics)
- VGN generally will be present
- Pupil Size usually will not be affected



***Solicit participants' questions concerning indicators of Dissociative Anesthetic influence.***

Session Overview – Introduction to Drugged Driving

### Narcotic Analgesics

- Heroin
- Morphine
- Codeine
- Synthetic Opiates (e.g., Methadone, Fentanyl)

DWI DETECTION & SFST Intro-29

## Slide 29.

Narcotic Analgesics include a large number of drugs that share three important characteristics:  
They will relieve pain;



***Point out “Analgesic” means “pain killer”.***

They will produce withdrawal signs and symptoms when the drug is stopped after chronic administration;





***Point out this characteristic implies narcotic analgesics are physically addicting.***


and, they will suppress the withdrawal signs and symptoms of chronic morphine administration.

Some drugs classified as Narcotic Analgesics are natural derivatives of opium, such as: Heroin; Morphine; Codeine; and, OxyContin. Some are synthetic Narcotic Analgesics, such as: Methadone; Demerol; and, Fentanyl.

Session Overview – Introduction to Drugged Driving

### Indicators of Narcotic Analgesic Influence

- Depressed reflexes
- Droopy eyelids
- Dry mouth
- Itching
- “On the nod”
- Puncture marks may be evident
- Slow, low, raspy speech



DWI DETECTION & SFST Intro-30

**Slide 30.**

General indicators of Narcotic Analgesic influence:

- Depressed reflexes
- Droopy eyelids
- Drowsiness
- Dry mouth
- Itching
- “On the nod”
- Puncture marks may be evident
- Slow, low, raspy speech

Eye indicators of Narcotic Analgesic influence:

- Neither HGN nor VGN will be present
- Pupils generally will be constricted




***Solicit participants’ questions concerning indicators of Narcotic Analgesic influence.***

Session Overview – Introduction to Drugged Driving

## Inhalants

- Various glues
- Paint
- Gasoline
- Aerosol sprays
- Nitrous Oxide
- Ether
- Amyl Nitrite



DWI DETECTION & SFST Intro-32

**Slide 31.**

Inhalants are breathable chemicals that produce mind-altering results. Inhalants include many familiar household materials such as glue (“Toluene”), paint, gasoline, aerosol sprays, etc. that produce volatile fumes.


Some drugs classified as Inhalants include: Various glues (e.g. Toluene); paint; gasoline; aerosol sprays (i.e., vegetable frying pan lubricants, hair sprays, insecticides); Nitrous Oxide; Ether; and, Amyl Nitrite.

Certain anesthetics also may be used as Inhalants.

Session Overview – Introduction to Drugged Driving

## Indicators of Inhalant Influence

- Confused
- Disoriented
- Possible nausea
- Residue of substance
- Slow, thick, slurred speech



DWI DETECTION & SFST Intro-33

**Slide 32.**

General indicators of Inhalant influence:

- Confused
- Disoriented
- Possible nausea
- Residue of substance on face, hands, clothing
- Slow, thick, slurred speech

Eye indicators of Inhalant influence:

- HGN generally will be present
- VGN may be present (especially with high doses)
- Pupil size generally will not be affected




***Solicit participants' questions concerning Inhalants.***

Session Overview – Introduction to Drugged Driving

## Cannabis

- Marijuana
- Hashish
- Hash oil
- Synthetic Cannabinoids
- Other forms of Cannabis



DWI DETECTION & SFST Intro-34

**Slide 33.**

Cannabis is a category of drugs derived from various species of plants such as the Cannabis Sativa and Cannabis Indica.



***Indica plants grow short and wide while Sativa plants grow tall and thin.***

Forms of Cannabis include: Marijuana; Hashish; Hash oil; and, Synthetic Cannabinoids which include Marinol or Dronabinol, Spice, K2, JWH-18, etc. Other forms of Cannabis include edibles, butane hash oils (wax), etc.


Cannabis products generally are smoked although they also can be administered orally.

---

Session Overview – Introduction to Drugged Driving

## Indicators of Cannabis Influence

- Bloodshot eyes
- Body tremors
- Disoriented
- Odor of marijuana
- Relaxed inhibitions



DWI DETECTION & SFST Intro-35

**Slide 34.**

General Indicators of Cannabis Influence:

- Bloodshot eyes
- Body tremors
- Disoriented
- Odor of marijuana
- Relaxed inhibitions

Eye indicators of Cannabis Influence:

- Neither HGN nor VGN will be present
- Pupil size generally will be dilated, but also may not be affected




***Solicit participants' questions concerning Cannabis.***

## F. Combinations of Drugs

Session Overview – Introduction to Drugged Driving

### Common Combinations of Drugs



Alcohol and some other drug

PCP and Cannabis

Cocaine and Heroin

DWI DETECTION & SFST

Intro-36

**Slide 35.**



***Write these common combinations on the dry-erase board or easel/easel pad.***

According to the 2020 DRE Annual Report, 34 percent of DRE opinions recorded nationally involved impairment from the use of multiple drugs.

Alcohol and some other drug is the most frequent combination. PCP and Cannabis is another common combination. Cocaine and Heroin is another common combination.



***Remind participants many PCP users prefer to administer that drug by smoking and a common method is to sprinkle powdered PCP on marijuana.***

Because impairment from the use of multiple drugs is so common, you should not be surprised to encounter subjects who are under the influence of more than one drug. Be especially alert to the possibility subjects who have been drinking alcohol may also have administered some other drug or drugs. The effects of impairment from the use of multiple drugs may vary widely depending on exactly what combination of drugs is involved, how administered, and when they were administered. Multiple drug use can cause different effects in the user.

## G. Dealing with Suspected Drug Influence or Medical Impairment



Instructor  
Note

***This segment of the lesson plans must be developed locally. Relevant topics may include:***

- ***Local and State laws governing drug-impaired driving and chemical testing of drug-impaired subjects***
- ***Departmental procedures for interviewing, searching, etc. drug-impaired subjects***
- ***Procedures for contacting DREs and assisting in or witnessing the drug evaluation and classification examination***
- ***Procedures for requesting, obtaining, and handling chemical test specimens***



Officers should be familiar with the various medical conditions that mimic drug impairment, i.e. diabetic shock and hypoglycemia. Officers should obtain appropriate medical treatment for drivers who are impaired by these conditions.



Instructor  
Note

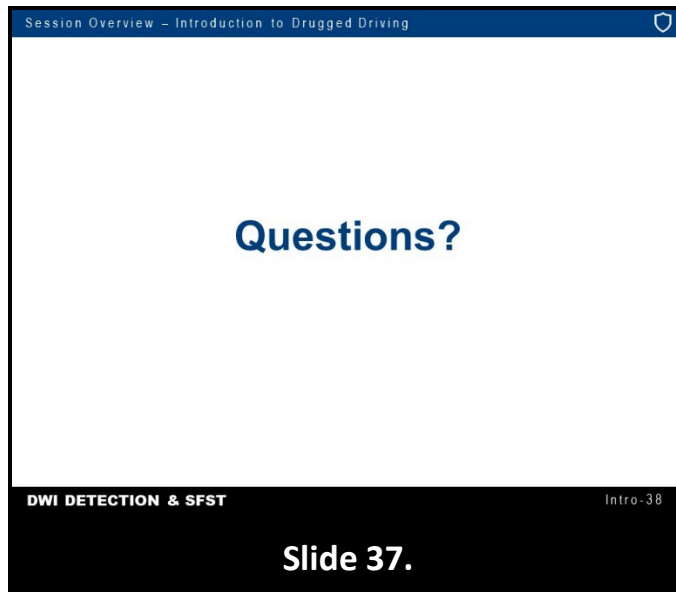
***This may be an opportunity to discuss various medical conditions that mimic drug impairment, i.e., diabetic shock and hypoglycemia.***

Drivers who are suspected of drug impairment should be processed in accordance with state and local laws. Wherever possible, a local DRE should be summoned to assist with the investigation.



Instructor  
Note

***Emphasize the importance of requesting the assistance of a local DRE whenever possible.***



When drug impairment is suspected a DRE should be utilized to assist with documentation of the user's impairment. The DRE is trained to evaluate and interpret possible effects. Consult with a DRE, if possible and document in detail all observations. Although this training is not designed to qualify you as a DRE, it is intended to make you more knowledgeable when encountering drivers impaired by substances other than alcohol. For further information about drug-impaired driving, consider attending the Advanced Roadside Impaired Driving Enforcement training.



***Solicit participants' questions regarding the Introduction to Drugged Driving.***



## References

- 2020 National Survey on Drug Use and Health (NSDUH) Release. (2021, October). Retrieved from Substance Abuse and Mental Health Services Administration: <https://www.samhsa.gov/data/release/2020-national-survey-drug-use-and-health-nsduh-releases>
- Alcohol and the Driver. Council on Scientific Affairs. (1986, January 24-31). *JAMA*, 255(4), 522-527. doi:10.1001/jama.1986.03370040096031
- (1980). *Alcohol Highway Safety Workshop: Participant's Workbook Problem Status*. National Highway Traffic Safety Administration.
- Borkenstein, R. F. (1964, March). *The Role of the Drinking Driver in Traffic Accidents*. Bloomington, IN: Indiana University, Department of Police Administration.
- Burns, M., & Anderson, E. (1995, November). *A Colorado Validation Study of the Standardized Field Sobriety Test (SFST) Battery*. Colorado Department of Transportation.
- Burns, M., & Dioquino, T. (1997). *A Florida Validation Study of the Standardized Field Sobriety Test (SFST) Battery*. National Highway Traffic Safety Administration.
- Citek, K. (2014). *Eye Tests on a Suspect with a Blind Eye*. Pacific University College of Optometry.
- Citek, K., Ball, B., & Rutledge, D. A. (2003, November). Nystagmus Testing In Intoxicated Individuals. *Optometry*, 74(11), 695-710.
- (1974, August). *DWI Law Enforcement Training: Instructor Guide*. (P. 139). National Highway Traffic Safety Administration.
- Hause, J., Matheson, D., Hannon, R., & Chavez, E. (1977, January). *Increased D.U.I. Enforcement Program: Stockton, California Project Evaluation*. (Contract No. DOT-HS-5-01194). U.S. Department of Transportation/National Highway Traffic Safety Administration.
- Holland, M., & Ferner, R. (2017, July). A Systematic Review of the Evidence for Acute Tolerance to Alcohol - the "Mellanby Effect". *Clinical Toxicology (Philadelphia)*, 55(6), 545-556. doi:10.1080/15563650.2017.1296576
- (1999). *Horizontal Gaze Nystagmus: The Science and the Law: A Resource Guide for Judges, Prosecutors and Law Enforcement*. National Traffic Law Center. National Highway Traffic Safety Administration. Retrieved from [https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/horizontal\\_gaze\\_nystagmus-the\\_science\\_and\\_the\\_law.pdf](https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/horizontal_gaze_nystagmus-the_science_and_the_law.pdf)
- Leigh, R., & Zee, D. (2015). *The Neurology of Eye Movements, Fifth Edition*. Oxford University Press.
- Mellanby, E. (1919). *Alcohol: Its Absorption Into and Disappearance from Blood Under Different Conditions*. London, HMSO: British Medical Research Committee: Special Report Series No. 31.

- National Center for Statistics and Analysis. (2016, June). *Motorcycles: 2014 Data*. (Traffic Safety Facts. Report No. DOT HS 812 292). Washington D.C.: National Highway Traffic Safety Administration.
- National Center for Statistics and Analysis. (2017, October). *Alcohol-Impaired Driving: 2016 Data*. (Traffic Safety Facts. Report No. DOT HS 812 450). Washington, D.C.: National Highway Traffic Safety Administration.
- National Center for Statistics and Analysis. (2022, April). *Traffic Safety Facts 2020: Alcohol-impaired driving: 2020 data*. (Report No. DOT HS 813 294). National Highway Traffic Safety Administration.
- National Center for Statistics and Analysis. (2022, October). *Traffic Safety Facts 2020: A Compilation of Motor Vehicle Crash Data*. (Report No. DOT HS 813 375). National Highway Traffic Safety Administration.
- National Institute on Alcohol Abuse and Alcoholism. (2017, April 19). *What Is A Standard Drink?* Retrieved from National Institute of Health: <https://www.niaaa.nih.gov/alcohols-effects-health/overview-alcohol-consumption/what-standard-drink>
- (1976, December). *Selective Traffic Enforcement Program – STEP-BAC (Blood Alcohol Content) in Fort Lauderdale, Florida*. (Report No. DOT HS 801 956), Fort Lauderdale, FL.
- Stuster, J. (1993). *The Detection of DWI Motorcyclists*. (Final Rep. DOT-HS-807-839). Santa Barbara, CA: Anacapa Sciences, Inc.
- Stuster, J. (1997). *The Detection of DWI at BACs Below 0.10*. (Final Rep. DOT-HS-808-654). Santa Barbara, CA: Anacapa Sciences, Inc.
- Stuster, J., & Burns, M. (1998, August). *Validation of the Standardized Field Sobriety Test Battery at BACs Below 0.10 Percent*. Santa Barbara, CA: Anacapa Sciences, Inc.
- Substance Abuse and Mental Health Services Administration. (2021). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2020 National Survey on Drug Use and Health*. (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/data/>
- (2013, March). *The Detection of DWI Motorcyclists*. (Publication: DOT HS 807 856). Washington, D.C.: National Highway Traffic Safety Administration.
- Watanabe, D., Wu, H., Noguchi, C., Zhou, Y., Akao, T., & Shimoi, H. (2011, February). Enhancement of the Initial Rate of Ethanol Fermentation Due to Dysfunction of Yeast Stress Response Components Msn2p and/or Msn4p. *American Society of Microbiology (ASM): Applied and Environmental Microbiology*, 77(3).  
doi:<https://doi.org/10.1128/AEM.01869-10>