DWI Detection and Standardized Field Sobriety Testing

May 2013 Edition

Instructor Guide

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Instructor Guide –
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PREFACE

The Standardized Field Sobriety Testing (SFST) training prepares police officers and other qualified persons to administer and interpret the results of the SFST battery. This training under the auspices and direction of the International Association of Chiefs of Police (IACP) and the National Highway Traffic Safety Administration (NHTSA) has experienced remarkable success in detecting and apprehending intoxicated drivers since its inception in the 1980s.

As in any educational training program, an instruction manual is considered a “living document” that is subject to updates and changes based on advances in research technology and science. A thorough review is made of information by the Drug Evaluation Classification Program (DECP) Technical Advisory Panel (TAP) of the Highway Safety Committee of the IACP with contributions from many sources in health care science, toxicology, jurisprudence, and law enforcement. Based on this information, any appropriate revisions and modifications in background theory, facts, examination and decision making methods are made to improve the quality of the instruction as well as the standardization of guidelines for the implementation of the SFST Training Curriculum. The reorganized manuals are then prepared and disseminated, both domestically and internationally.

Changes will take effect 90 days after approval by the TAP, unless otherwise specified or when so designated by NHTSA/IACP or the DEC Program state coordinator.

DWI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING

ADMINISTRATOR'S GUIDE

The Administrator's Guide provides an introduction and overview of the DWI Detection and Standardized Field Sobriety Testing (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 manual describe how the Standardized Field Sobriety Tests (SFSTs) are to be administered under ideal conditions. We recognize that 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 the National Highway Traffic Safety Administration (NHTSA) to improve police officers' skills in **detecting** and **apprehending** drug impaired drivers.

In this regard NHTSA/IACP has developed two modules that address drug- impaired driving:

- *Introduction to Drugs That Impair* a four hour overview of drugs other than alcohol that impair.
- *Advanced Roadside Impaired Driving Enforcement (ARIDE)* is a 16 hour course which will offer additional information to law enforcement officers on detecting impairment caused by more than just alcohol. Often times law enforcement officers that have not received advanced or in service training regarding drug impairment tend to not be able to identify these characteristics; therefore they will release an impaired driver. Once an officer completes the training he/she will be more proficient with the 3 battery of tests (HGN,WAT,OLS), as well as a broader knowledge of drug impairment indicators. The law enforcement officer will also be more familiar with the DRE program and its function. This will facilitate better communication and transfer of critical roadside indicators of impairment to the evaluating DRE officer for a more complete and accurate assessment of the impairment.

Either module is an excellent add-on or follow-up to the DWI Detection and Standardized Field Sobriety Testing training program. Both are highly recommended. **HOWEVER, NEITHER WILL QUALIFY AN OFFICER TO SERVE AS A DRUG RECOGNITION EXPERT (DRE)**.

All of the aforementioned impaired driving courses have been approved by the International Association of Chiefs of Police (IACP). National standards have been established by IACP to ensure consistency in the content, delivery, and application of the SFST and drug impaired training. The SFST standards are provided in this Administrator's Guide (see Appendix B).

For more information regarding these impaired driver detection programs, contact your State Office of Highway Safety or your NHTSA Regional Training Coordinator (See Appendices E and F).

Note: NHTSA/IACP is not a certifying agency for impaired driving courses, i.e., SFST, ARIDE, DRE, etc. This includes both practitioners and instructors.

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A. Purpose of This Document

The Administrator's Guide is intended to facilitate planning and implementation of the DWI Detection and Standardized Field Sobriety Testing Course. The core course consists of 16 sessions with two "live" alcohol workshops.

The Guide outlines acceptable options to the "core" training procedures (see "How Flexible Is The Course?", Item 7, page 7). It overviews the sequence of instruction, documents the materials and the teaching aides 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.

B. Overview of the Course

1. For whom is the training intended?

Participants should be any officers responsible for DWI enforcement who will actually use all aspects of the training, especially the three Standardized Field Sobriety Tests - Horizontal Gaze Nystagmus, Walk and Turn, and One Leg Stand. Officers selected to attend this training should be aware of the hazards caused by impaired drivers, are motivated to arrest those drivers and their duty assignments enable them to spend the time required to process DWI offenders will benefit substantially from this course.

Some law enforcement agencies have concluded that 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 that 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 that the ability to maintain the skills learned in this course will rapidly diminish if they are not reinforced by frequent "street" application and occasional in-service training. This is not to imply that this training is so complex or confusing that it can only be mastered by exceptionally skilled officers. The techniques of DWI Detection and use 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.

2. What are the purposes of the training?

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 break the law. 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, and articulating 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 to 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.

3. What will the participants get out 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 and 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 Standardized Field Sobriety Tests (SFST); 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 Horizontal Gaze Nystagmus 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.

4. What subject matter does the course cover?

   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:

- The involvement of impaired driving in traffic crashes, deaths and injuries, both nationally and within the participants'' state(s).
- The 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).
- The concept of detection as a three phase process, with specific evidence gathering and decision making tasks in each phase.
- The 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 Horizontal Gaze Nystagmus (HGN) testing.
- Guidelines for processing suspects arrested for DWI, preparing arrest reports and delivering testimony in DWI trials.

5. What activities take place during the training?

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 Standardized Field Sobriety Tests, 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 -- again and again -- administering and interpreting the Standardized Field Sobriety Tests.

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

Among the most important learning activities of the course are the following:

- 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 Standardized Field Sobriety Tests. Participants work in small groups, taking turns administering Horizontal Gaze Nystagmus, Walk and Turn, and One Leg Stand to each other.
- "Controlled drinking" practice(s), in which participants administer the Standardized Field Sobriety Tests 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 Standardized Field Sobriety Tests being performed by volunteer drinkers are available for options one and two only. These videos allow participants to practice observing, interpreting and recording the tests.

NOTE: The NHTSA/IACP strongly believes 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 Horizontal Gaze Nystagmus, Walk and Turn and One Leg Stand tests.

6. How long does the training take?

The core curriculum consists of 16 sessions that span 22 hours, 45 minutes of instruction, excluding breaks. With additional brief breaks and meal periods, the course requires three full training "days". There is no need to conduct the training for three consecutive days, nor to adhere to a traditional 8:00am - 5:00pm class day schedule. For example:

- There may be reasons to spread the course over a five day period or conduct some sessions at night.
- A five day sequence, with an average of four to five hours' instruction each day, will afford the participants more independent study time and an opportunity to assimilate the information presented.
- Scheduling the "controlled drinking" practice sessions at night makes it easier to recruit volunteer drinkers. Also, it allows participants to practice administering the Standardized Field Sobriety Tests under more realistic circumstances (most impaired driving arrests occur at night). If weather permits, these practice sessions can be held outdoors to enhance realism.
- Evening and nighttime training sessions are less susceptible to interruption. A court appearance could cause a student 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 student can achieve the training objectives if several hours of instruction or practice are missed.

SESSIONS MISSED DURING EXCUSED ABSENCES MUST BE MADE UP.

The sequence and duration of the 16 session are listed below.

Session	Title	Duration
1	Introduction and Overview	30 Minutes
2	Detection and General Deterrence	50 Minutes
3	The Legal Environment	70 Minutes
4	Overview of Detection, Note Taking and Testimony	50 Minutes
5	Phase One: Vehicle In Motion	90 Minutes
6	Phase Two: Personal Contact	90 Minutes
7	Phase Three: Pre-Arrest Screening	40 Minutes
8	Concepts & Principles of the Standardized Field Sobriety Tests	200 Minutes
9	Test Battery Demonstrations	40 Minutes
10	“Dry Run” Practice	50 Minutes
11	“Testing Subjects” Practice: First Session	120 Minutes
12	Processing the Arrested Subject and Preparing for Trial	90 Minutes
13	Report Writing Exercise and Moot Court	90 Minutes
14	“Testing Subjects” Practice: Second Session	120 Minutes
15	Review and Examinations	110 Minutes
16	Program Conclusion	50 Minutes

- Officers trained in the NHTSA/IACP approved SFST curricula, prior to the below revision date, remain qualified to administer and interpret the SFSTs based on their previous training.

7. How flexible is the course?

   All of the training objectives are considered appropriate 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 of the subject matter is considered necessary to achieve those objectives. All of the learning activities are needed to ensure that the participants master the subject matter.

This curriculum normally takes about 24 hours to teach. To be recognized by IACP, regardless of hours, the student must have met all of the listed learning goals and performance objectives included in each of the 16 sessions.

This course is "flexible" in that it can easily be **expanded** since it does not cover all dimensions of DWI enforcement. For example, NHTSA has developed three modules addressing impairment by drugs other than alcohol. One module is approximately 4 hours in duration and the other module is approximately 8 hours. Both modules are designed to be completely compatible with this course and are excellent additions to the training whether taught independently or as an add-on. In addition to these two trainings, the State DECP Coordinator or State Highway Safety Office can be contacted for information on the ARIDE curriculum.

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

OPTION ONE: To substitute NHTSA/IACP approved videos of "dosed" subjects for the first alcohol workshop (See Session XI-A) but to conduct the second alcohol workshop "live" as indicated in Session XIV.

OPTION TWO: To substitute NHTSA/IACP approved videos of "dosed" subjects for both live alcohol workshops (See Sessions XI-A and XIV-A).

It is critical to note that the purpose of this training is to ensure that participants become proficient in administering and interpreting the Standardized Field Sobriety Tests. **Therefore, if either option is selected, each student must maintain a log of every SFST administered.**

Note: During training, the Standardized Field Sobriety Tests (SFST) must be administered each time exactly as outlined in this course. For field conditions, refer to the Preface.

C. Overview of the Curriculum Package

In addition to this Administrator's Guide, the curriculum package for the DWI Detection and Standardized Field Sobriety Testing course consists of the following documents and materials:

- Instructor's Lesson Plans Manual
- Visual Aids
- Student Manual

1. Instructor's Lesson Plans Manual

   The Instructor's Lesson Plans Manual is a complete and detailed blue print of what the course covers and of how it is to be taught. It is organized into sixteen modules, each corresponding to one of the course's sessions.

   Each module consists of a cover page, an outline page, and the lesson plans, which include a thumb print of the PowerPoint slide 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's Manual serves as a means of <u>preparing</u> 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's Manual serves as an in class reference document for helping to maintain the sequence and pace of presentations and other learning activities. However, the information contained in the outlines <u>are not</u> to be read verbatim to the participants.

2. Visual Aids

   Four kinds of audio-visual aids are employed in this course.

   - Wall charts
   - Dry-erase board/flip-chart presentations
   - Slides (PowerPoint slides
   - Videos

   The wall charts are permanently-displayed items. They consist of sketches with brief captions intended to depict major themes and segments of the course. Wall

charts can be handmade, using colored marker pens, on flip-chart sheets. Sketches and text must be large enough to be viewed from any seat in the classroom. PowerPoint slides can be projected onto flip-chart sheets and traced with colored markers to produce the wall charts.

The dry-erase board/flip-chart presentations, as outlined in the lesson plans, are self-explanatory.

The slides are simple graphic and/or narrative displays that emphasize key points and support the instructor's presentation. The slides referenced in the lesson plans are found in each module of the Instructor's Manual. The instructor should supplement the slides with locally prepared materials wherever appropriate.

Video presentations are provided and referenced in the instructor lesson plans. For example, a 15 minute presentation entitled "Visual Detection of DWI", and a 12 minute video entitled "The Detection of DWI Motorcyclists" are used in Session V.

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 Standardized Field Sobriety Tests and the NHTSA/IACP approved videos used as options to the controlled drinking workshops in Sessions 11-A and 14-A. The videos may also serve as a review for graduates of this course.

3. DWI Detection and Standardized Field Sobriety Testing Student Manual

   The DWI Detection and Standardized Field Sobriety Testing Student Manual is as a reference manual for the course. It provides a summary of the contents of each session.

   The Student's Manual is intended to be used during the entire 16 sessions.

D. <u>General Administrative Requirements</u>

1. Facility Requirements

The presentation/demonstration sessions of the DWI Detection and Standardized Field Sobriety Testing course require a classroom with ample table/desk space for each student; a computer and/or DVD player, an overhead multi-media projector and screen; and, a dry erase board and/or flipchart. The classroom must have sufficient open space to permit clearly visible demonstrations of the Standardized Field Sobriety Tests. If possible, the participants'' tables/desks should be arranged in a U-shaped format, so that the instructors can conduct their demonstration in the open space in the center.

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 Walk and Turn test (i.e., strips of easily removable tape). If weather permits, these practice sessions can be held outdoors to enhance realism.

The live "Testing Subjects" Practice Sessions (XI and XIV) require a separate room for the volunteer drinkers and use of one or more accurate breath testing instruments devices for monitoring their blood alcohol concentrations (BACs).

2. Instructor Qualifications

SFST instructors MUST have successfully completed the NHTSA/IACP approved Standardized Field Sobriety Testing (SFST) training program or its equivalent, and have experience in administering the SFSTs as well as providing testimony in court in the area of DWI enforcement. 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 SFST battery should become instructors in the SFST training program.

If an alcohol workshop will be conducted as part of the training, one instructor should be experienced in conducting an alcohol workshop. A ratio of at least one instructor for every 6 participants is recommended. Their responsibilities include coaching participants during the various hands on practice sessions and conducting the proficiency examinations during Session XV. All instructors must be fully proficient in administering the Standardized Field Sobriety Tests. It is beneficial to recruit a Traffic Safety Resource Prosecutor (TSRP) or an experienced DWI prosecutor to assist in conducting certain segments in Session III, The Legal Environment, Session XII, Processing the Arrested Subject and Preparing for Trial, and Session XIII, Report Writing Exercise and Moot Court.

It is preferred that instructors for the four-hour "Introduction to Drugs That Impair" module be Drug Recognition Experts. The instructors for the eight-hour module "Drugs That Impair Driving" must be DRE instructors or SFST instructors who are certified DREs.

3. 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 Standardized Field Sobriety Tests). Participants need individual attention during practice sessions.

   The recommended maximum class size is 24 participants. An ideal range would be 15-21.

E. Guidelines for Controlled Drinking Practice Sessions

The SFST core curriculum requires volunteers who will consume carefully measured quantities of alcohol and submit to Standardized Field Sobriety Tests 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.

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

1. 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 21 years old 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.

2. Managing the Volunteer Drinkers

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

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

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

THE EFFECTIVENESS OF THE VOLUNTEERS AS TRAINING RESOURCES DEPENDS ON THEIR BLOOD ALCOHOL CONCENTRATIONS. 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 should be breath tested, have their pulse, blood pressure, and HGN checked and recorded.

NOTE: Additional time may be needed for administrative procedures.

3. 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 (3) 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	7
180	9	7
190	9	7
200	10	8
210	10	8
20	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.

F. Course Administrative Planning and Preparation Requirements

Course administrative planning and preparation tasks are to:

1. Select officers whom you expect to devote substantial amounts of time to DWI enforcement.

2. Identify the learning objectives that are appropriate for your participants.

3. Tailor the instructional material, as appropriate, to conform to your learning objectives.

4. 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.

5. Prepare the instructional facilities by arranging the classroom seating format. Secure the necessary audio visual equipment and materials.

6. 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).

G. Standards for Course Completion

In order to successfully complete this course of instruction, participants must pass the written examination and demonstrate proficiency in administering and interpreting the Standardized Field Sobriety Tests.

1. The Written Examination

   A written knowledge examination (post-test) is in the lesson plans for Session XVI. This test focuses on the administrative and interpretation procedures for the Standardized Field Sobriety Tests. Participants must achieve a grade of 80% to successfully complete this training.

   NOTE: For retesting requirements refer to IACP International Standards, Section 1.4. (Appendix B)

2. Assessing Student Proficiency

   Instructors must decide whether individual participants are proficient with the Standardized Field Sobriety Tests. This is accomplished by the following:

   - The lesson plans for Session XV (Review and Examinations) set forth a procedure for testing each student's ability to administer the three Standardized Field Sobriety Tests properly. "Passing" this test requires that the participants administer the complete test battery at least once, in an instructor's presence, without deleting or erroneously performing any of the critical administrative elements of the tests.

H. Student Critiques

A student 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. The form is divided into eight parts:

- Training Objectives
- Workshop Sessions and Quality of Instruction

- Course Design
- Topic Deletions
- Topic Additions
- Overall Course Rating
- Quality of Instruction
- Final Comments or Suggestions

I. SFST Field Evaluations

It is encouraged that the DWI enforcement of 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 encourage officers to document all administrations of Standardized Field Sobriety Tests. At a minimum, this documentation should include subject's name, date, results of each test, the 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.

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

J. Requests for Information, Assistance or Materials

Please contact your state's Office of Highway Safety, and/or your NHTSA Regional Training Coordinator for help in planning and conducting this training. (See Appendices E or F)

APPENDIX A

SYNOPSIS OF THE SFST CURRICULUM
An Overview of the 16 Sessions

Session 1 - Introduction and Overview

This session has three segments: "Welcoming Remarks and Objectives", "Administrative Details", and "Pretest".

Give a brief welcome and introduction. Briefly 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 tentcards, so that you will be able to call on them by name.

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

In the final segment, you will have your participants complete a 10-question pre-test that will allow you to assess how much they already know about DWI Detection and 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.” 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 affects 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: "Basic DWI Statute", "Implied Consent Law", "Illegal Per Se Statute", "Preliminary Breath Testing", and, "Case Law Review".

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 Horizontal Gaze Nystagmus. 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 standard 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 Clues 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 Clues of Impaired Operation (Motorcycles)," will introduce the similar concepts as it relates to motorcycle operation.

In the fourth segment, "Recognition and Description of Initial Clues," 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 student 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 Clues 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 Clues." 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 that 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 Standardized Field Sobriety Tests.

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 Horizontal Gaze Nystagmus.

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 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 Walk and Turn and One Leg Stand.

In the sixth segment, "Advantages and Limitations of Preliminary Breath Testing," you will explain the role of PBTs 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.

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 SFST three-test battery 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 Walk and Turn. 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 Walk and Turn, 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 Walk and Turn.

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 One Leg Stand is administered. You will explain the four validated clues of impairment for One Leg Stand, 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 One Leg Stand.

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

Session 9 - Test Battery Demonstrations

In this session you will conduct several complete and careful demonstrations of how the three SFSTs are administered and interpreted. The session has two segments. The first is "Live Classroom Demonstrations." You will conduct two complete demonstrations of the

three tests, using participants as the test "subjects." Then, you will "talk" a student through a complete demonstration, using another student as the "subject."
The second segment is "Video Demonstrations." This video demonstrates the correct administration of the Standardized Field Sobriety Tests.

Session 10 - "Dry Run" Practice Session

In this session 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 11 and Session 11-A - "Testing Subjects" Practice: First Session

The core curriculum requires a live drinking session. This two-hour 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's Guide, page 15).

For Options One and Two 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 student, view the videos, assess the video-taped 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 recommends using the core curriculum.

Session 12 - Processing the Arrested Suspect and Preparing 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 overview the kind of information officers should include in their DWI reports. Participants will view a nighttime DWI stop and arrest scenario and will record their observations on a DWI Investigation Field Notes form. You will present and explain a model report writing format. The narrative DWI Arrest Report will be based on the participants DWI Investigation Field Notes 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. You will show a video of a pretrial conference, and discuss the strengths and weaknesses of the officer's preparation with your participants.

The final segment is "Guidelines for Direct Testimony." You will present and explain some "dos and don'ts" of testimony in DWI cases. You will show a video segment of a prepared officer. You will discuss the officer's performance with your participants.

Session 13 - Report Writing Exercise and Moot Court

In the first segment, "Procedures," you will inform the participants that they will view a video portrayal of a typical DWI detection-to-arrest sequence, and must then write a narrative report on that sequence, using the model report format presented in Session XII. In the second segment, "Report Writing Exercise," you will show the video and participants will write their reports.

In the final segment, "Moot Court Exercise," two participants will be selected to "testify" about this "arrest" in a Moot Court setting. Please note that the participants selected to testify will do so independently of one another, and they will each be "sequestered" during the other's testimony.

Session 14 and 14-A - "Testing Subjects" Practice: Second Session

The core curriculum and Option One require this session to contain a live drinking workshop. The procedures for this session are identical to Session 11.

For Option Two participants will view the NHTSA/IACP approved videos designated for this session. The procedures for this option are identical to those in Session 11-A.

NOTE: NHTSA/IACP strongly recommends using the core curriculum.

Session 15 - Review and Proficiency Examinations

In this session you will select participants to administer the complete SFST battery, 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 Standardized Field Sobriety Test. Next, you will formally test each student'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 16 - 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.

APPENDIX B

INTERNATIONAL STANDARDS

FOR THE

STANDARDIZED FIELD SOBRIETY TESTING (SFST)

PROGRAM

Presented by

The International Association of Chiefs of Police
515 North Washington Street
Alexandria, Virginia 22314
703/836-6767

A product of the
International Association of Chiefs of Police
Highway Safety Committee's technical Advisory Panel
with support from the
National Highway Traffic Safety Administration

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STANDARDS FOR THE STANDARDIZED FIELD SOBRIETY TESTING (SFST) PROGRAM

Executive Summary

Since the mid-1970s, the National Highway Traffic Safety Administration (NHTSA), with the cooperation and assistance of the law enforcement community, has conducted research that resulted in the development of a battery of three Standardized Field Sobriety Tests (Horizontal Gaze Nystagmus, Walk and Turn, and the One Leg Stand) to assist police officers in detecting impaired drivers. The program, which was previously termed Improved Sobriety Testing, was initially developed by the Los Angeles Police Department and was validated in laboratory and field studies conducted by the Southern California Research Institute. Training in how to conduct the tests is included in the NHTSA course DWI Detection and Standardized Field Sobriety Testing.

In 1986, the Advisory Committee on Highway Safety of the International Association of Chiefs of Police (IACP) passed a resolution which recommended that law enforcement agencies adopt and implement the field sobriety testing training program developed by NHTSA. As the program grew, it became apparent that in order to insure continued success, nationally accepted standards must be established. These standards, which establish criteria for the selection and training of SFST practitioners, helps insure the continued success level of the SFST program. In 1992, the IACP Highway Safety Committee recommended the development of this system of nationally accepted standards.

In April of 1992, the IACP and NHTSA sponsored a meeting at the headquarters in Arlington, Virginia. Persons invited to this meeting included senior SFST instructors from several states, curriculum specialists, and training administrators. The participants met in working groups to reach a consensus concerning the many issues related to the SFST program and to develop recommended minimum standards to the IACP Advisory Committee on Highway Safety. The standards were drafted and presented to the committee for their review at the midyear meeting in June 1992.

The Advisory Committee on Highway Safety, by resolution, adopted the national standards for the SFST Program. The standards were approved by the voting membership of the IACP's Highway Safety Committee and subsequently expanded to include international partners.

Presented in this document are standards specifying the requirement for selection and training of SFST practitioners and SFST instructors.

I. STANDARDS FOR TRAINING IN STANDARDIZED FIELD SOBRIETY TESTING

Standards in this section specify the criteria which must be met prior to an individual's completion of the Standardized Field Sobriety Testing (SFST) Program. These criteria outline the knowledge required to be considered for training, as well as the knowledge required for completion of the program.

The current approved curriculum involves a three-day training program. Prior to beginning the training program, participants should have an interest in traffic law enforcement with an emphasis on DUI/DWI. During this training, participants are taught to administer and interpret the results of the SFST battery, including Horizontal Gaze Nystagmus (HGN), Walk and Turn, and the One Leg Stand.

Upon completion of this classroom training, the student must pass a comprehensive written examination and complete a proficiency examination while evaluated by an SFST instructor.

1.1 In order to be considered for training in the SFST, a person shall be employed and under the direct control of a public criminal justice agency or institution involved in providing training services to law enforcement agencies.

Commentary: At the discretion of the agency head or administrator, and with consent of the training authority, other persons may audit or observe any or all portions of the SFST training.

1.2 SFST participants shall complete an approved classroom training course which shall, at a minimum, achieve the learning objectives as stated in the NHTSA/IACP-approved training curriculum.

Commentary: This curriculum normally takes about 24 hours to teach. To be recognized by IACP, regardless of hours, the student must have met all of the listed learning goals and performance objectives included in each of the 16 sessions.

Because of the differences in the type and level of training for officers in the detection of impaired substances, agencies should determine the most effective means of providing classroom training in SFST. However, in order to maintain the credibility and integrity of the program, agencies that use a training program other than that currently approved by the IACP must have the alternative curriculum approved by the IACP Advisory Committee on Highway Safety as meeting the required learning objectives. In addition, the IACP Drug Evaluation and Classification Program Technical Advisory Panel (TAP), an advisory arm of the Advisory Committee on Highway Safety, will be responsible for providing periodic updates and modifications to the IACP-approved training curriculum. Presently, the core SFST training course is 24 hours in length and includes at least two controlled drinking sessions utilizing volunteer drinkers, (i.e., "live alcohol workshops"). Acceptable options to the "live" workshops involving the use of videos have been approved. The acceptable alternatives are (1) to substitute NHTSA/IACP approved videos of "dosed" subjects for the first alcohol workshop, but to conduct the second alcohol workshop "live"; or (2) to substitute

NHTSA/IACP approved videos of “dosed” subjects for both alcohol workshops.

It is critical to note that the purpose of this training is to ensure that participants become proficient in administering and interpreting Standardized Field Sobriety Tests. NHTSA/IACP recognizes the limitations some agencies have in conducting live alcohol workshops. If either of the video options is selected, each student must maintain a log of each SFST administered.

1.3 All SFST candidates shall attend and complete all classroom portions of an approved SFST curriculum. This shall include satisfactorily completing all assignments and required examinations. Participants shall not be permitted to “test out” of portions of the training nor shall they be permitted to attend only those classes that they have not previously completed.

Commentary: Class sessions missed should be made up at the earliest possible time.

1.4 In order to satisfactorily complete the classroom portion of the training, SFST candidates must complete the IACP-approved final examination with a score of eighty percent (80%). Candidates scoring less than 80% on the final may be retested one time under the supervision of an SFST instructor. The retest shall be completed within 30 days following the completion of the classroom training.

Commentary: The examination used to retest the candidate shall be an IACP-approved examination and shall not have been administered to the candidate previously. If the candidate does not achieve a passing score on reexamination, the candidate must retake the classroom portion of the training and pass the final examination.

1.5 Upon completion of training, the candidate must demonstrate the ability to administer the SFSTs in the approved sequence and appropriately document and interpret the results.

Commentary: One of the primary factors in the success of the SFST program has been the emphasis upon a standardized approach. The training stresses the importance of a systematic, structured administration of the SFSTs. This includes completing all portions of the SFSTs in the appropriate sequence.

Commentary: **NHTSA/IACP is not a certifying agency for impaired driving courses, i.e., SFST, ARIDE, DRE, etc. This includes both practitioners and instructors.**

II. STANDARDS FOR TRAINING AS INSTRUCTORS IN THE STANDARDIZED FIELD SOBRIETY TESTING PROGRAM

These instructors will have successfully completed the IACP-approved Standardized Field Sobriety Testing (SFST) training program or its equivalent, will have experience in administering the SFSTs, and in providing testimony in court in the area of DUI/DWI enforcement. 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 SFST battery should become instructors in the SFST training program.

Also addressed in this section are standards for instructors/trainers in the program. These individuals are responsible for training the SFST instructors.

2.1 Only persons who meet Standard 1.1 and have successfully completed the IACP-approved DWI Detection and Standardized Field Sobriety Testing training program, or its approved equivalent, may be designated as SFST instructors.

Commentary: It is recommended that instructor-candidates be familiar with the current practices and procedures of the SFST curriculum.

2.2 Any SFST trained person desiring to become an instructor in the SFST Program shall follow their state protocol for applying for consideration to become an instructor.

Commentary: The agency head or SFST coordinator shall verify that a candidate instructor meets the prerequisites to enter SFST instructor training. Prerequisites may also include any state, local or agency requirements specified for instructors within the jurisdiction.

2.3 The candidate instructor shall satisfactorily complete the IACP-approved SFST Instructor School, or an approved equivalent, which shall include both knowledge and practical examination of candidate instructors. Currently certified DRE instructors are recognized as SFST instructors and are approved to instruct the SFST program.

Commentary: This requirement does not preclude state or local jurisdictions from placing additional requirements on persons assigned to teach in local law enforcement programs.

The IACP Highway Safety Committee Technical Advisory Panel shall be responsible for reviewing and evaluating alternative training programs submitted by agencies. Those programs meeting or exceeding the approved learning objectives for instructor training shall be deemed “equivalent”.

2.4 All training sessions conducted as part of the SFST Program shall be coordinated by a designated SFST instructor who has previously instructed, to insure proper conduct and delivery of the approved curriculum.

Commentary: To ensure that all training classes are conducted in accordance with the standards, it is recommended that the instructor coordinating the training have a minimum of one-year experience as a SFST instructor.

2.5 An instructor trainer (a person who is training instructors) shall have demonstrated proficiency as an instructor in the SFST program.

2.6 An instructor trainer must be knowledgeable of and have audited the SFST School and the SFST Instructor School, and must be thoroughly familiar with the SFST student and instructor manuals.

Commentary: An instructor must demonstrate evidence of the satisfactory completion of the NHTSA/IACP-approved Instructor Development Course or approved equivalent. Instructor trainers must be familiar with the approved SFST Training Program and be thoroughly familiar with the lesson plans for their assigned blocks of instruction.

III. SFST REFRESHER TRAINING

Commentary: To assist agencies administer refresher training, a refresher course has been developed by NHTSA/IACP and is available to interested agencies. See Appendix D.

APPENDIX C

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

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September 1993

TECHNICAL REPORT

NHTSA Contract No. DTNH22-92-C-05109

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

Technical Report Documentation Page

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.
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9. Performing Organization Name and Address National Public Services Research Institute, 8201 Corporate Drive, Suite 220, Landover, MD 20745		10. Work Unit No. (TRAIS)
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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 Standardized Field Sobriety Tests (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		
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The Role of Video Training

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

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

The Conclusions of this Study

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

1. Video administration of the Standardized Field Sobriety Test (SFST) of alcohol-dosed subjects can be used as an alternative to the use of live alcohol-dosed subjects in either or both of the current training "workshops" without altering the ability of trainees to administer or score the test.

2. Current SFST training leads to significant gains in knowledge of administration procedures and scoring criteria. However, gains in scoring the Walk and Turn and One Leg Stand are minimal owing to the objectivity of the scoring criteria.

3. The only significant differences among approaches to teaching the workshop involve the direction of trainee scoring errors on the Walk and Turn and One Leg Stand, where trainees from the video workshop tend to report slightly fewer impairment clues than certified examiners, while those participating in either or both alcohol workshops tend to report more clues.

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APPENDIX D

Refresher Training
For The Standardized Field Sobriety Tests

In support of SFST training the National Highway Traffic Safety Administration (NHTSA) and the International Association of Chiefs of Police (IACP) have developed an SFST refresher training course.

This training targets law enforcement officers at the Federal, state, county and local level who have already taken, ***and successfully completed,*** the basic SFST classroom training course.

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 4-hour module or can be expanded to an 8-hour module.

To obtain a copy of the SFST Refresher Training Course, please contact your State Office of Highway Safety (Appendix E) or your closest NHTSA Regional Office (Appendix F).

APPENDIX E

STATE OFFICES OF HIGHWAY SAFETY

To locate your State Highway Safety Office, please go to: http://www.ghsa.org/ and select your state for contact information.

APPENDIX F

NHTSA REGIONAL OFFICES

Region I
(CT, ME, MA, NH, RI, VT)
Volpe National Transportation Systems Center
55 Broadway - Kendall Square - Code 903
Cambridge, MA 02142
Phone: 617-494-3427
Fax: 617-494-3646

Region II
(NY, NJ, PR, VI)
222 Mamaroneck Ave.
Suite 204
White Plains, NY 10605
Phone: 914-682-6162
Fax: 914-682-6239

Region III
(DE, DC, MD, PA, VA, WV)
10 South Howard St.
Suite 4000
Baltimore, MD 21201
Phone: 410-962-0090
Fax: 410-962-2770

Region IV
(AL, FL, GA, KY, MS, NC, SC,TN)
Atlanta Federal Center
61 Forsyth Street
Suite 17T30
Atlanta, GA 30303-3104
Phone: 404-562-3739
Fax: 404-562-3763

Region V
(IL, IN, MI, MN, OH, WI)
19900 Governors Drive
Suite 201
Olympia Fields, IL 60461
Phone: 708-503-8822
Fax: 708-503-8991

Region VI
(AR, LA, NM, OK, TX, Indian Nations)
819 Taylor Street
Room 8A38
Fort Worth, TX 76102-6177
Phone: 817-978-3653
Fax: 817-978-8339

Region VII
(IA, KS, MO, NE)
901 Locust Street
4th Floor
Kansas City, MO 64106
Phone: 816-329-3900
Fax: 816-329-3910

Region VIII
(CO, MT, ND, SD, UT, WY)
555 Zang Street
Room 430
Lakewood, CO 80228
Phone: 303-969-6917
Fax: 303-969-6294

Region IX
(AZ, CA, HI, NV, American Samoa, Guam, Northern Mariana Islands)
201 Mission Street
Suite 2230
San Francisco, CA 94105
Phone: 415-744-3089
Fax: 415-744-2532

Region X
(AK, ID, OR, WA)
3140 Jackson Federal Building
915 Second Avenue
Seattle, WA 98174
Phone: 206-220-7640
Fax: 206-220-7651

APPENDIX G

INSTRUCTOR ROSTER

Course Name:
Course Date:
Course Location:

Name: _____ Name: _____

Title: _____ Title: _____

Organization: _____ Organization: _____

_____

Mailing Address: _____ Mailing Address: _____

_____Zip _____ _____Zip _____

Phone: ____(_____)_____Phone: (_____)_____

Name: _____ Name: _____

Title: _____ Title: _____

Organization: _____ Organization: _____

_____

Mailing Address: _____ Mailing Address: _____

_____Zip _____ _____Zip _____

Phone: ____(_____)_____Phone: (_____)_____

Name: _____ Name: _____

Title: _____ Title: _____

Organization: _____ Organization: _____

_____

Mailing Address: _____ Mailing Address: _____

_____Zip _____ _____Zip _____

Phone: ____(_____)_____Phone: (_____)_____

(COPY THIS FORM FOR ADDITIONAL NAMES)

PARTICIPANT ROSTER

Course Name:
Course Date:
Course Location:

Name: _____ Name: _____

Title: _____ Title: _____

Organization: _____ Organization: _____

_____

Mailing Address: _____ Mailing Address: _____

_____Zip _____ _____Zip _____

Phone: ____(_____)_____Phone: (_____)_____

Name: _____ Name: _____

Title: _____ Title: _____

Organization: _____ Organization: _____

_____

Mailing Address: _____ Mailing Address: _____

_____Zip _____ _____Zip _____

Phone: ____(_____)_____Phone: (_____)_____

Name: _____ Name: _____

Title: _____ Title: _____

Organization: _____ Organization: _____

_____

Mailing Address: _____ Mailing Address: _____

_____Zip _____ _____Zip _____

Phone: ____(_____)_____Phone: (_____)_____

(COPY THIS FORM FOR ADDITIONAL NAMES)

Course Location Date

DWI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING TRAINING PROGRAM
PARTICIPANT'S CRITIQUE

A. Workshop Objectives

Please indicate whether you feel that you personally achieved the following course objectives.

	Yes	No	Not Sure
1. Enable you to understand enforcement's role in general DWI deterrence.			
2. Enable you to understand the detection phases.			
3. Enable you to understand requirements for organizing and presenting testimonial and documentary evidence in DWI cases.			
4. Improve your ability to recognize and interpret evidence of DWI violations.			

5. Enable you to administer and interpret validated psychophysical tests to DWI subjects.			
6. Improve your ability to describe DWI evidence clearly and convincingly in written reports and verbal testimony.			

B. <u>Workshop Sessions and Quality of Instruction</u>

Please rate how helpful each workshop session was for <u>you personally</u>. Also, please rate the quality of instruction (subject knowledge, instructional techniques and learning activities).

Use a scale from 1 to 5 where: 5=Excellent, 4=Very Good, 3=Good, 2=Fair, 1=Poor.

	<u>Session/Activity</u>	<u>Quality</u>
Detection and General Deterrence	_____	_____
The Legal Environment	_____	_____
Overview of Detection, Note Taking and Testimony	_____	_____

Phase One: Vehicle in Motion	_____	_____
Phase Two: Personal Contact	_____	_____
Phase Three: Pre-Arrest Screening	_____	_____
Concepts and Principles of Standardized Field Sobriety Tests	_____	_____
Test Battery Demonstrations	_____	_____
"Dry Run" Practice	_____	_____
"Drinking Subjects" Practice	_____	_____
Processing the Arrested Subject and Preparation for Trial	_____	_____
Report Writing Exercise and Moot Court	_____	_____

C. <u>Course Design</u>

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

1. The program contains some information that is not needed and that should be deleted.

   Agree Disagree Not Sure

2. There are some important topics missing from the program that should be added.

   Agree Disagree Not Sure

3. The program is too short.

   Agree Disagree Not Sure

4. I feel this program has improved my own ability to enforce DWI laws.

   Agree Disagree Not Sure

5. The instructors did a good job.

   Agree Disagree Not Sure

6. I am very glad I attended the program.

   Agree Disagree Not Sure

7. The program is too long.

   Agree Disagree Not Sure

8. The instructors should have been better prepared.

   Agree Disagree Not Sure

9. I feel fully qualified to use the nystagmus test now.

   Agree Disagree Not Sure

10. I feel fully qualified to use the two divided attention tests now.

    Agree Disagree Not Sure

11. Too much time was spent practicing with drinking volunteers.

    Agree Disagree Not Sure

12. These three new tests definitely will improve our ability to identify impaired drivers.

    Agree Disagree Not Sure

13. I wish we had more practice with drinking volunteers.

    Agree Disagree Not Sure

D. If you <u>absolutely</u> had to delete one session or topic from this course, what would it be?

E. If you could add <u>one new topic</u> or session to this course, what would it be?

F. Overall Course Rating

Please rate the overall quality of the seminar on a scale from 1 to 5 where: 5=Excellent, 4=Very Good, 3=Good, 2=Fair, 1=Poor.

Overall Course Rating:

G. Quality of Instruction

Please rate each instructor on a scale from 1 to 5 where: 5=Excellent, 4=Very Good, 3=Good, 2=Fair, 1=Poor.

_____ _____
Instructor Rating

_____ _____
Instructor Rating

_____ _____
Instructor Rating

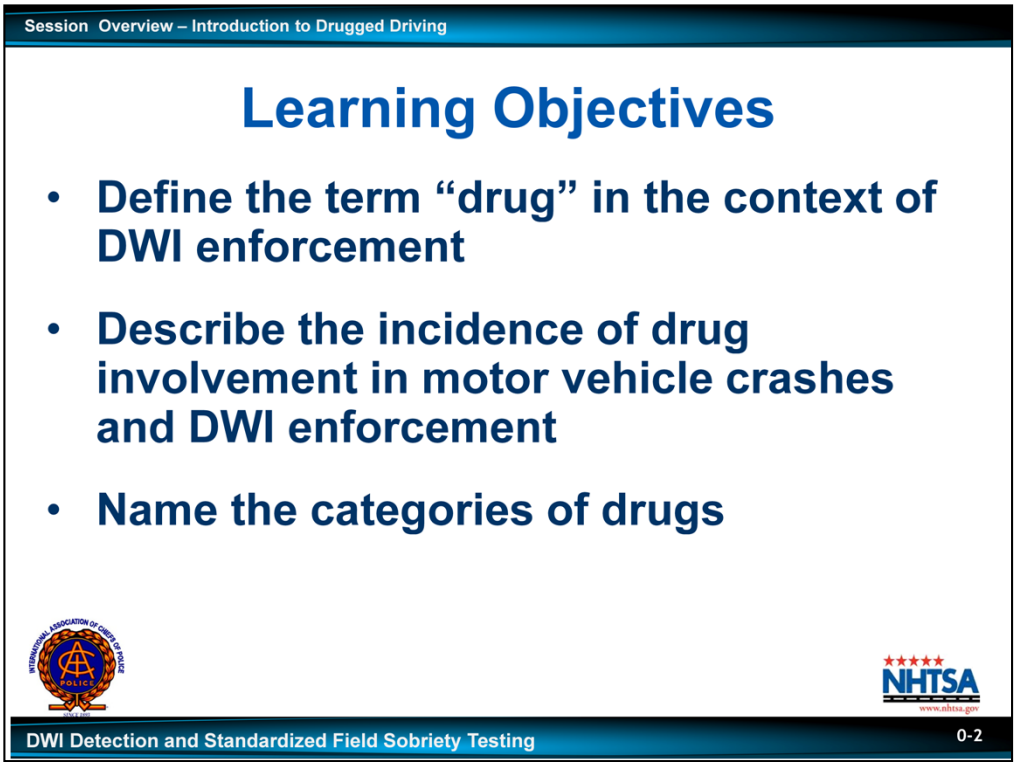
_____ _____
Instructor Rating

H. Please provide any final comments or suggestions that you feel are appropriate.

I. Please comment on the "Introduction to Drugged Driving" portion of the class, if presented.

4-hours

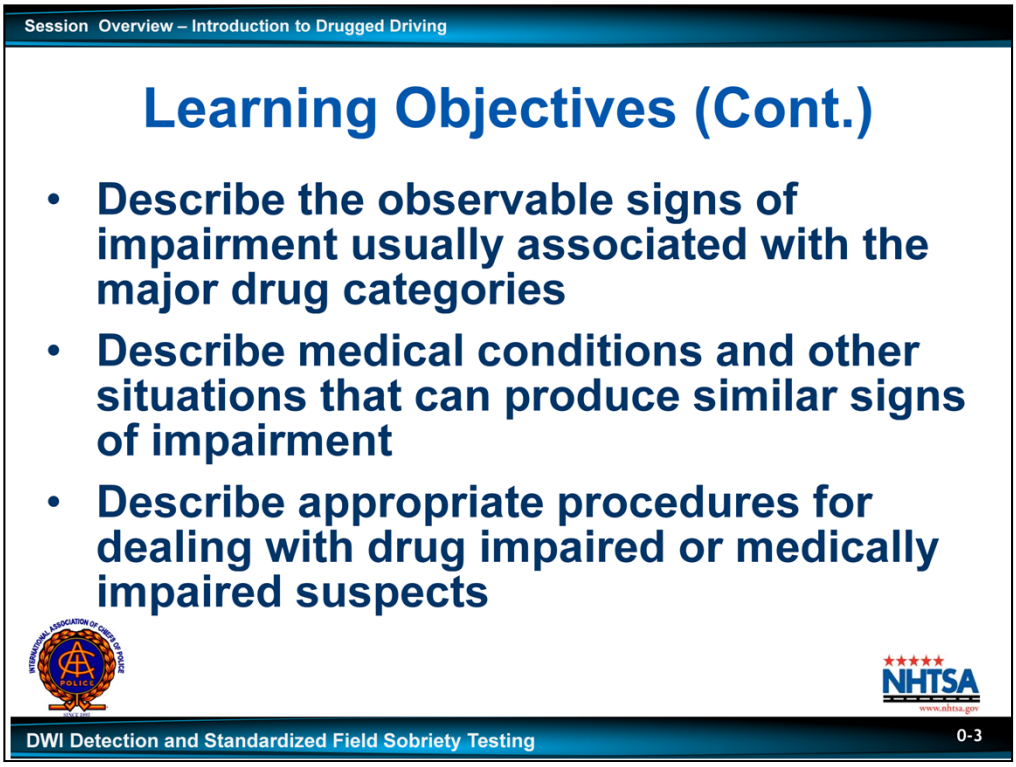
Introduction to Drugged Driving



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

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

- Define the term "drug" in the context of DWI enforcement
- Describe in approximate, quantitative terms the incidence of drug involvement in motor vehicle crashes and in DWI enforcement
- Name the categories of drugs

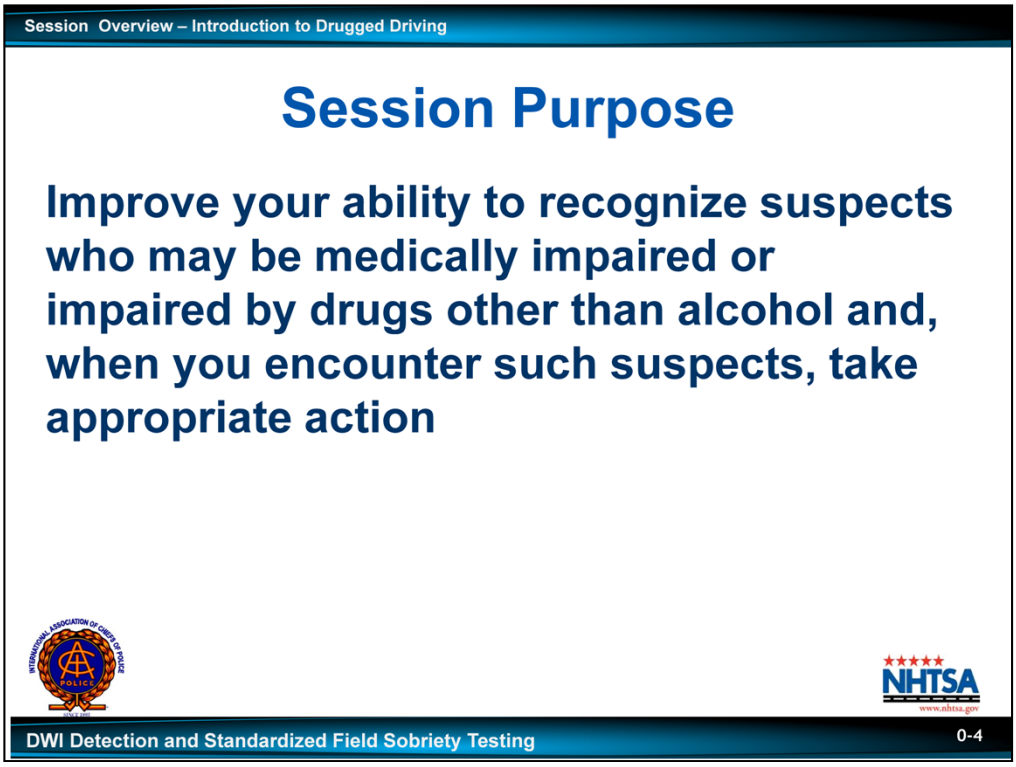


Learning Objectives (Cont.)

- 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-impaired or medically impaired suspects.

CONTENT SEGMENTS	LEARNING ACTIVITIES
A. Overview	Instructor Led Presentations
B. Eye Examinations: Detecting Signs of Drug Influence	Participant Practice
C. Drug Categories and Their Observable Effects	
D. Combination of Drugs	
E. Dealing with Suspected Drug Influence or Medical Impairment	

Solicit participant questions concerning these objectives.

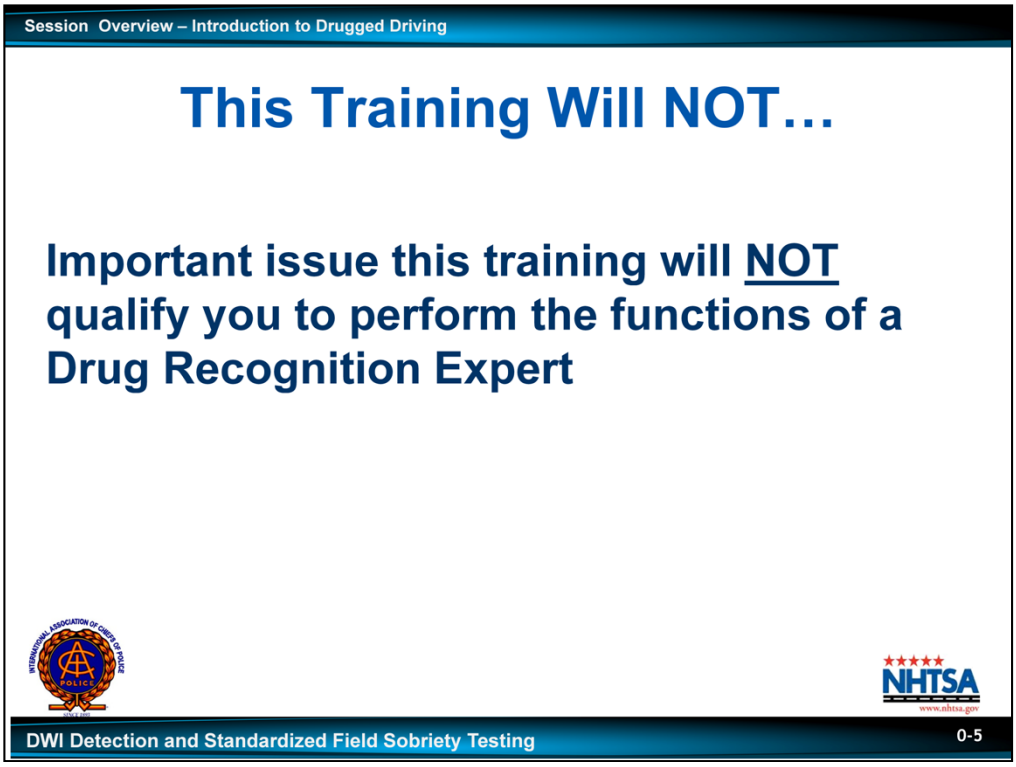


A. Overview

- The purpose of this session is to improve your ability to recognize suspects who may be medically impaired or impaired by drugs other than alcohol and, when you encounter such suspects, take appropriate action.
- Alcohol certainly remains the most frequently abused drug, and most impaired drivers are under the influence of alcohol

Ask participants: "What is responsible for most DWI violations in America?"

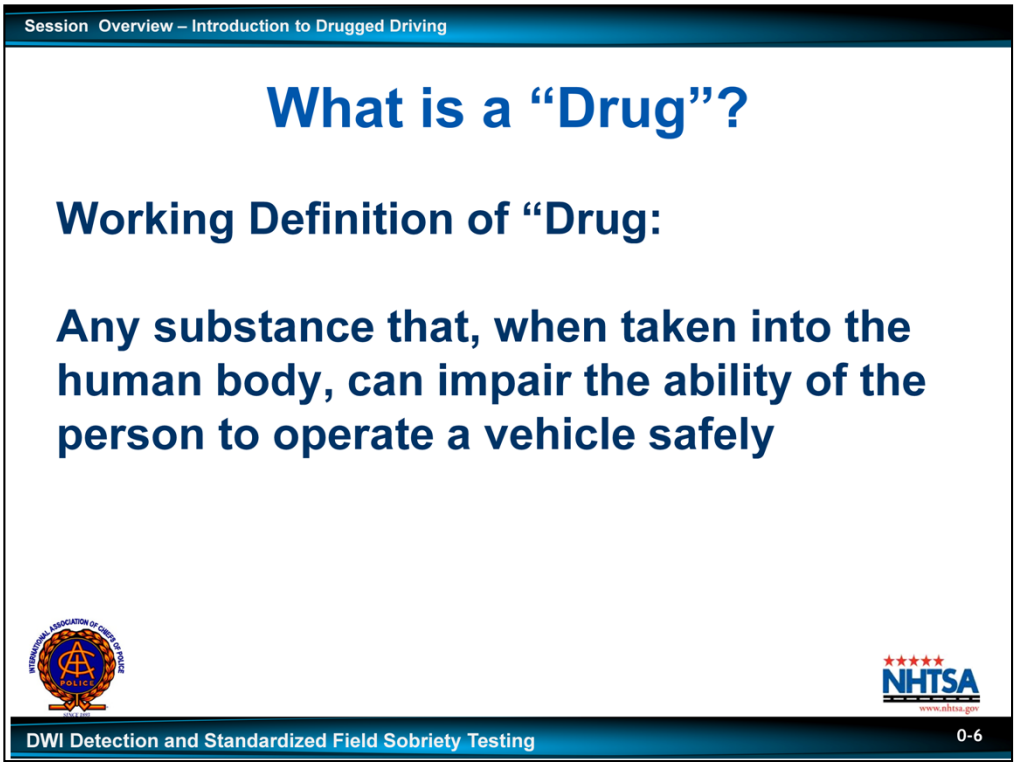
- Many other drugs also are routinely abused by many drivers.
- It is highly likely that every experienced DWI enforcement officer has encountered at least some drivers who were under the influence of drugs other than alcohol.
- Depending upon the specific types of drugs they have taken, some drug-impaired drivers may look and act quite a bit like persons who are under the influence of alcohol, but others will look and act very differently from alcohol-impaired drivers.
- It is important that you be able to recognize subjects who may be under the influence of other drugs, so that you will know when to summon assistance from physicians or other appropriate persons, or trained drug recognition experts. (DREs)



One important thing that this session will not accomplish: it will NOT qualify you to perform functions of a Drug Recognition Expert (DRE).

Officers become DREs only after they have completed a very challenging program that includes nine days of classroom training and many weeks of closely-supervised on-the-job training. (Two-Day Pre-School followed by Seven-Day classroom training.)

Explain that DRE school includes a two day pre-school followed by a seven day classroom training.



Definition of "Drug"

- The word "drug" is used in many different ways, by many different people.
- The corner druggist and the U.S. Drug Enforcement Administration are both concerned with "drugs", but they don't have exactly the same thing in mind when they use that word, and neither the druggist nor the DEA have the same perspective as the DWI enforcement officer.

For our purposes, a "drug: is:

- Any substance when taken into the human body, can impair the ability of the person to operate a vehicle safely.

Working definition is derived from California Vehicle Code, Section 312; 1985. The definition is also used in Drug Evaluation and Classification (DEC) Program.

- This definition excludes some substances that physicians consider to be drugs.

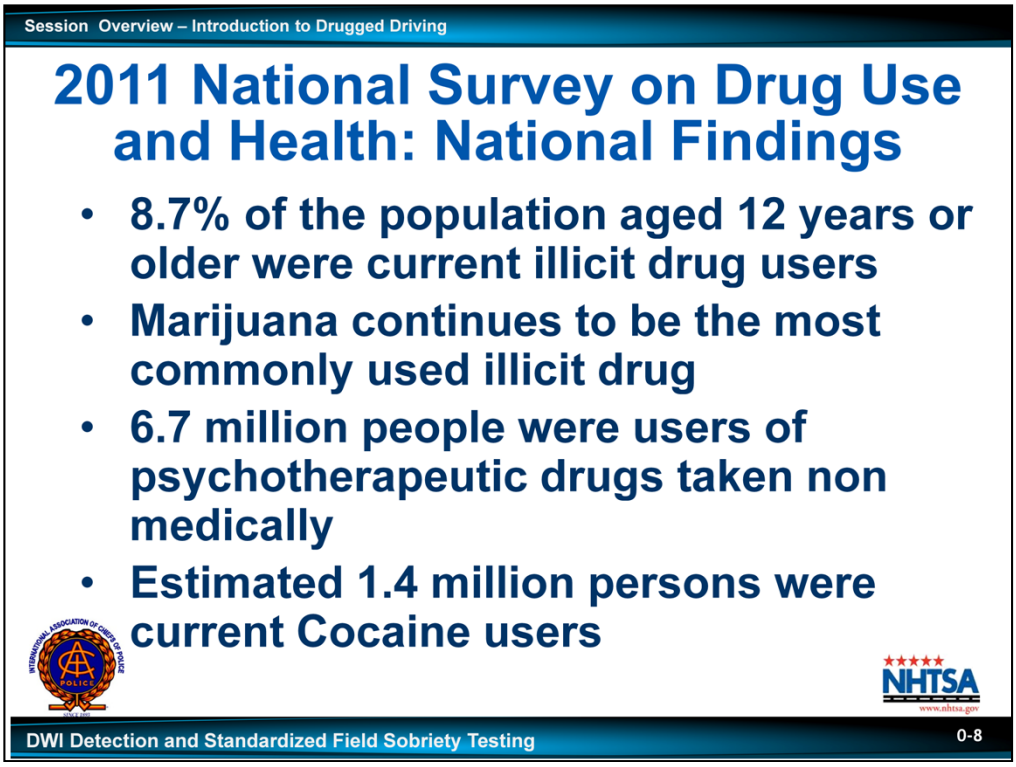
Ask participants: What are some things that physicians would consider to be "drugs" that physicians would consider to be "drugs" that would not be covered under this definition? Examples: nicotine; Caffeine.

- This definition includes some substances that physicians don't usually think of as drugs.

Ask participants: What are some common chemical substances that doctors don't usually consider drugs, but that definitely impair driving ability? Examples: model airplane glue; paint.

How many people use drugs?

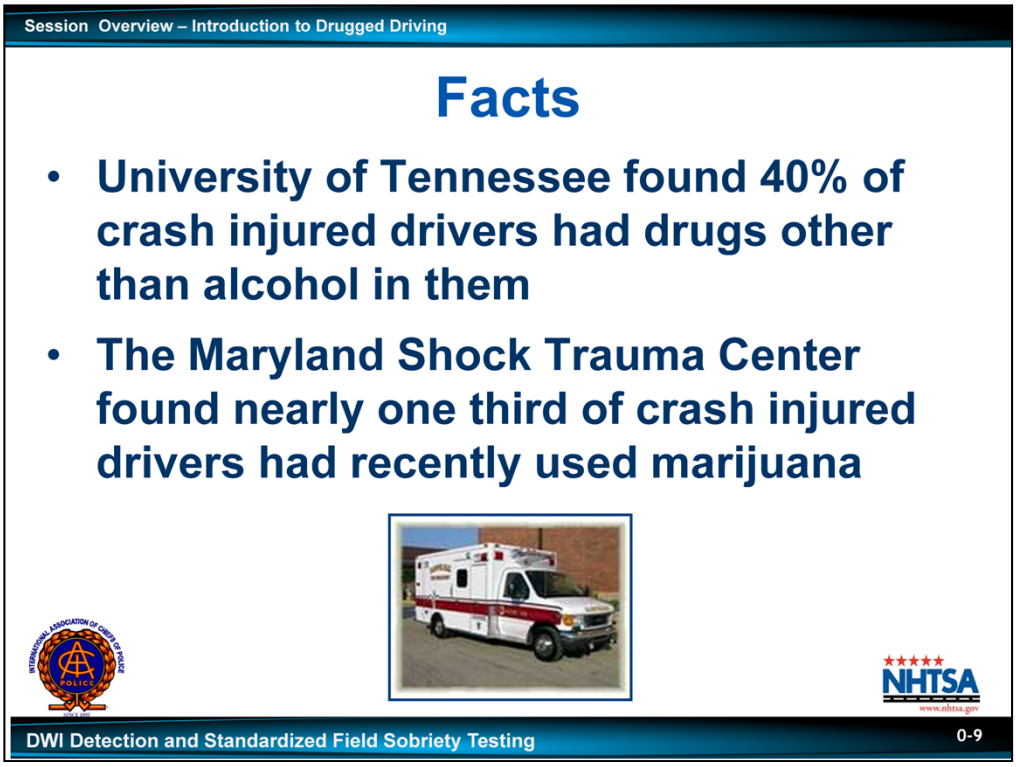
- Because many drugs are illegally manufactured, sold and consumed, it is difficult to determine how many people actually use the various drugs.
- All available information shows that drug use and abuse are widespread among large segments of the American public.



Results From the 2011 National Survey on Drug Use and Health: National Findings

- In 2011, 8.7% of the population aged 12 years or older were current illicit drug users.
- Marijuana was the most commonly used illicit drug in 2011, with 18.1 million users.
- In 2011, 6.7 million people were users of psychotherapeutic drugs taken non medically
- In 2011, an estimated 1.4 million persons were current Cocaine users

Source: Results from the 2010 National Survey on Drug Use and Health: National Findings



Evidence of drug use frequently shows up in people killed or injured in motor vehicle crashes.

- Fact: University of Tennessee (1988) found 40% of crash injured drivers had drugs other than alcohol in them.
- Fact: The Maryland Shock Trauma Center (1986)found nearly one-third of crash injured drivers had recently used Marijuana.

Studies of fatally-injured drivers consistently show that nearly 20% had drugs or the combination of drugs and alcohol in their systems at the time of the crash.

Source: FARS, 2010

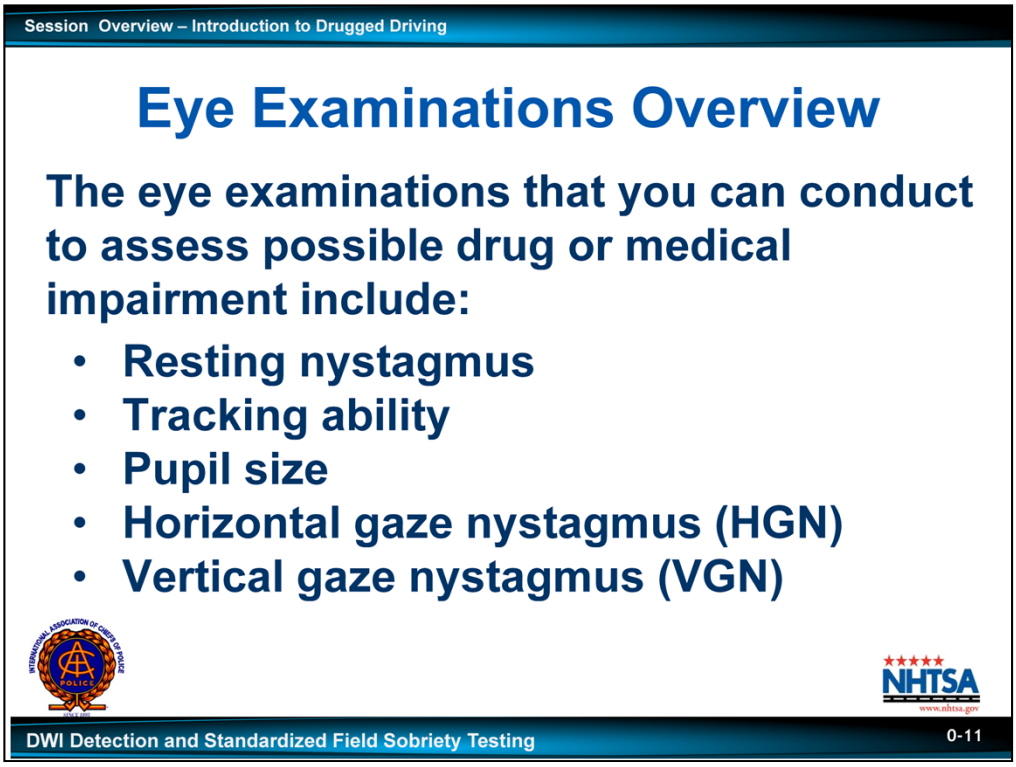
Solicit participants' questions or comments concerning drug use and drug involvement in impaired driving.

B. Eye Examinations: Detecting Signs of Dug Influence

The eyes disclose some of the clearest signs 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 is a very clear indication, in subject's eyes, of possible alcohol impairment.
- There are a number of drugs, other than alcohol, that will cause horizontal gaze nystagmus.
- There are a number of other drugs that will not cause horizontal gaze nystagmus.
- There are many other clues that the eyes will disclose, all of which will suggest the presence or absence of drugs or medical impairment.



Eye Examinations Overview:

The eye examinations that you can conduct to assess possible drug or medical impairment include:

- Resting nystagmus
- Tracking ability
- Pupil size
- Horizontal gaze nystagmus (HGN)
- Vertical gaze nystagmus (VGN)

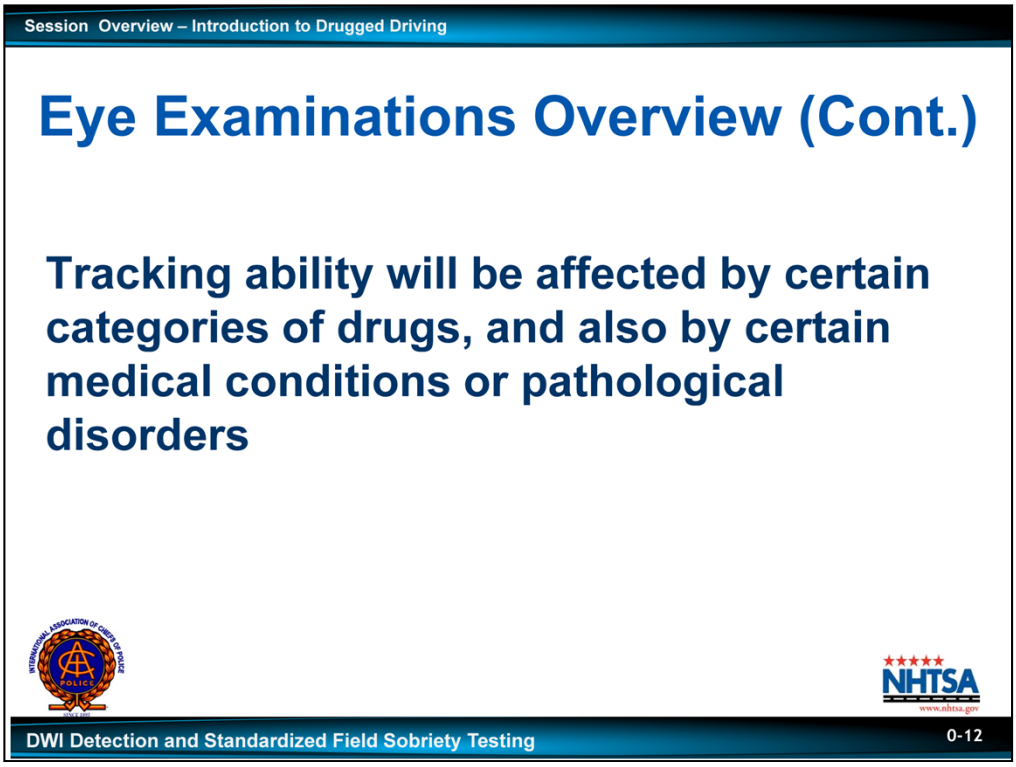
Resting Nystagmus is referred to as jerking as the eyes look straight ahead. This condition is not frequently seen. Its presence usually indicates a pathological disorder or high doses of a Dissociative Anesthetic drug such as PCP.

Resting Nystagmus may also be a medical problem.

Tracking Ability will be affected by certain categories of drugs, and also by certain medical conditions or pathological disorders.

If the two eyes do not track together, the possibility of a medical condition or injury is present.

By passing a stimulus across both eyes, you can check to see if both eyes are tracking equally.



Tracking Ability will be affected by certain categories of drugs, and also by certain medical conditions or pathological disorders.

Select a participant to serve as a demonstration subject.

If the two eyes do not track together, the possibility of a medical condition or injury is present.

Position a stimulus in front of that participant's eyes, and check for lack of smooth pursuit across both of the participant's eyes.

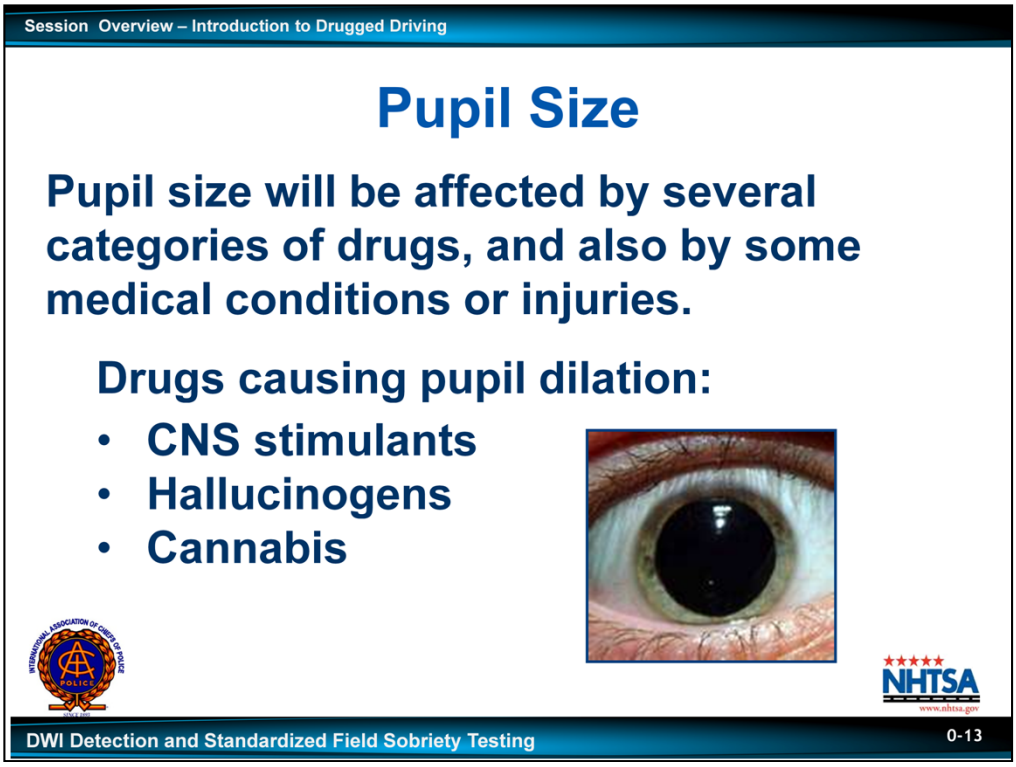
By passing a stimulus across both eyes, you can check to see if both eyes are tracking equally.

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 pathological disorder.

Point out that this can occur because the subject is blind (or nearly blind) in one eye. This can be checked by having the subject cover one eye and instructing the subject to reach out and touch the tip of the stimulus.

If a person has sight in both eyes, but the eyes fail to track together, there is a possibility that the person is suffering from an injury or illness.

Point out that this "jerking" is horizontal gaze nystagmus.



Pupil Size

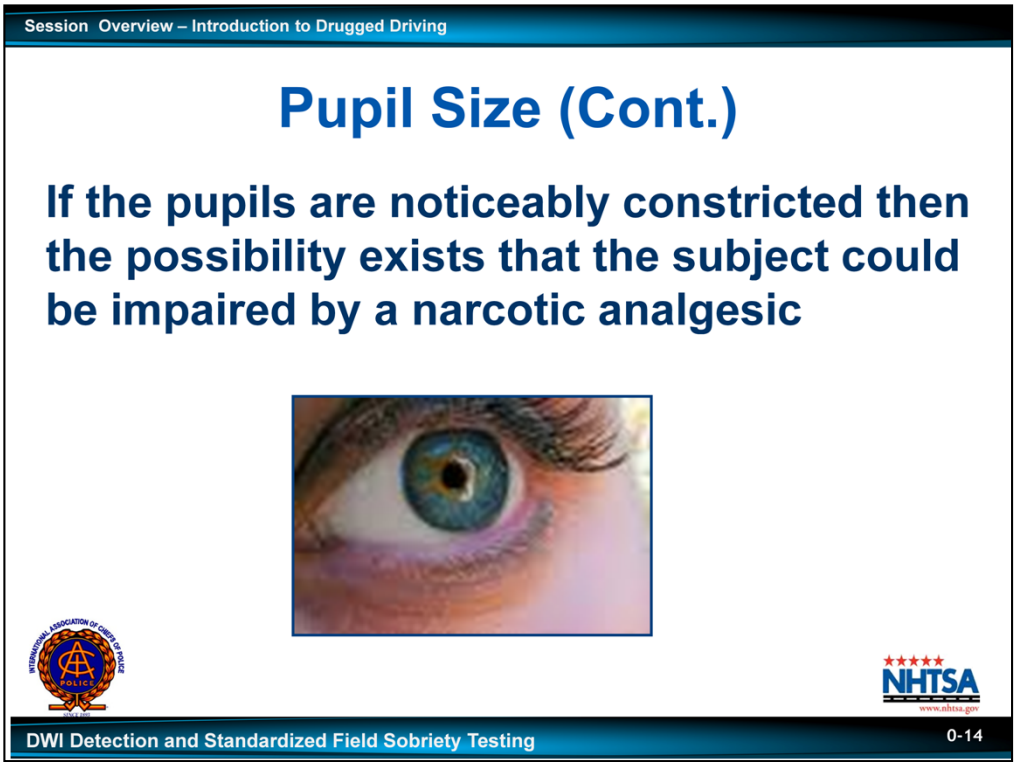
Pupil Size will be affected by several categories of drugs, and also by some medical conditions or injuries:

- If the two pupils are distinctly different in size, it is possible that the subject has a glass eye, or is suffering from a head injury or a neurological disorder.

Point out that it is sufficient to look at a subject's pupils and estimate whether they look noticeably small, about normal, or noticeably large.

If the pupils are noticeably dilated, then the possibility exists that the subject could be impaired by certain categories of drugs:

- CNS stimulants
- Hallucinogens
- Cannabis



Pupil Size (Cont.)

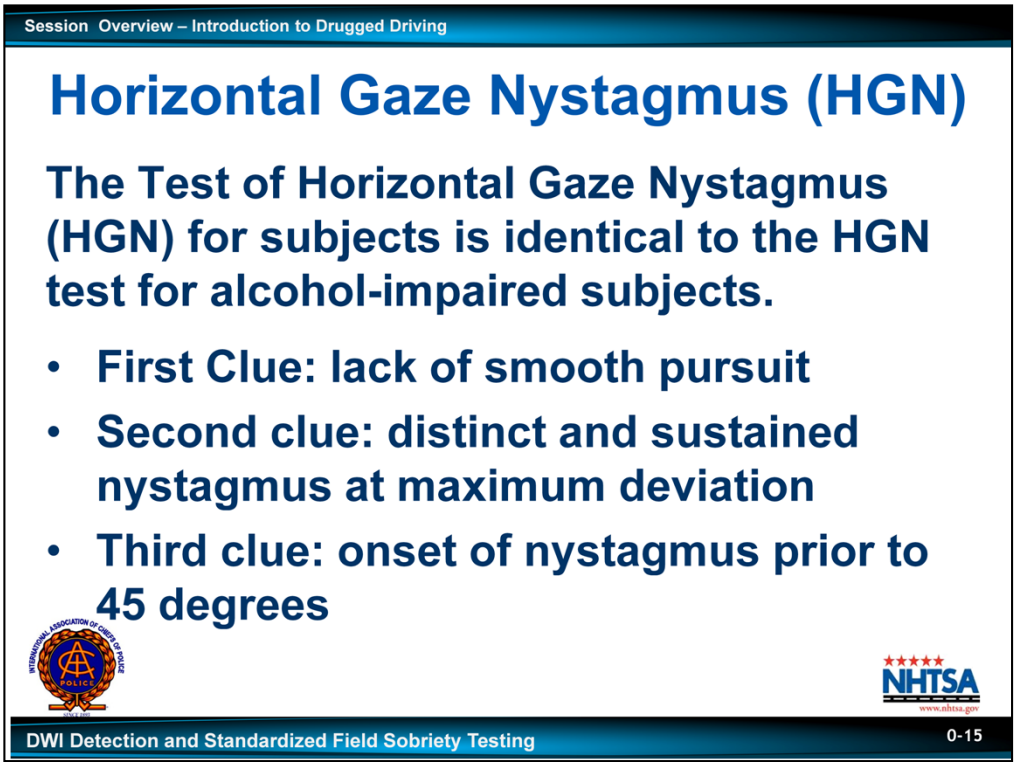
If the pupils are noticeably constricted then the possibility exists that the subject could be impaired by a narcotic analgesic.

Examples: Heroin, codeine, demerol, etc.

CNS Depressants, Dissociative Anesthetics, and Inhalants usually do not affect pupil size.

Point out that types of drugs that usually cause nystagmus usually don't affect pupil size.

Major exception: Methaqualone (a CNS Depressant,) and Soma will normally cause pupils to dilate.



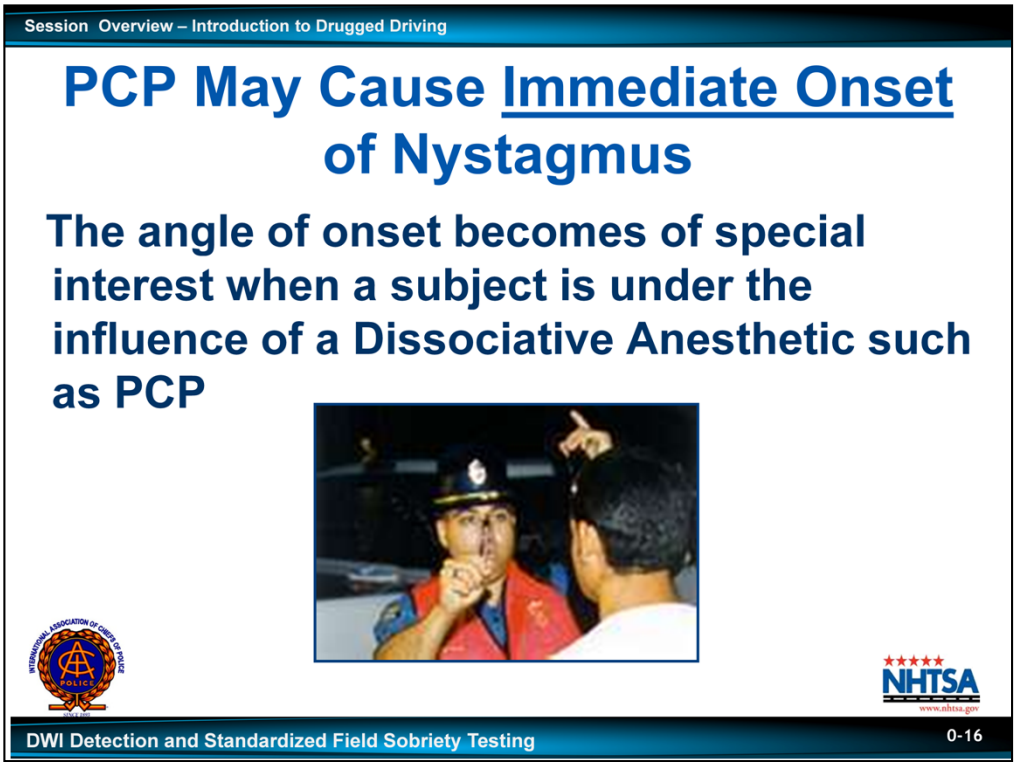
Horizontal Gaze Nystagmus

The test of Horizontal Gaze Nystagmus (HGN) for subjects is identical to the HGN test for alcohol-impaired subjects.

- First Clue: Lack of smooth pursuit
- Second clue: Distinct and sustained nystagmus at maximum deviation
- Third clue: Onset of systagmust prior to 45 degrees

If the eyes track equally, but “jerk” while they are moving, then the possible presence of three categories of drugs should be noted:

- Central Nervous System Depressants
- Dissociative Anesthetics
- Inhalants

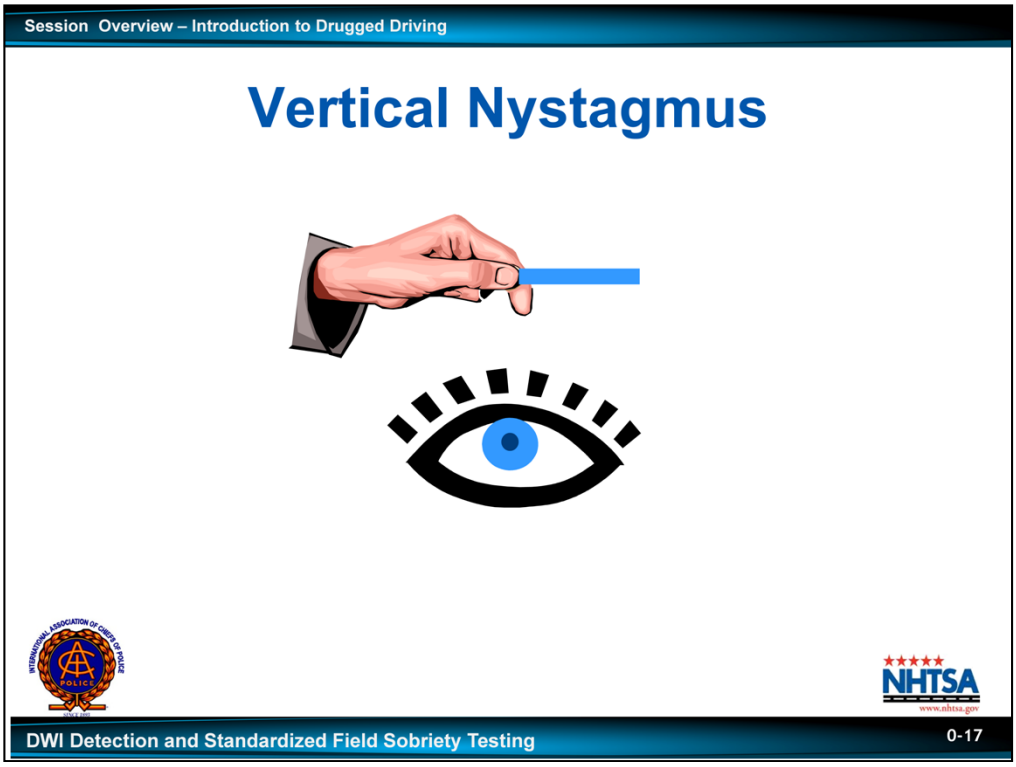


PCP May Cause Immediate Onset of Nystagmus

PCP impaired subjects may exhibit immediate onset, i.e., the jerking begins virtually as soon as the eyes start to move toward the side.

Sometimes, PCP- impaired subjects will exhibit resting nystagmus, i.e., the eyes jerk while they are looking straight ahead.

Write "Resting Nystagmus" on dry-erase board or flip-chart.



Vertical Nystagmus

The Vertical Nystagmus test is very simple to administer.

Point out that vertical nystagmus was not examined in the research that led to the validation of the Standard Field Sobriety Test battery, horizontal gaze nystagmus, walk and turn and one leg stand.

- 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.

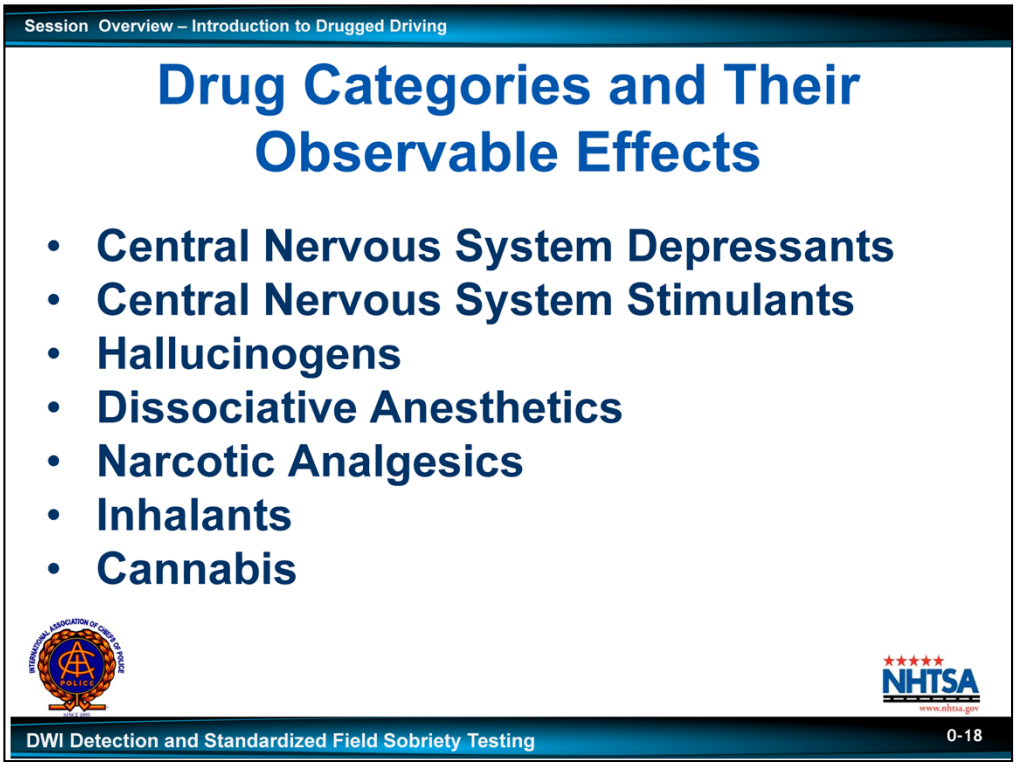
Select a participant or another instructor to serve as a subject and demonstrate the vertical nystagmus test.

- Watch closely for evidence of jerking (up and down).

Vertical Nystagmus may be present in subjects under the influence of CNS depressants or inhalants.

Point out that vertical nystagmus usually develops after high doses of alcohol, other depressants or inhalants.

Solicit participants' questions concerning nystagmus.



C. Drug Categories and Their Observable Effects

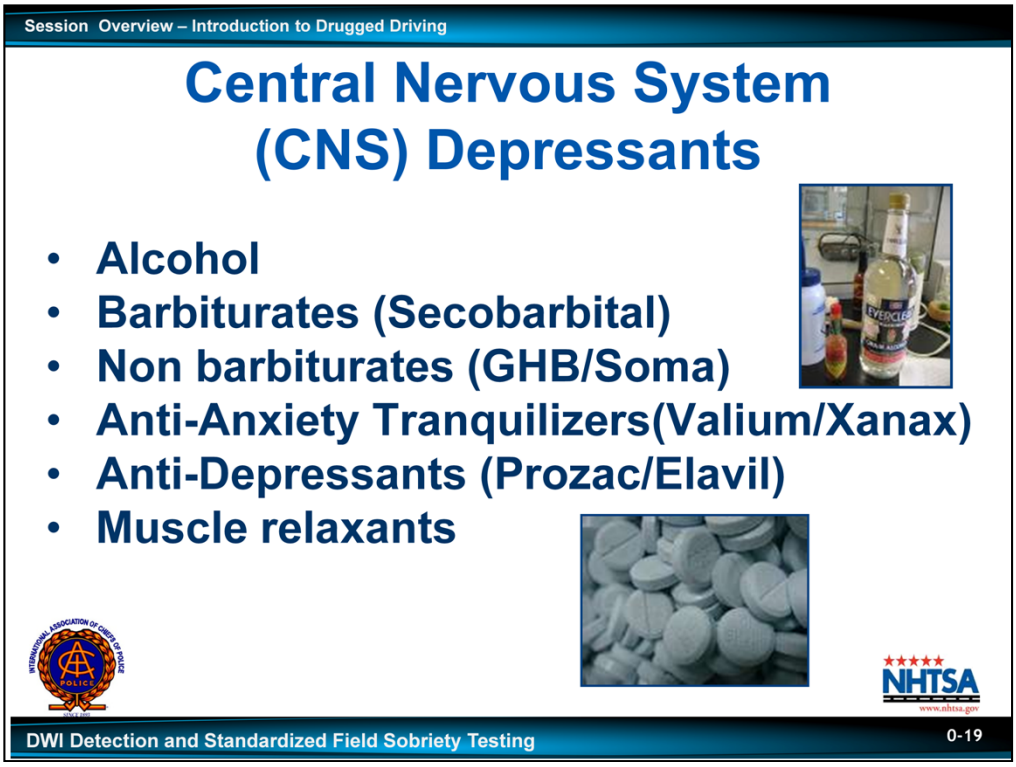
Seven Categories of "Drugs"

Definition of "Drug": Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.

Within this simple, enforcement-oriented definition, there are seven categories of drugs:

- Central Nervous System Depressants
- Central Nervous System Stimulants
- Hallucinogens
- Dissociative Anesthetics
- Narcotic Analgesics
- Inhalants
- Cannabis

Point out that these seven drug categories are derived from the IACP DEC Program.



Central Nervous System (CNS) Depressants

CNS Depressants slow down the operations of the brain, and usually depress the heartbeat, respiration, and many other processes controlled by the brain.

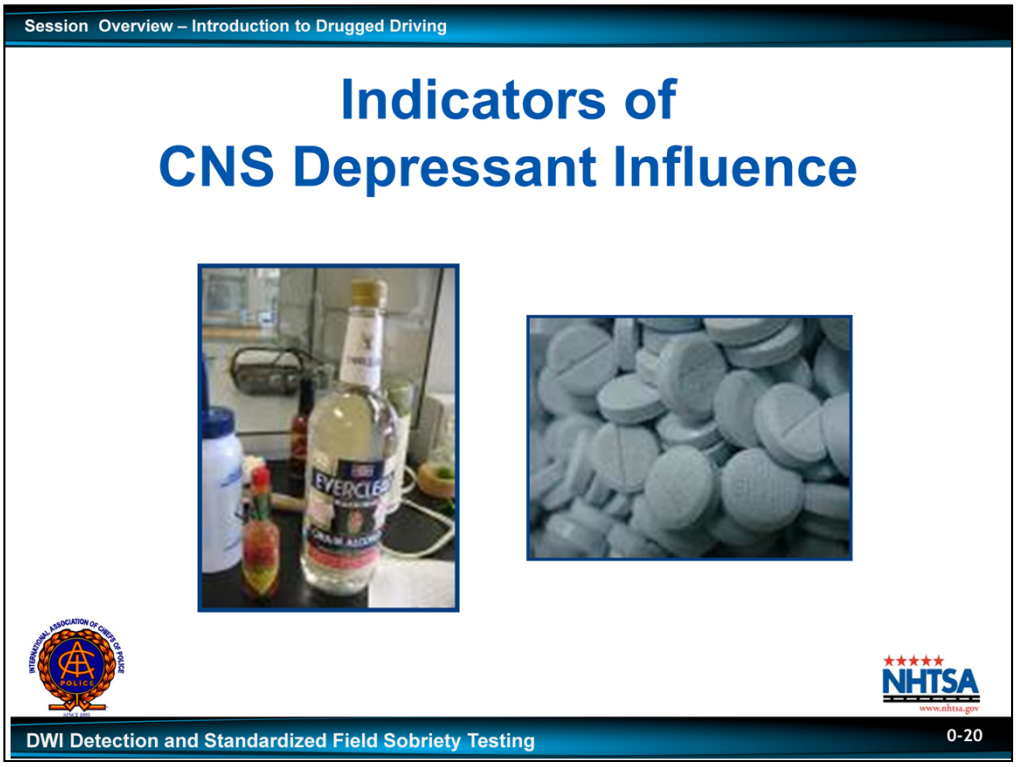
The most familiar CNS Depressant is alcohol.

Other CNS Depressants include:

- Barbiturates (such as Secobarbital (Seconal), and Pentobarbital (Luminal))
- Non-Barbiturates (GHB-gamma-hydroxybutyrate and Soma)
- Anti-Anxiety Tranquilizers (Such as Valium, Librium, Xanax, and Rohpynol)
- Anti-Depressants (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.

In general, people under the influence of any CNS Depressant look and act like people under the influence of alcohol.



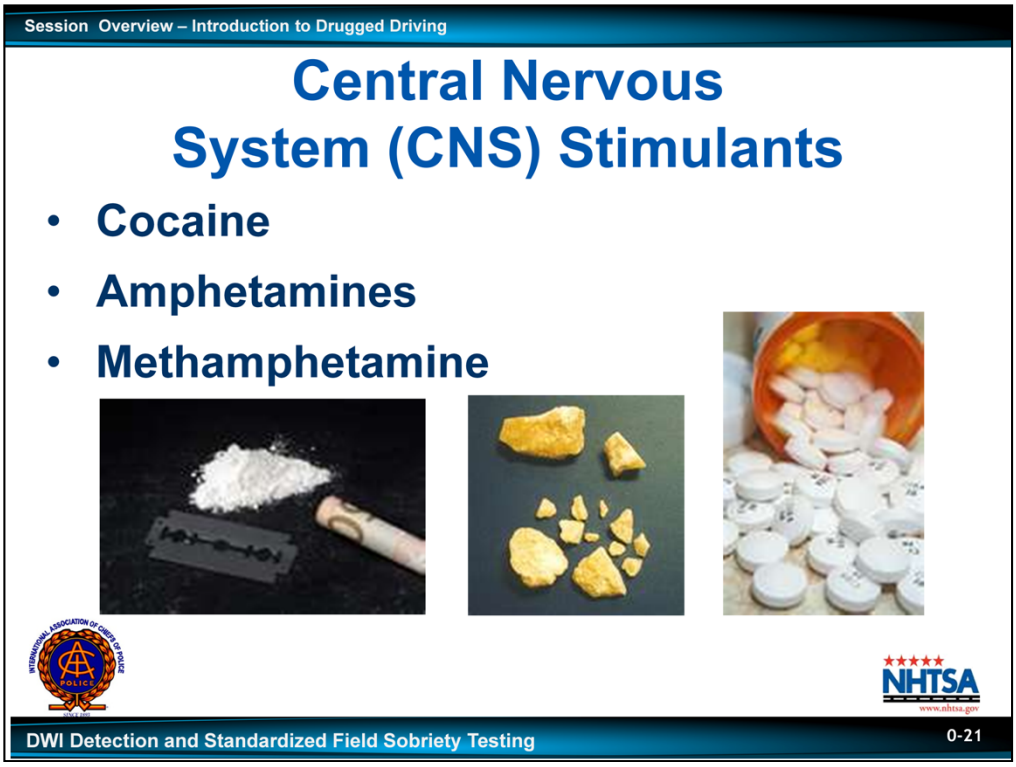
General indicators of CNS Depressant influence are:

- "Drunken" behavior and appearance
- Uncoordinated
- Drowsy
- Sluggish
- Disoriented
- Thick, slurred speech

Eye indicators of CNS Depressant influence are:

- Horizontal gaze nystagmus usually will be present
- Vertical nystagmus may be present (with high doses)
- Pupil size usually will not be effected, except that Methaqualone and Soma may cause pupil dilation

Solicit participants' questions concerning indicators of CNS Depressant influence.



Central Nervous System Stimulants

Central Nervous System 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.

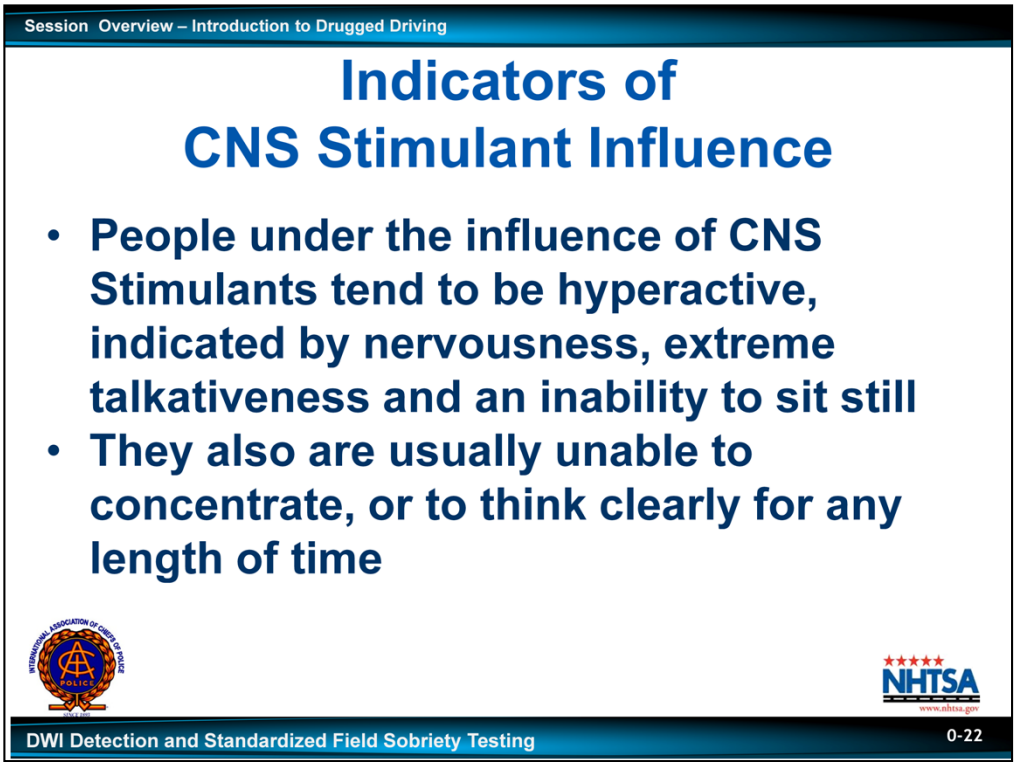
Methamphetamines are chemically produced (manufactured) drugs.

Cocaine abusers may take the drug:

- By “snorting”
- By smoking (freebase, or “Crack”)
- By injection
- Orally

Abusers of amphetamines may take their drugs:

- By injection
- Orally
- By “snorting”
- Smoked (i.e., “ice”)



General indicators of CNS Stimulant influence:

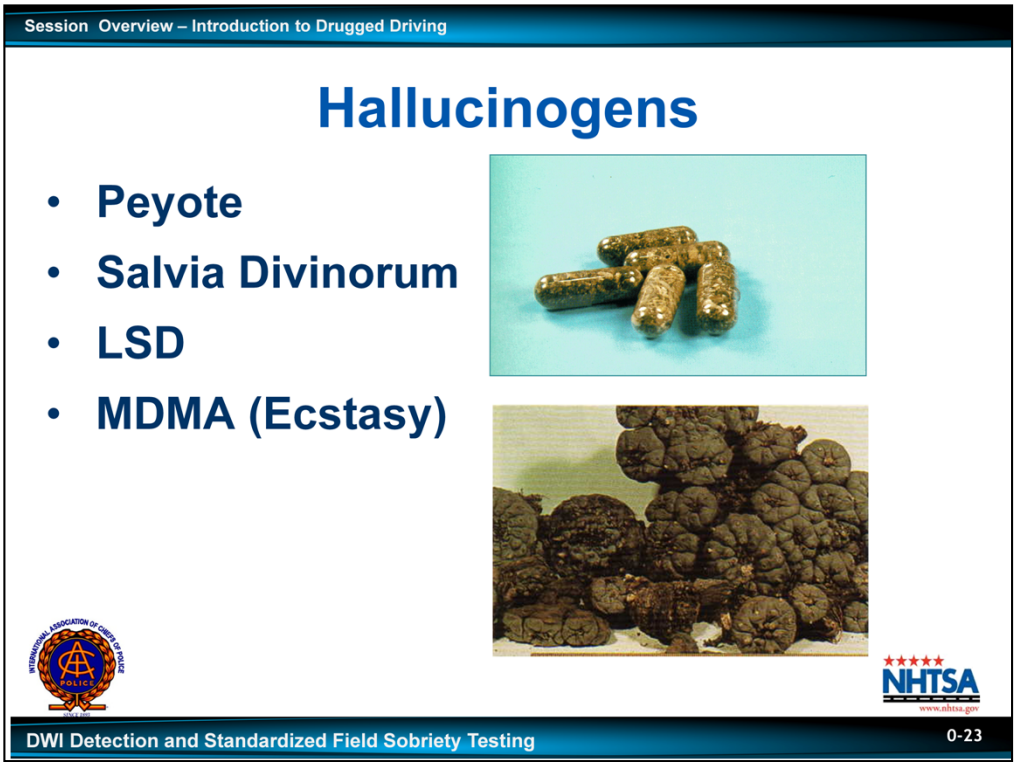
People under the influence of CNS Stimulants tend to be hyperactive, indicated by nervousness, extreme talkativeness and an inability to sit still. They also are usually unable to concentrate, or to think clearly for any length of time.

- Restlessness
- Talkative
- Excitation
- Euphoria
- Exaggerated reflexes
- Loss of appetite
- Anxiety
- Grinding teeth (bruxism)
- Redness to nasal area (if “snorting”)
- Body tremors

Eye indicators of CNS Stimulant Influence:

- Neither horizontal nor vertical nystagmus will be observed
- The pupils generally will be dilated.

Solicit participants’ questions concerning indicators of CNS Stimulant influence.



Hallucinogens

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.

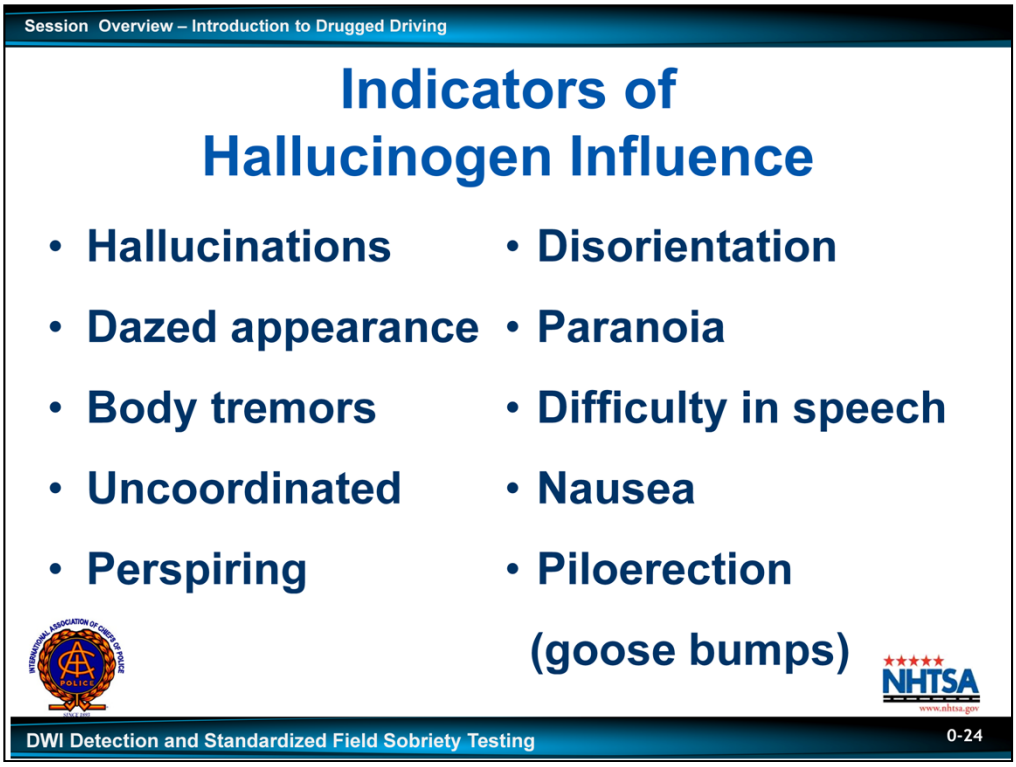
Example: the user may "smell" a particular fragrance when he or she looks at something painted red.

Some hallucinogenic drugs come from natural sources:

- Peyote is an hallucinogen found in a particular specie of cactus.
- Psilocybin is an hallucinogen found in a number of species of mushroom.

Other hallucinogens are synthetically manufactured:

- LSD (Lysergic Acid Diethylamide)
- MDA (3, 4-Methylene-dioxyamphetamine)
- MDMA (Ecstasy)
- Many others



General indicators of hallucinogen influence:

Hallucinogen abusers usually take their drugs orally; however, some hallucinogens can be smoked, or injected or “snorted”.

- Hallucinations
- Dazed appearance
- Body tremors
- Uncoordinated
- Perspiring
- Disorientation
- Paranoia
- Difficulty in speech
- Nausea
- Piloerection (goose bumps)

Eye indicators of hallucinogen influence:

Point out that the indicators of Hallucinogen influence are very similar to the indicators of CNS Stimulant Influence.

- Neither horizontal nor vertical gaze nystagmus should be present
- The pupils usually will be noticeably dilated

Solicit participants’ questions concerning indicators of Hallucinogen influence.

Dissociative Anesthetics

Dissociative Anesthetics is the category of drugs that includes PCP, its various analogs, and Dextromethorphan (DXM).

PCP is a synthetic drug, that was first developed as an intravenous anesthetic.

Point out that PCP is a very powerful anesthetic, or pain-killer.

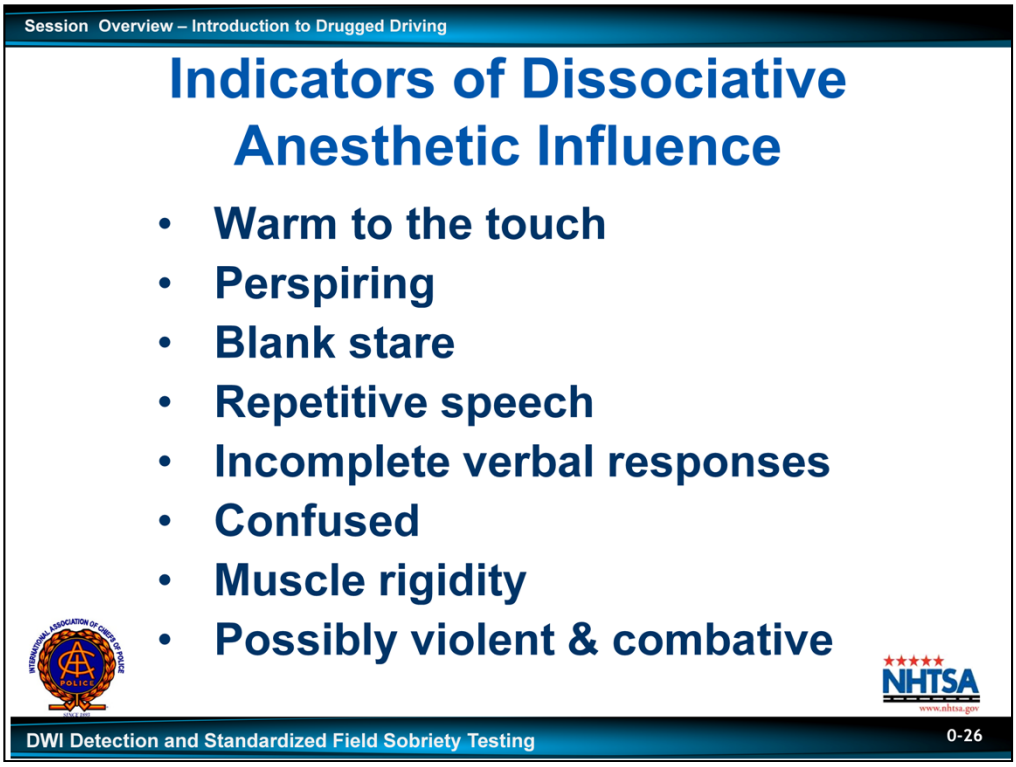
Because PCP produces very undesirable side effects, it is no longer legally manufactured. However, an analog (chemical cousin) Ketamine is still being legally manufactured and available.

However, it is easy to manufacture:

- The formula for making PCP and PCP analogs have been widely publicized.
- The manufacturing process involves readily available chemicals.

Many Dissociative Anesthetic users smoke the drug, by using it to adulterate tobacco, marijuana, or various other substances.

Dissociative Anesthetics can also be taken orally or by injection, or inhaled.



General Indicators of Dissociative Anesthetics:

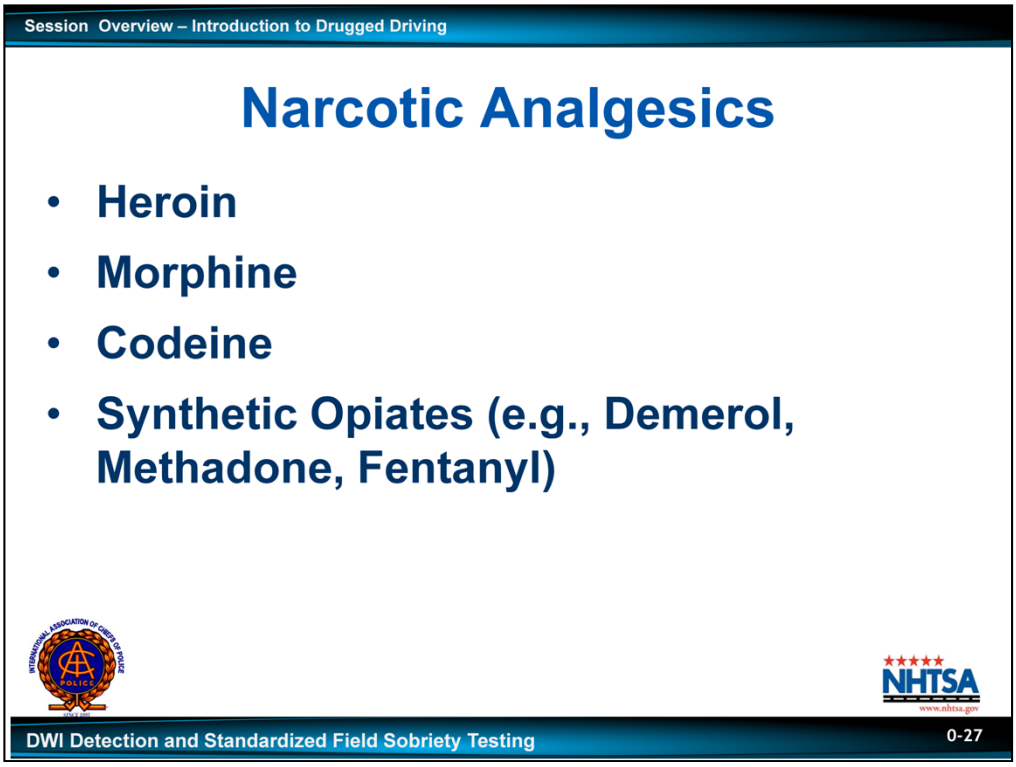
Dissociative Anesthetics cans also be taken orally or by injection, or inhaled.

- Warm to the touch
- Perspiring
- Blank stare
- Repetitive speech
- Incomplete verbal responses
- Confused
- Muscle rigidity
- Possibly violent & combative

Eye Indicators of Dissociative Anesthetic influence:

- Horizontal gaze nystagmus generally will be present, often with very early onset and very distinct jerking.
- Vertical nystagmus generally will be present.
- Pupil Size usually will not be effected.

Solicit participants' questions concerning indicators of Dissociative Anesthetic influence.



Narcotic Analgesics

Narcotic Analgesics include a large number of drugs that share three important characteristics:

- They will relieve pain.

Point out that "Analgesic" means "pain killer".

- They will produce withdrawal signs and symptoms, when the drug is stopped after chronic administration.

Point out that this characteristic implies that narcotic analgesics are physically addicting.

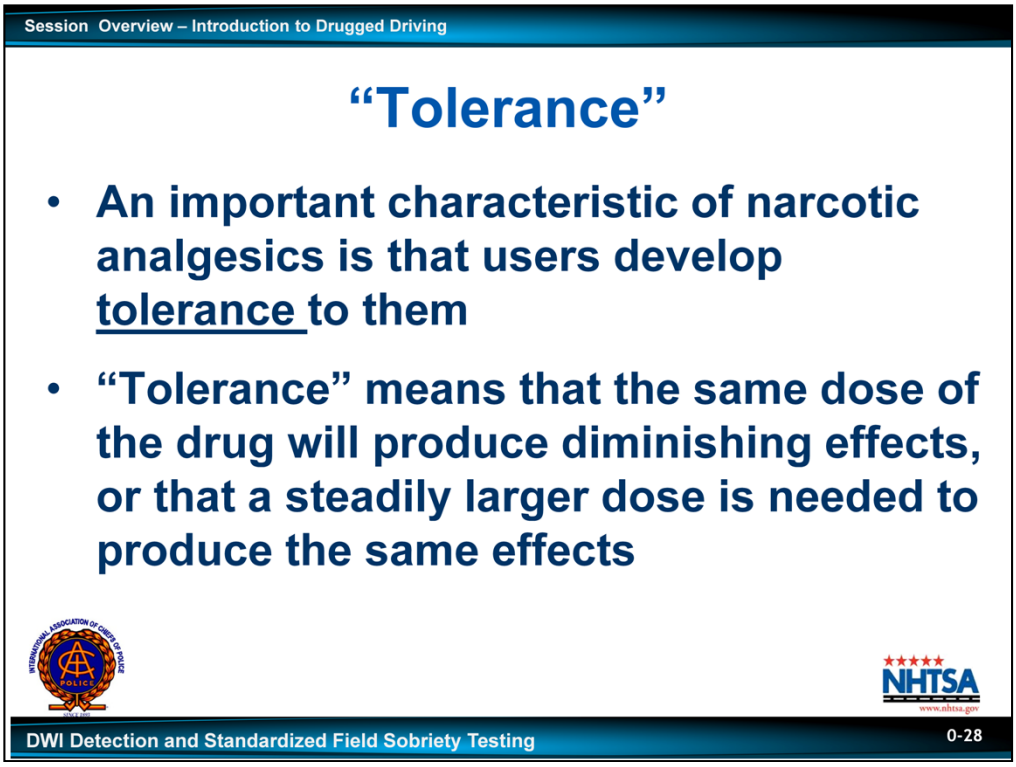
- They will suppress the withdrawal signs and symptoms of chronic morphine administration.

Some drugs classified as Narcotic Analgesics are natural derivatives of opium:

- Heroin
- Morphine
- Codeine

Some are synthetic narcotic analgesics, such as:

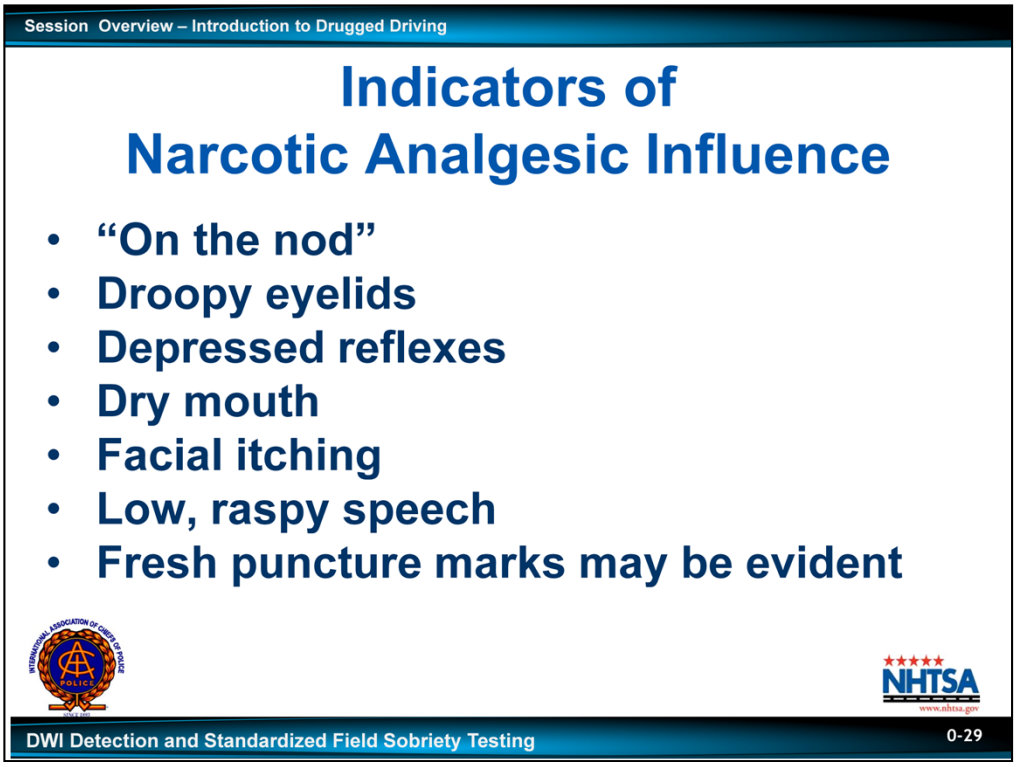
- Demerol
- Methadone
- Numorphan
- Fentanyl
- OxyContin



Tolerance

- An important characteristic of narcotic analgesics is that users develop tolerance to them.
- "Tolerance" means that the same dose of the drug will produce diminishing effects, or that a steadily larger dose is needed to produce the same effects.

A tolerant user who has taken his or her "normal" dose of heroin (for example), may exhibit little or no evidence of physical impairment.



General indicators of Narcotic Analgesic influence:

- "On the nod"
- Droopy eyelids
- Depressed reflexes
- Dry mouth
- Facial itching
- Low, raspy speech
- Fresh puncture marks may be evident

Eye indicators of Narcotic Analgesic influence:

- Neither horizontal nor vertical nystagmus will be present
- Pupils generally will be constricted

Solicit participants' questions concerning indicators of Narcotic Analgesic influence.

Inhalants

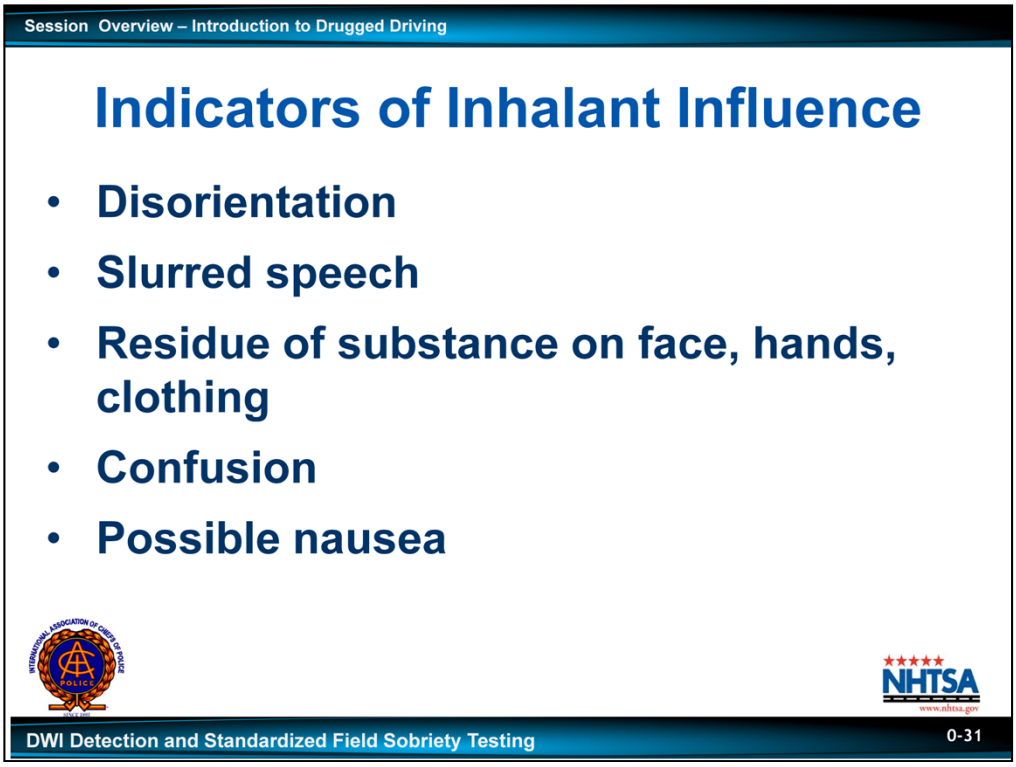
Inhalants are breathable chemicals that produce mind-altering results.

Inhalants include many familiar household materials, such as glue (“Toluene”), paint, gasoline, aerosol sprays, etc. that produce volatile fumes.

Some drugs that are classified as Inhalants include:

- Glue (i.e., model airplane glue, Toluene)
- Paint
- Gasoline
- Aerosol sprays (i.e., vegetable frying pan lubricants, hair sprays, insecticides)
- Nitrous Oxide
- Ether
- Amyl Nitrate

Certain anesthetics also may be used as inhalants.



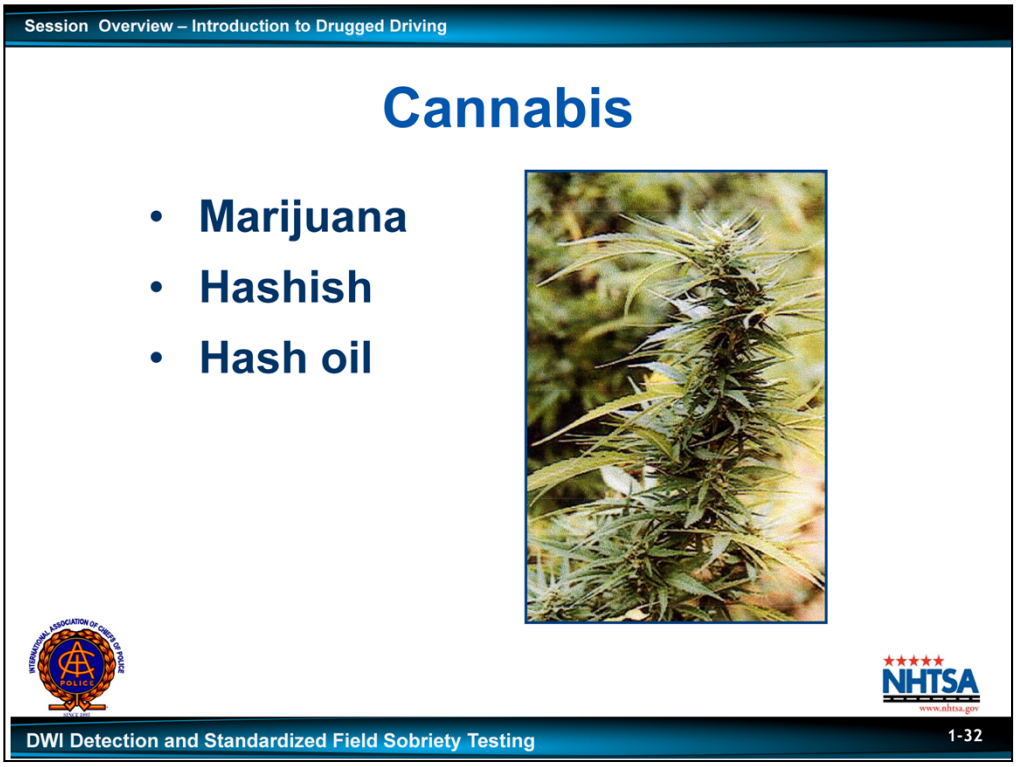
General indicators of Inhalant influence:

- Disorientation
- Slurred speech
- Residue of substance on face, hands, clothing
- Confusion
- Possible nausea

Eye indicators of Inhalant influence:

- Horizontal gaze nystagmus generally will be present.
- Vertical nystagmus may be present (especially with high doses).
- Pupil size generally will not be effected.

Solicit participants' questions concerning inhalants.

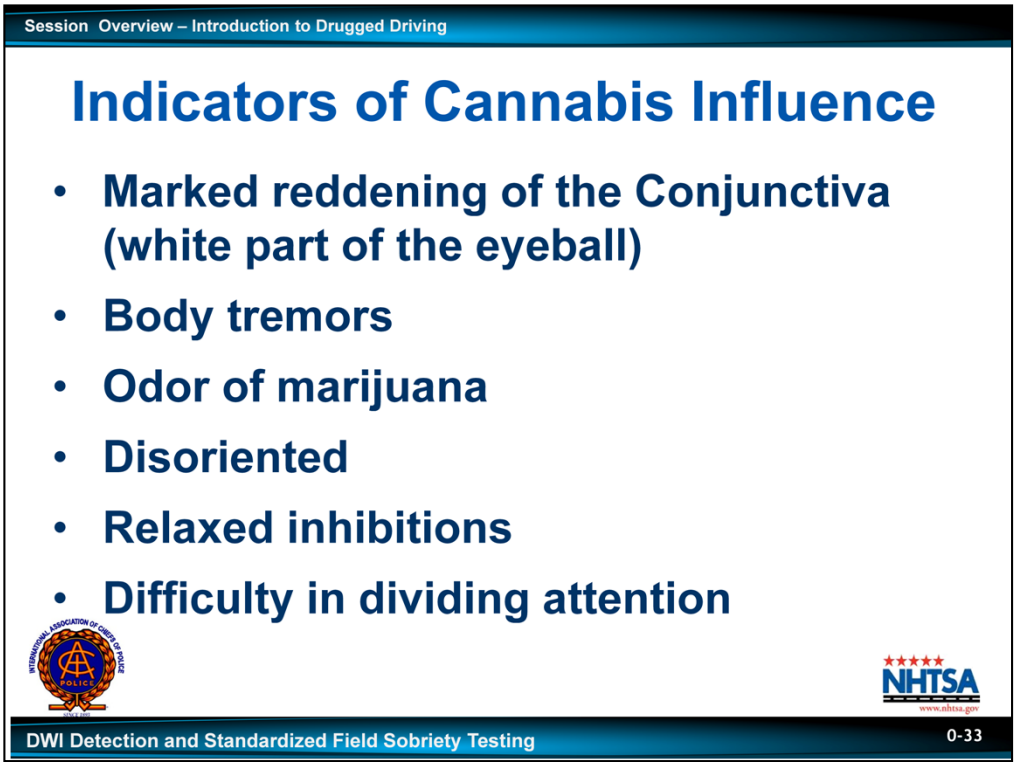


Cannabis

The category Cannabis includes the various products of the Cannabis Sativa plant, including:

- Marijuana
- Hashish
- Hash oil
- Synthetic THC (Marinol or Dronabinol)
- Synthetic cannabinoid products (Spice, K2, JWH-18, etc.)

Cannabis products generally are smoked, although they also can be ingested orally.



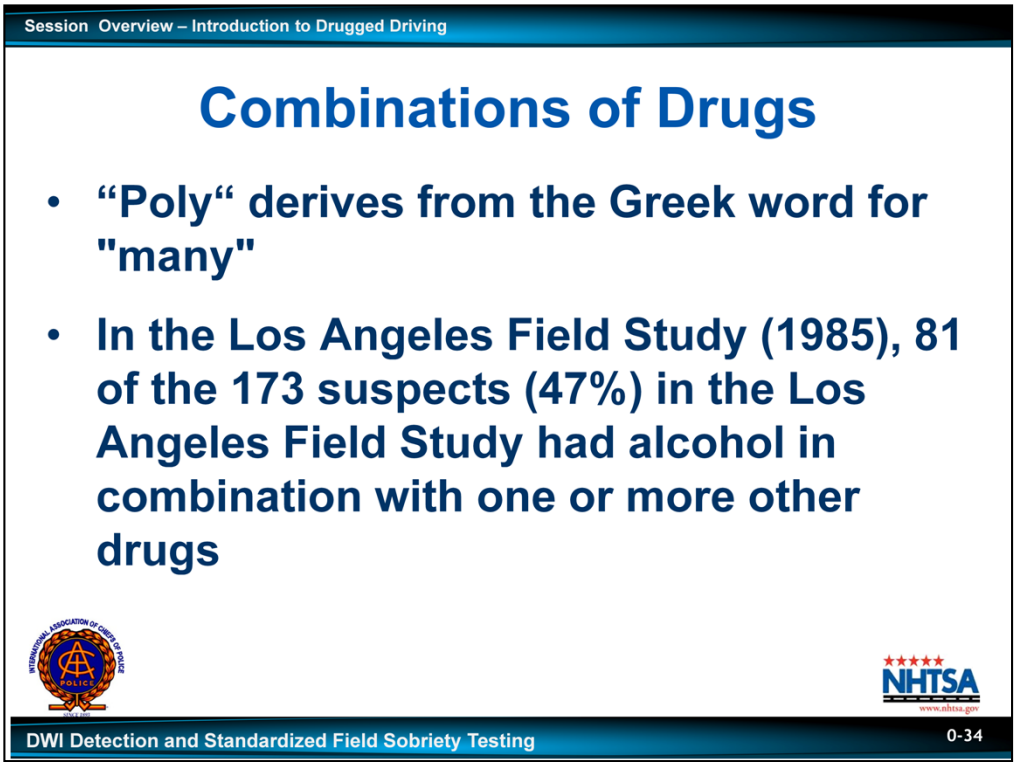
General Indicators of Cannabis Influence:

- Marked reddening of the Conjunctiva (white part of the eyeball)
- Body tremors
- Odor of marijuana
- Disoriented
- Relaxed inhibitions
- Difficulty in dividing attention

Eye indicators of Cannabis Influence:

- Neither horizontal nor vertical nystagmus will be present
- Pupil size generally will be dilated, but also may not be effected

Solicit participants' questions concerning Cannabis.



D. Combinations of Drugs

Many drug users routinely ingest drugs from two or more drug categories at the same time.

- The term for this condition is "polydrug use".

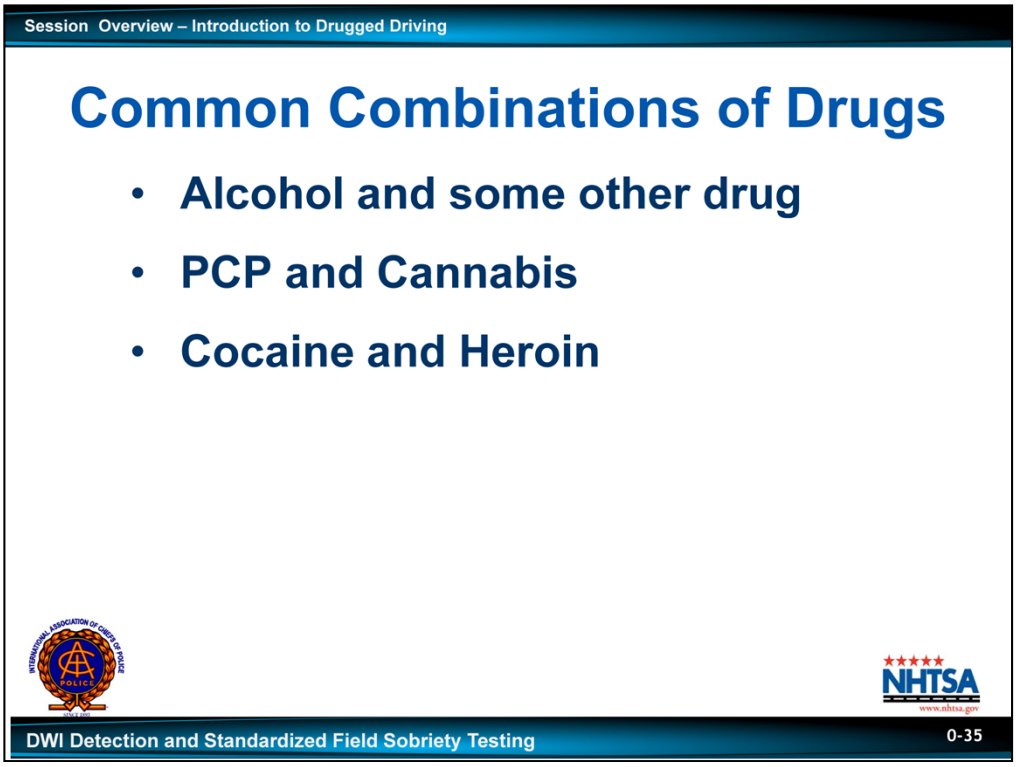
Point out that the preflx "poly" derives from the Greek word for "many".

In the Los Angeles Field Study (1985), 72% of the suspects had two or more drugs in them.

In that study, alcohol was often found in combination with one or more other drugs.

But even if we discount alcohol, nearly half (45%) of the Field Study suspects had two or more other drugs in them.

Point out that 81 of the 173 suspects (47%) in the Los Angeles Field Study had alcohol in combination with one or more other drugs.



Common Combinations of Drugs

Write these common combinations on the dry-erase board or flip-chart.

- Alcohol and some other drug is the most frequent combination
- PCP and Cannabis is another common combination

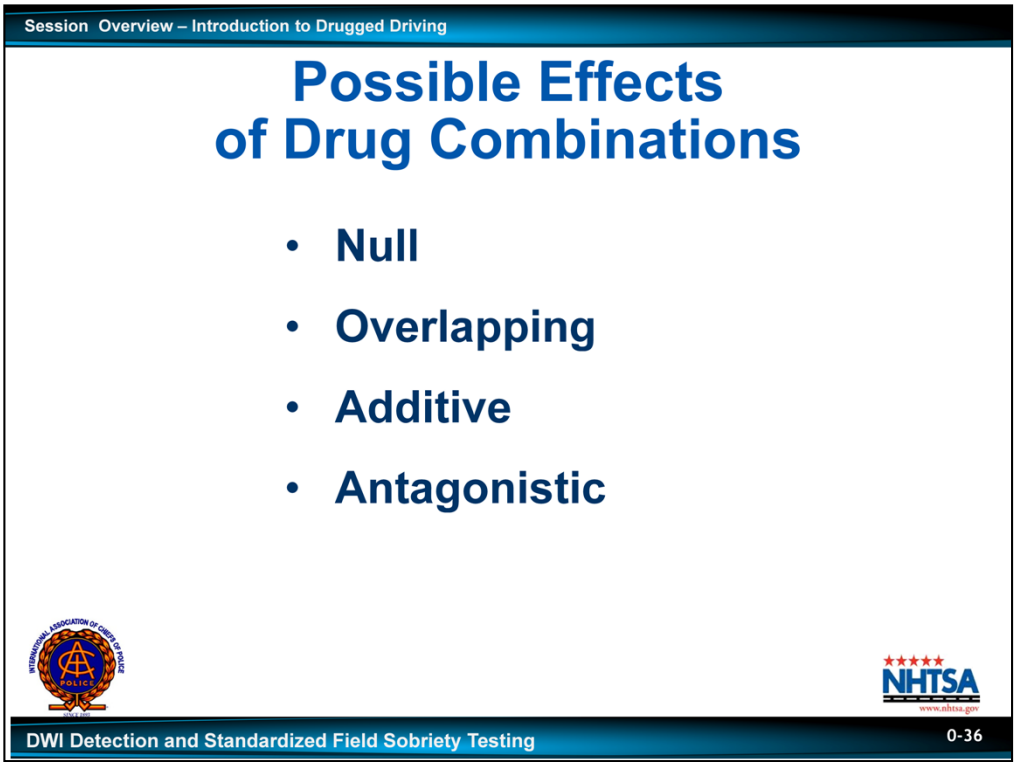
Remind participants that many PCP users prefer to ingest that drug by smoking, and a favorite method is so sprinkle powdered PCP on marijuana.

- Cocaine and Heroin is another common combination

Because polydrug use is so common, you should not be surprised to encounter subjects who are under the influence of more than one category of drugs.

- At some times and places polydrug users may be more common than single drug users.
- Be especially alert to the possibility that subjects who have been drinking alcohol may also have ingested some other drug or drugs.

The effects of polydrug use may vary widely, depending on exactly what combination of drugs is involved, how ingested and when they were ingested.



Any particular combination of drugs may produce four general kinds of effects:

- Null: Neither drug has an effect on the indicator.

Null Effect: The combination of no action + no action = no action

Example of Null Effects: CNS Stimulant and Narcotic Analgesic. Neither drug causes nystagmus, therefore, you should not see nystagmus with this combination.

- Overlapping: Each drug may effect the subject in some different way. In combination, both effects may appear.

Overlapping Effect: Action + no action = action

Example of Overlapping Effects: PCP and Narcotic Analgesic. PCP will cause nystagmus, while a Narcotic Analgesic does not cause nystagmus. Therefore, you should see nystagmus.

- Additive: The two drugs may independently produce some similar effects. In combination, these effects may be enhanced.

Additive Effect: Action + the same action reinforces the action

Example of Additive Effects: Stimulants and hallucinogens both cause pupil dilation. Therefore, pupils should be dilated.

- Antagonistic: The two drugs may produce some effects that are exactly opposite. In combination, these effects may mask each other.
- Example of Antagonistic Effect: A CNS Stimulant usually causes pupil dilation. A narcotic usually causes pupil constriction. It is possible that someone who is simultaneously under the influence of a stimulant and narcotic may have pupils that are nearly normal in size. It is also possible that the pupils will change as the effects of one drug diminishes while the other increases.

Antagonistic Effect: Action + opposite action = can't predict outcome

E. Demonstrations of Drug Influence (Video)

F. Dealing With Suspected Drug Influence of Medical Impairment

This may be an opportunity to discuss various medical conditions that mimic drug impairment, i.e., diabetic shock and hypoglycemia.

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***

Empathize the importance of requesting the assistance of a local DRE whenever possible.

G. Closing

Consult with a DRE, if possible and document in detail all observations.

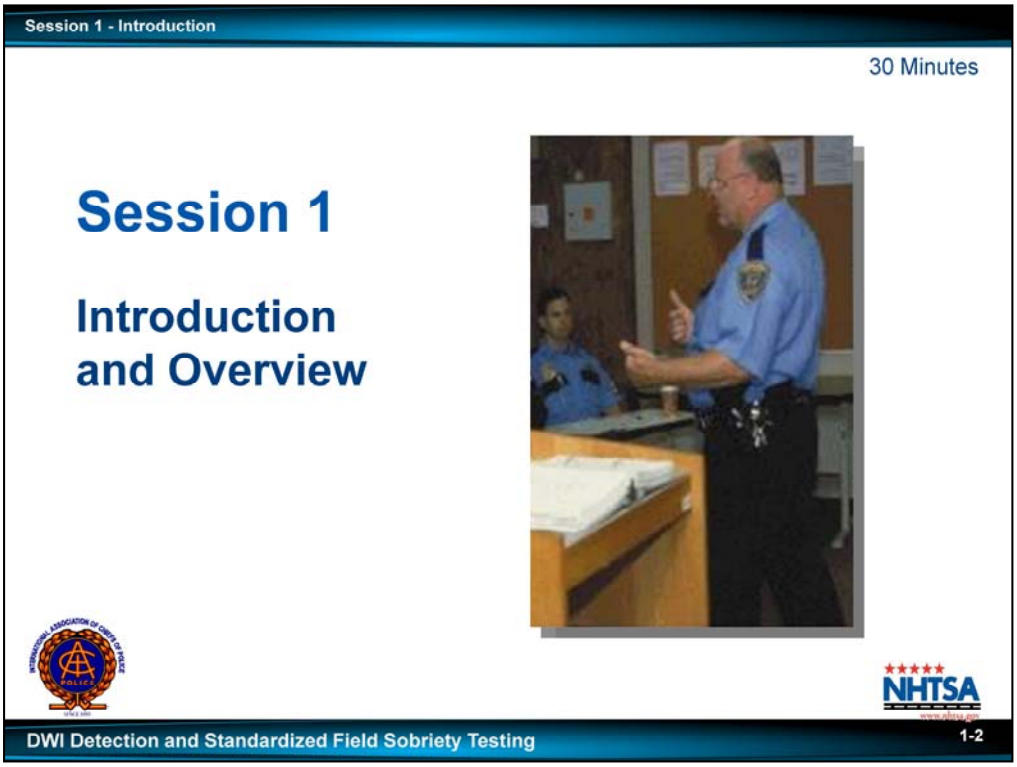
Although this course is not designed to qualify you as a DRE, it is intended to make you more knowledgeable when encountering drivers impaired by substances other than alcohol.

Solicit participants' question regarding the Introduction to Drugged Driving

Instructor needs to put in Location and Date.

Before beginning this session fill in the blanks with local statistics on frame 9.

Write your names on dry erase board or flipchart. State names, agency, and relevant background information.



A. <u>Welcoming Remarks</u>

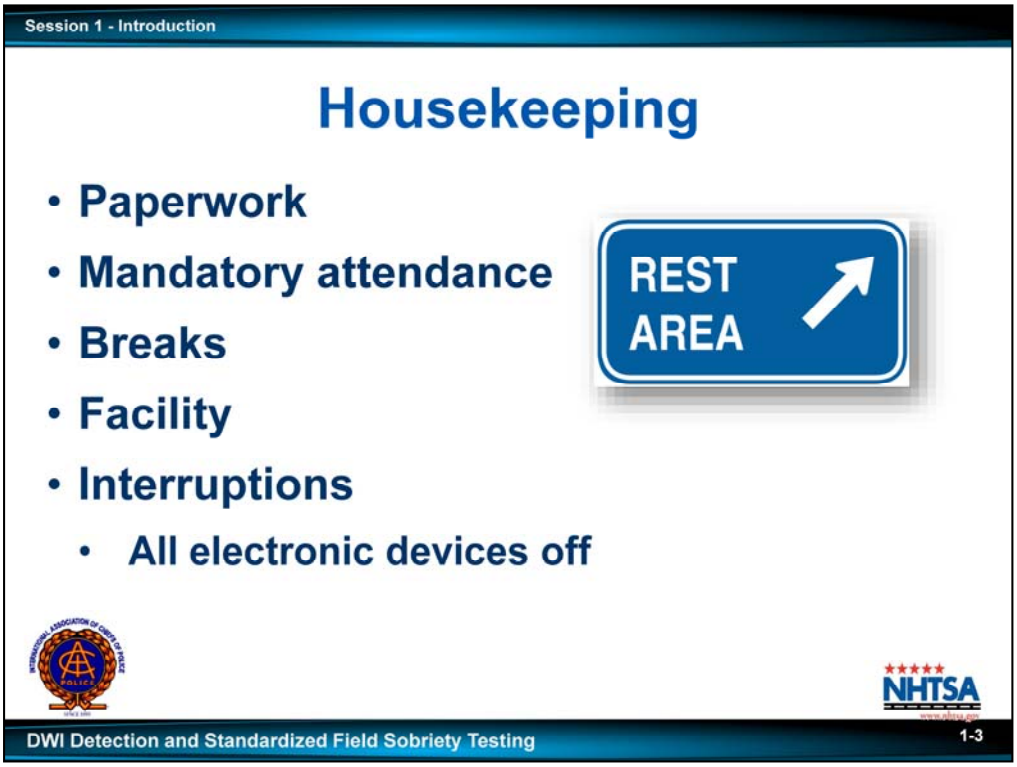
Welcome to the DWI Detection and Standardized Field Sobriety Testing Course. The SFST training focuses on a set of examination procedures that provide officers knowledge and tools for DWI detection. The SFST course provides detailed explanations of the evaluation procedures, careful demonstrations of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

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.



B. <u>Administrative Details</u>

Paperwork
Completion of registration forms, travel vouchers, etc.

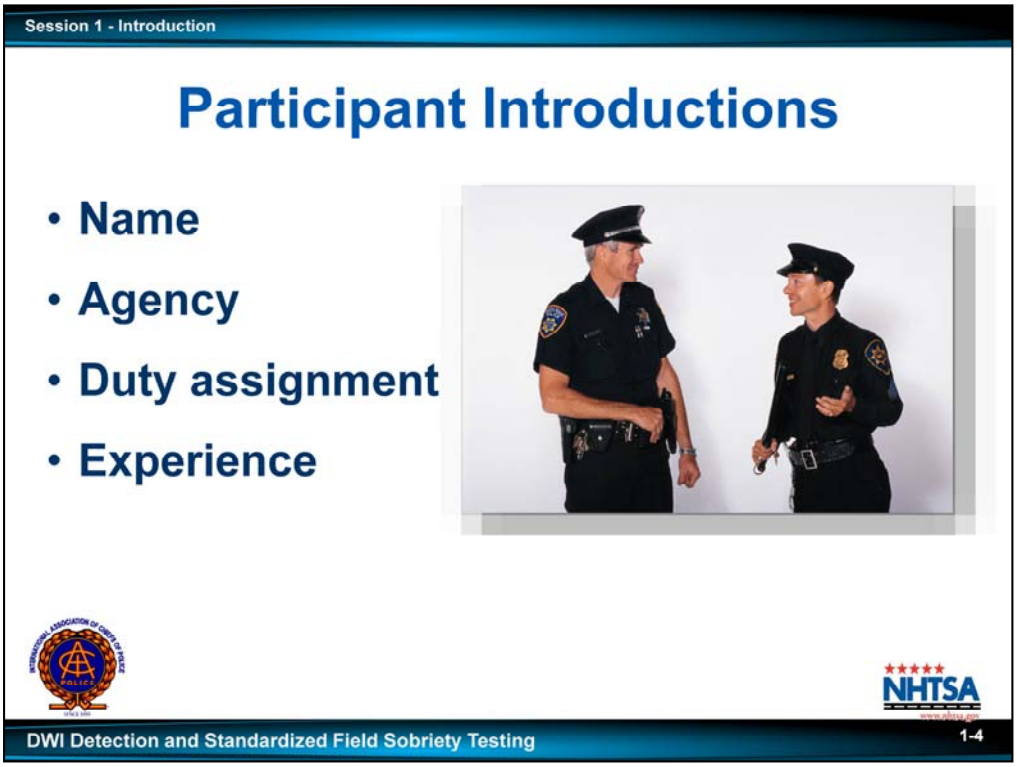
Attendance
Mandatory attendance at all sessions of this school.
If a participant misses any portion of this school, he or she must make up the deficiency via after hours tutoring before completing the program.

Breaks
Time allotted for breaks and reconvening

Facility
Locations of restrooms, lunchrooms, etc.

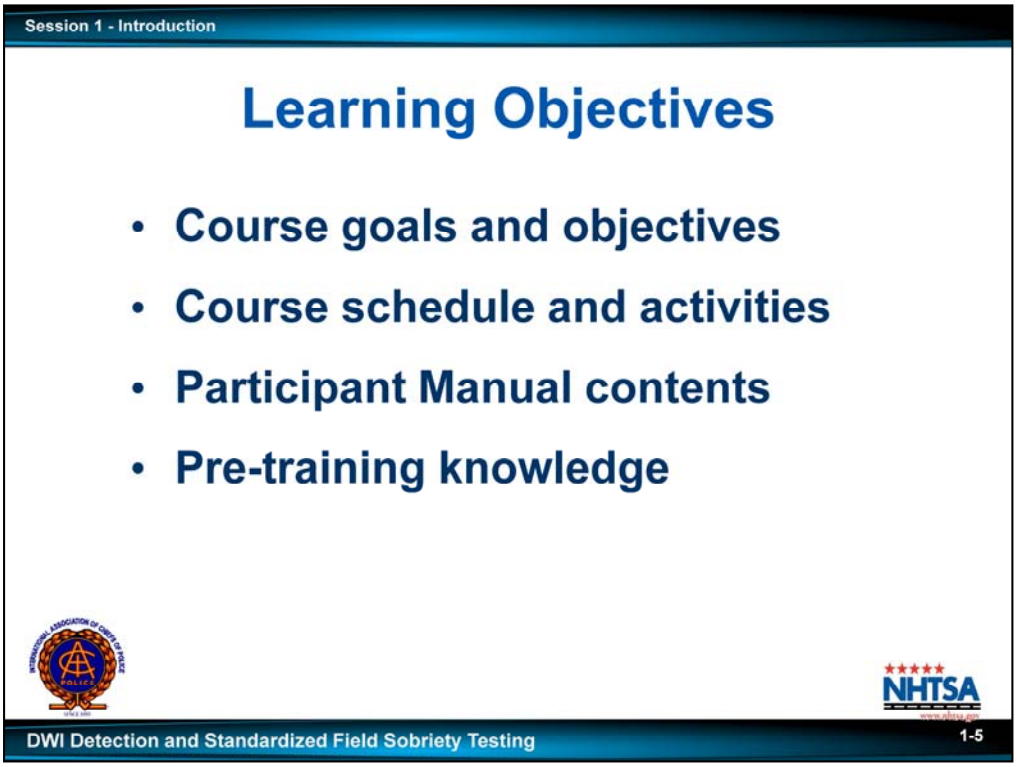
Interruptions
No texting or email monitoring. Turn off all electronic devices.

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 that 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.



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.



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

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

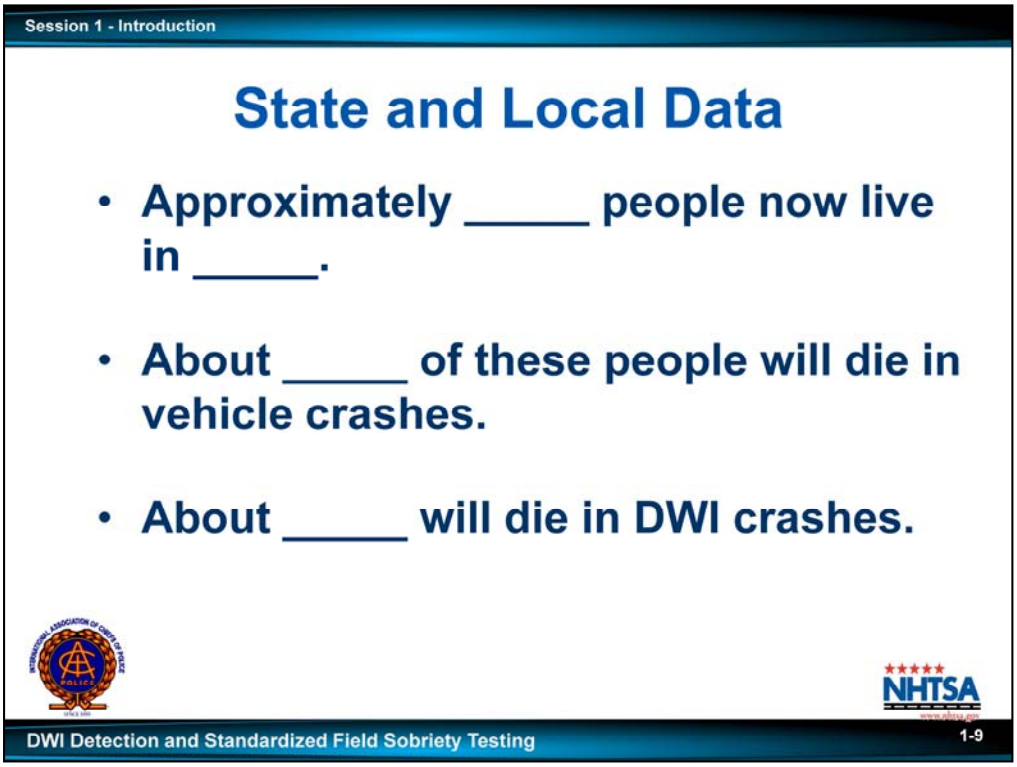
CONTENT SEGMENTS	LEARNING ACTIVITES
A. Welcoming Remarks and Objectives	Instructor Led Presentations
B. Administrative Details	Written Examination
C. Pre-Test	

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

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

65 deaths and injuries each hour!



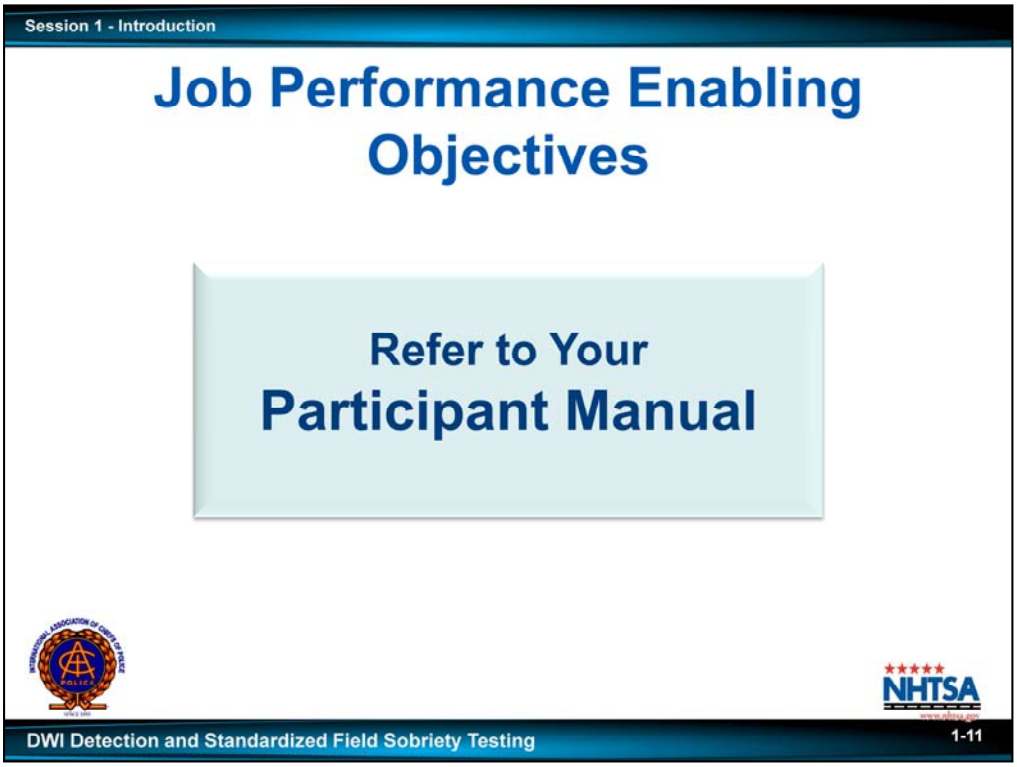
This frame is intended to address the local perspective. Fill in appropriate information from agency sources.

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

***Point out that the 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 Standardized Field Sobriety Tests
- 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



Enabling objectives support overall learning objectives and are detailed in your Participant Manual. Some examples are : (Instructor 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.

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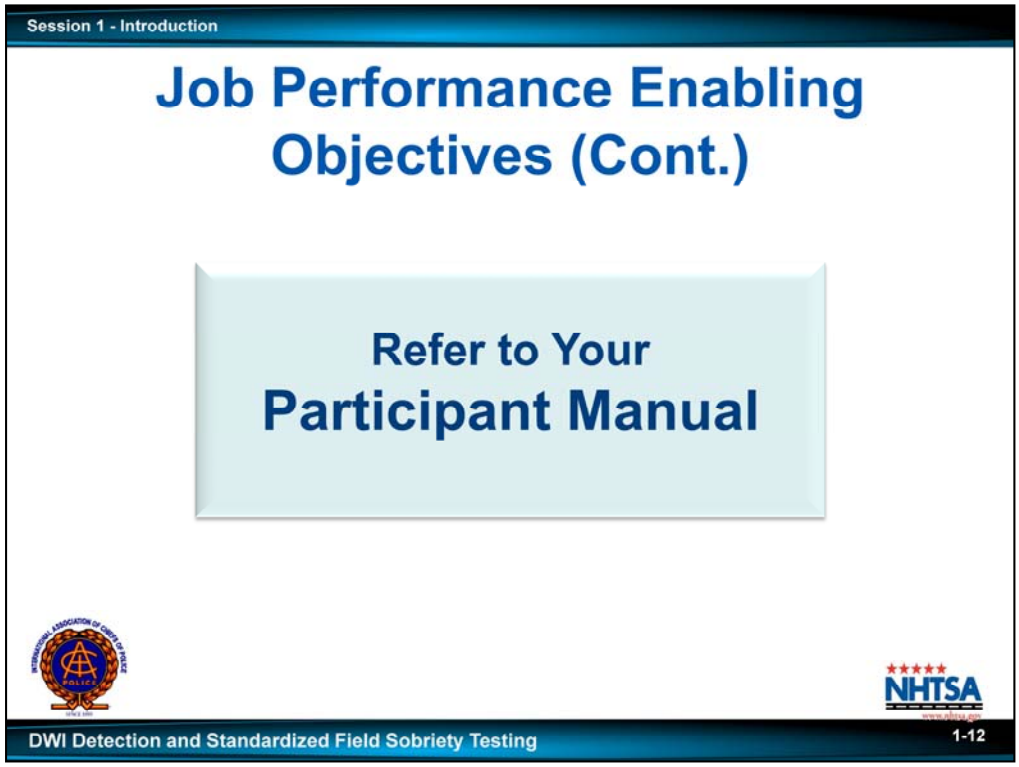
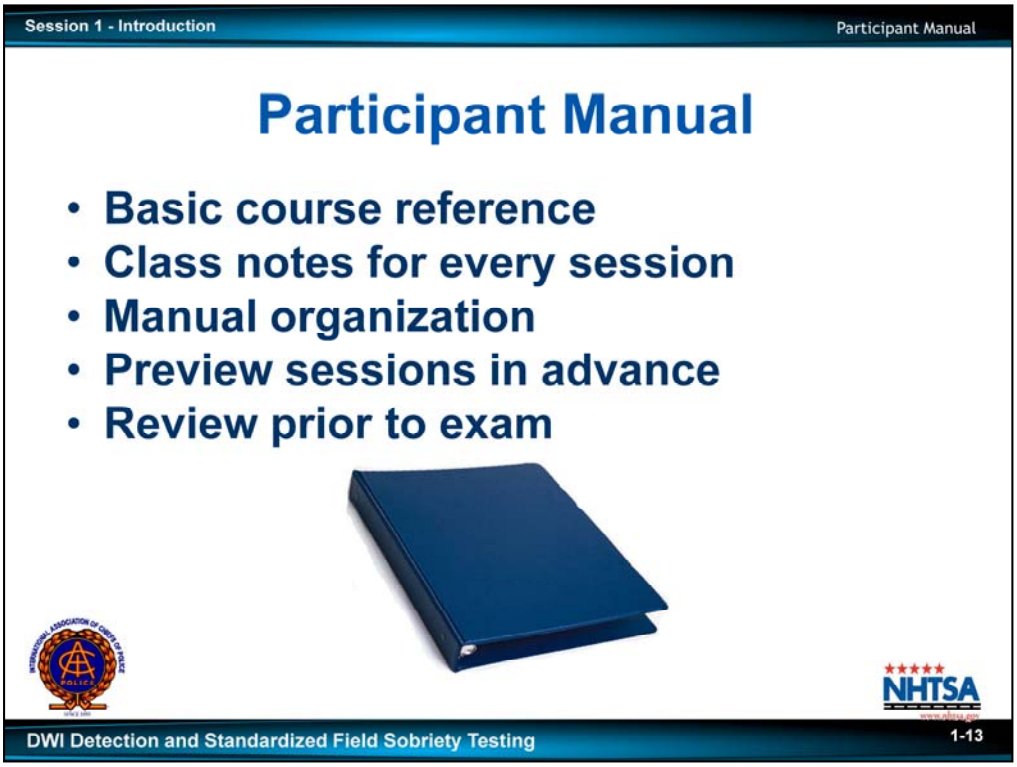
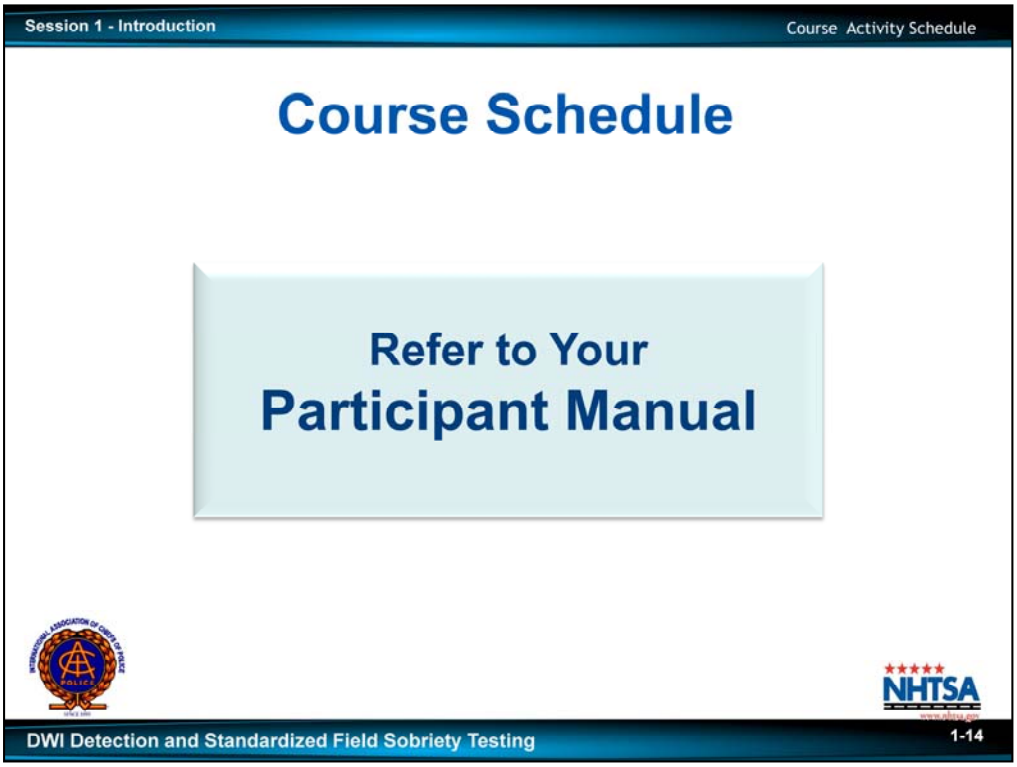


- Understand the role and relevance of preliminary breath testing in pre-arrest screening of DWI subjects.
- Know and carry out appropriate administrative procedures for the Horizontal Gaze Nystagmus test.
- Know and carry out appropriate administrative procedures for validated divided attention psychophysical 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 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.



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

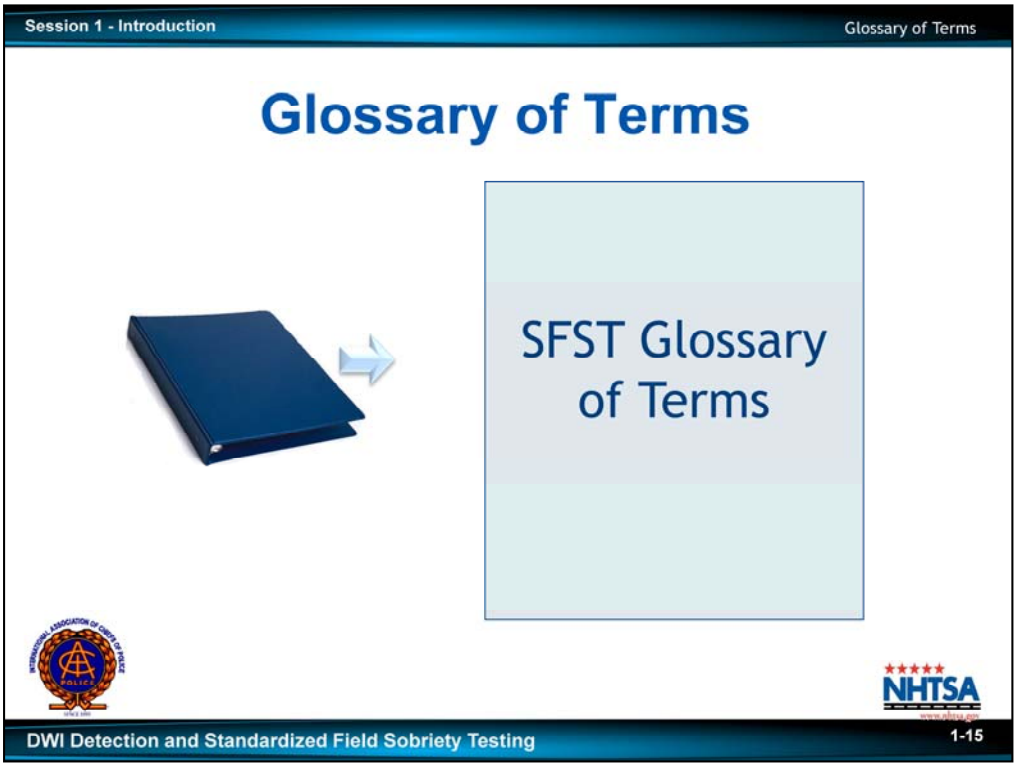
- Read each session prior to class.
- Use the manual to review the material prior to taking the final exam.



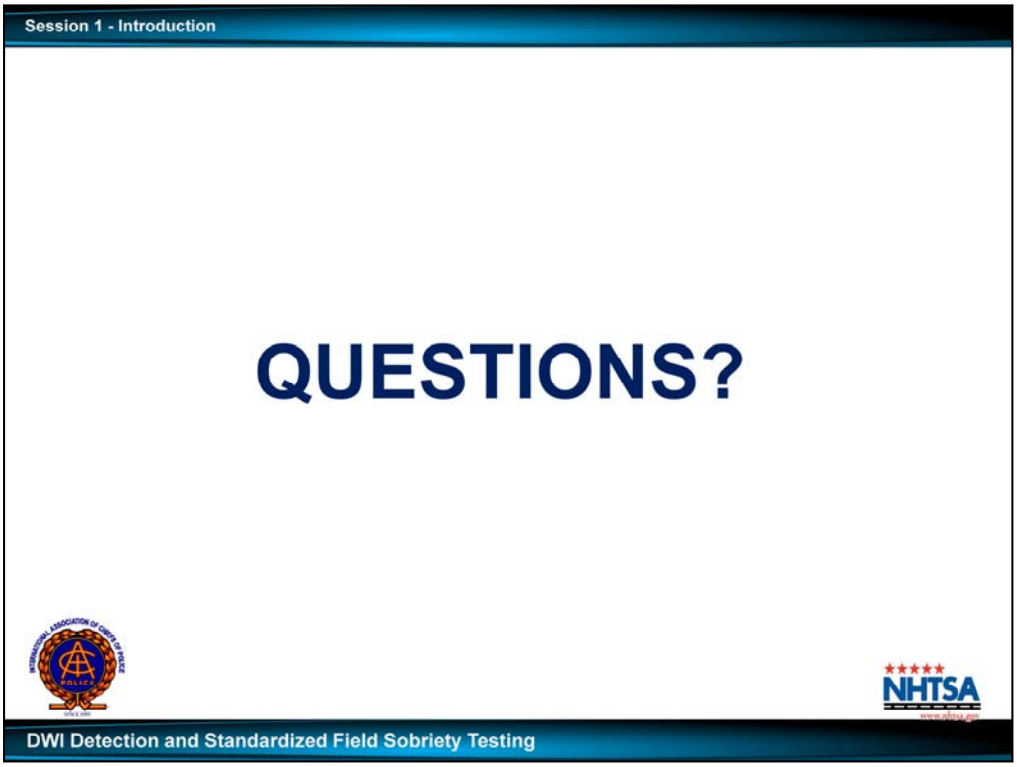
The course schedule is located in the Participant Manual.

Give a brief overview of the schedule of sessions.

Questions concerning the schedule?



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



C. Pre-Test

- ***Address participant questions.***
- ***Administer the Pre-Test.***
- ***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.***

SFST Glossary of Terms

ACCOMMODATION REFLEX

The adjustment of the eyes for viewing at various distances. Meaning the pupils will automatically constrict as objects move closer and dilate as objects move further away.

ADDICTION

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

ADDITIVE EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an additive effect if they both affect the indicator in the same way. For example, cocaine elevates pulse rate and PCP also elevates pulse rate. The combination of cocaine and PCP produces an additive effect on pulse rate.

AFFERENT NERVES

See: "Sensory Nerves."

ALKALOID

A chemical that is found in, and can be physically extracted from, some substance. For example, morphine is a natural alkaloid of opium. It does not require a chemical reaction to produce morphine from opium.

ALVEOLAR BREATH - Breath from the deepest part of the lung.

ANALGESIC

A drug that relieves or allays pain.

ANALOG (of a drug)

An analog of a drug is a chemical that is very similar to the drug, both in terms of molecular structure and in terms of psychoactive effects. For example, the drug Ketamine is an analog of PCP.

ANESTHETIC

A drug that produces a general or local insensibility to pain and other sensation.

ANTAGONISTIC EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an antagonistic effect if they affect the indicator in opposite ways. For example, heroin constricts pupils while cocaine dilates pupils. The combination of heroin and cocaine produces an antagonistic effect on pupil size. Depending on how much of each drug was taken, and on when they were taken, the suspect's pupils could be constricted, or dilated, or within the normal range of size.

ARRHYTHMIA

An abnormal heart rhythm.

ARTERY

The strong, elastic blood vessels that carry blood away the heart.

ATAXIA

A blocked ability to coordinate movements. A staggering walk and poor balance may be caused by damage to the brain or spinal cord. This can be the result of trauma, birth defect, infection, tumor, or drug use.

AUTONOMIC NERVE

A motor nerve that carries messages to the muscles and organs that we do not consciously control. There are two kinds of autonomic nerves, the sympathetic nerves and parasympathetic nerves.

AXON

The part of a neuron (nerve cell) that sends out a neurotransmitter.

BAC

(Blood Alcohol Concentration) - The percentage of alcohol in a person’s blood.

BrAC

(Breath Alcohol Concentration) - The percentage of alcohol in a person’s blood as measured by a breath testing device.

BLOOD PRESSURE

The force exerted by blood on the walls of the arteries. Blood pressure changes continuously, as the heart cycles between contraction and expansion.

BRADYCARDIA

Abnormally slow heart rate; pulse rate below the normal range.

BRADYPNEA

Abnormally slow rate of breathing.

BRUXISM

Grinding the teeth. This behavior is often seen in person who are under the influence of cocaine or other CNS Stimulants.

CANNABIS

This is the drug category that includes marijuana. Marijuana comes primarily from the leaves of certain species of Cannabis plants that grow readily all over the temperate zones of the earth. Hashish is another drug in this category, and is made from dried and pressed resin of a marijuana plant. The active ingredient in both Marijuana and Hashish is a chemical called delta-9 tetrahydrocannabinol, usually abbreviated THC.

This is the drug category that includes Mari

CARBOXY THC

A metabolite of THC (tetrahydrocannabinol).

CHEYNE- STOKES RESPIRATION

Abnormal pattern of breathing. Marked by breathlessness and deep, fast breathing.

CLUE - Something that leads to the solution of a problem.

CNS (Central Nervous System)

A system within the body consisting of the brain, the brain stem, and the spinal cord.

CNS DEPRESSANTS

One of the seven drug categories. CNS Depressants include alcohol, barbiturates, anti-anxiety tranquilizers, and numerous other drugs.

CNS STIMULANTS

One of the seven drug categories. CNS Stimulants include Cocaine, the Amphetamines, Ritalin, Preludin, and numerous other drugs.

CONJUNCTIVITIS

An inflammation of the mucous membrane that lines the inner surface of the eyelids caused by infection, allergy, or outside factors. May be bacterial or viral. Persons suffering from conjunctivitis may show symptoms in one eye only. This condition is commonly referred to as "pink eye", a condition that could be mistaken for the bloodshot eyes produced by alcohol or Cannabis.

CONVERGENCE

The "crossing" of the eyes that occurs when a person is able to focus on a stimulus as it is pushed slowly toward the bridge of their nose. (See, also, "Lack of Convergence".)

CRACK/ROCK

Cocaine base, appears as a hard chunk form resembling pebbles or small rocks. It produces a very intense, but relatively short duration "high".

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

CURRICULUM VITAE

A written summary of a person's education, training, experience, noteworthy achievements and other relevant information about a particular topic.

CYCLIC BEHAVIOR

A manifestation of impairment due to certain drugs, in which the suspect alternates between periods (or cycles) of intense agitation and relative calm. Cyclic behavior, for example, sometimes will be observed in persons under the influence of PCP.

DELIRIUM

A brief state characterized by incoherent excitement, confused speech, restlessness, and possible hallucinations.

DENDRITE

The part of a neuron (nerve cell) that receives a neurotransmitter.

DIACETYL MORPHINE

The chemical name for Heroin.

DIASTOLIC

The lowest value of blood pressure. The blood pressure reaches its diastolic value when the heart is fully expanded, or relaxed (Diastole).

DIPLOPIA

Double vision.

DISSOCIATIVE ANESTHETICS

One of the seven drug categories. Includes drugs that inhibits pain by cutting off or disassociating the brain's perception of pain. PCP and its analogs are considered Dissociative Anesthetics.

DIVIDED ATTENTION

Concentrating on more than one thing at a time. The four psychophysical tests used by DREs require the suspect to divide attention.

DIVIDED ATTENTION TEST

A test which requires the subject to concentrate on both mental and physical tasks at the same time.

DOWNSIDE EFFECT

An effect that may occur when the body reacts to the presence of a drug by producing hormones or neurotransmitters to counteract the effects of the drug consumed.

DRUG

Any substance that, when taken into the human body, can impair the ability of the person to operate a vehicle safely.

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 subject should be arrested for a DWI violation. The DWI detection process has three phases:

1. Phase One - Vehicle In Motion
2. Phase Two - Personal Contact
3. Phase Three - Pre-arrest Screening

DYSARTHIA

Slurred speech. Difficult, poorly articulated speech.

DYSPNEA et. al.

Shortness of breath.

DYSMETRIA

An abnormal condition that prevents the affected person from properly estimating distances linked to muscular movements.

DYSPHORIA

A disorder of mood. Feelings of depression and anguish.

EFFERENT NERVES

See: "Motor Nerves".

ENDOCRINE SYSTEM

The network of glands that do not have ducts and other structures. They secrete hormones into the blood stream to affect a number of functions in the body.

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:

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

EXPERT WITNESS

A person skilled in some art, trade, science or profession, having knowledge of matters not within knowledge of persons of average education, learning and experience, 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.

FLASHBACK

A vivid recollection of a portion of an hallucinogenic experience. Essentially, it is a very intense daydream. There are three types: (1) emotional -- feelings of panic, fear, etc.; (2) somatic -- altered body sensations, tremors, dizziness, etc.; and (3) perceptual -- distortions of vision, hearing, smell, etc.

GARRULITY

Chatter, rambling or pointless speech. Talkative.

HALLUCINATION

A sensory experience of something that does not exist outside the mind, e.g., seeing, hearing, smelling, or feeling something that isn't really there. Also, having a distorted sensory perception, so that things appear differently than they are.

HALLUCINOGENS

One of the seven drug categories. Hallucinogens include LSD, MDMA, Peyote, Psilocybin, and numerous other drugs.

HASHISH

A form of cannabis made from the dried and pressed resin of a marijuana plant.

HASH OIL

Sometimes referred to as “marijuana oil” it is a highly concentrated syrup-like oil extracted from marijuana. It is normally produced by soaking marijuana in a container of solvent, such as acetone or alcohol for several hours and after the solvent has evaporated, a thick syrup-like oil is produced with a higher THC content.

HEROIN

A powerful and widely-abused narcotic analgesic that is chemically derived from morphine. The chemical, or generic name of heroin is "diacetyl morphine".

HIPPUS

A rhythmic change in the pupil size of the eyes, as they dilate and constrict when observed in darkness independent of changes in light intensity, accommodation (focusing), or other forms of sensory stimulation. Normally only observed with specialized equipment.

HOMEOSTASIS

The dynamic balance, or steady state, involving levels of salts, water, sugars, and other materials in the body's fluids.

HORIZONTAL GAZE NYSTAGMUS (HGN)

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

HORMONES

Chemicals produced by the body's endocrine system that are carried through the blood stream to the target organ. They exert great influence on the growth and development of the individual, and that aid in the regulation of numerous body processes.

HYDROXY THC

A metabolite of THC (tetrahydrocannabinol).

HYPERFLEXIA

Exaggerated or over extended motions.

HYPERGLYCEMIA

Excess sugar in the blood.

HYPERPNEA

A deep, rapid or labored breathing.

HYPERPYREXIA

Extremely high body temperature.

HYPERREFLEXIA

A neurological condition marked by increased reflex reactions.

HYPERTENSION

Abnormally high blood pressure. Do not confuse this with hypotension.

HYPOGLYCEMIA

An abnormal decrease of blood sugar levels.

HYPOPNEA

Shallow or slow breathing.

HYPOTENSION

Abnormally low blood pressure. Do not confuse this with hypertension.

HYPOTHERMIA

Decreased body temperature.

ICE

A crystalline form of methamphetamine that produces a very intense and fairly long-lasting "high".

ILLEGAL PER SE

Unlawful in and of itself. Used to describe a law which makes it illegal to drive while having a statutorily prohibited Blood Alcohol Concentration.

INHALANTS

One of the seven drug categories. The inhalants include volatile solvents (such as glue and gasoline), aerosols (such as hair spray and insecticides) and anesthetic gases (such as nitrous oxide).

INSUFFLATION

See "snorting".

INTEGUMENTARY SYSTEM

The skin and accessory structures, hair and nails. Functions include protection, maintenance of body temperature, excretion of waste, and sensory perceptions.

INTRAOCULAR

"Within the eyeball".

KOROTKOFF SOUNDS

A series of distinct sounds produced by blood passing through an artery, as the external pressure on the artery drops from the systolic value to the diastolic value.

LACK OF CONVERGENCE

The inability of a person's eyes to converge, or "cross" as the person attempts to focus on a stimulus as it is pushed slowly toward the bridge of his or her nose.

MARIJUANA

Common term for the Cannabis Sativa plant. Usually refers to the dried leaves of the plant. This is the most common form of the cannabis category.

MARINOL

A drug containing a synthetic form of THC (tetrahydrocannabinol). Marinol belongs to the cannabis category of drugs, but marinol is not produced from any species of cannabis plant.

METABOLISM

The sum of all chemical processes that take place in the body as they relate to the movements of nutrients in the blood after digestion, resulting in growth, energy, release of wastes, and other body functions. The process by which the body, using oxygen, enzymes and other internal chemicals, breaks down ingested substances such as food and drugs so they may be consumed and eliminated. Metabolism takes place in two phases. The first step is the constructive phase (anabolism) where smaller molecules are converted to larger molecules. The second steps is the destructive phase (catabolism) where large molecules are broken down into smaller molecules.

METABOLITE

A chemical product, formed by the reaction of a drug with oxygen and/or other substances in the body.

MIOSIS

Abnormally constricted pupils.

MOTOR NERVES

Nerves that carry messages away from the brain, to be body's muscles, tissues, and organs. Motor nerves are also known as efferent nerves.

MUSCULAR HYPERTONICITY

Rigid muscle tone.

MYDRIASIS

Abnormally dilated pupils.

NARCOTIC ANALGESICS

One of the seven drug categories. Narcotic analgesics include opium, the natural alkaloids of opium (such as morphine, codeine and thebaine), the derivatives of opium (such as heroin, dilaudid, oxycodone and percodan), and the synthetic narcotics (such as demerol and numorphan).

NERVE

A cord-like fiber that carries messages either to or from the brain. For drug evaluation and classification purposes, a nerve can be pictured as a series of "wire-like" segments, with small spaces or gaps between the segments.

NEURON

A nerve cell. The basic functional unit of a nerve. It contains a nucleus within a cell body with one or more axons and dendrites.

NEUROTRANSMITTER

Chemicals that pass from the axon of one nerve cell to the dendrite of the next cell, and that carry messages across the gap between the two nerve cells.

NULL EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce a null effect if neither of them affects that indicator. For example, PCP does not affect pupil size, and alcohol does not affect pupil size. The combination of PCP and alcohol produces a null effect on pupil size.

NYSTAGMUS

An involuntary jerking of the eyes.

ONE LEG STAND (OLS)

A divided attention field sobriety test. The third test administered in the SFST battery.

"ON THE NOD"

A semi-conscious state of deep relaxation. Typically induced by impairment due to Heroin or other narcotic analgesic. The suspect's eyelids droop, and chin rests on the chest. Suspect may appear to be asleep, but can be easily aroused and will respond to questions.

OVERLAPPING EFFECT

One mechanism of polydrug interaction. For a particular indicator of impairment, two drugs produce an overlapping effect if one of them affects the indicator but the other doesn't. For example, cocaine dilates pupils while alcohol doesn't affect pupil size. The combination of cocaine and alcohol produces an overlapping effect on pupil size: the combination will cause the pupils to dilate.

PALLOR

An abnormal paleness or lack of color in the skin.

PARANOIA

Mental disorder characterized delusions and the projection of personal conflicts, that are ascribed to the supposed hostility of others.

PARAPHERNALIA

Drug paraphernalia are the various kinds of tools and other equipment used to store, transport or ingest a drug. Hypodermic needles, small pipes, bent spoons, etc., are examples of drug paraphernalia. The singular form of the word is "paraphernalium". For example, one hypodermic needle would be called a "drug paraphernalium".

PARASYMPATHETIC NERVE

An autonomic nerve that commands the body to relax and to carry out tranquil activities. The brain uses parasympathetic nerves to send "at ease" commands to the muscles, tissues, and organs.

PARASYMPATHOMIMETIC DRUGS

Drugs that mimic neurotransmitter associated with the parasympathetic nerves. These drugs artificially cause the transmission of messages that produce lower blood pressure, drowsiness, etc.

PDR (Physician's Desk Reference)

A basic reference source for drug recognition experts. The PDR provides detailed information on the physical appearance and psychoactive effects of licitly-manufactured drugs.

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.

PHENCYCLIDINE

A contraction of PHENYL CYCLOHEXYL PIPERIDINE, or PCP. Formerly used as a surgical anesthetic, however, it has no current legitimate medical use in humans.

PHENYL CYCLOHEXYL PIPERIDINE (PCP)

Often called "phencyclidine" or “PCP”, it is a specific drug belonging to the Dissociative Anesthetics category.

PHYSIOLOGY

Physiology is the branch of biology dealing with the functions and activities of life or living matter and the physical and chemical phenomena involved.

PILOERECTION

Literally, "hair standing up", or goose bumps. This condition of the skin is often observed in persons who are under the influence of LSD.

POLY DRUG USE

Ingesting drugs from two or more drug categories.

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, and administers or arranges for a preliminary breath test.

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.

PSYCHEDELIC

A mental state characterized by a profound sense of intensified or altered sensory perception sometimes accompanied by hallucinations.

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.

PSYCHOTOGENIC

Literally, "creating psychosis" or "giving birth to insanity". A drug is considered to be psychotogenic if persons who are under the influence of the drug become insane, and remain so after the drug wears off.

PSYCHOTOMIMETIC

Literally, "mimicking psychosis" or "impersonating insanity". A drug is considered to be psychotomimetic if persons who are under the influence of the drug look and act insane while they are under the influence.

PTOSIS

Droopy eyelids.

PULSE

The expansion and relaxation of the walls of an artery, caused by the surging flow of blood.

PULSE RATE

The number of expansions of an artery per minute.

PUPILLARY LIGHT REFLEX

The pupils of the eyes will constrict and dilate depending on changes in lighting.

PUPILLARY UNREST

The continuous, irregular change in the size of the pupils that may be observed under room or steady light conditions.

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.

REBOUND DILATION

A period of pupillary constriction followed by a period of pupillary dilation where the pupil steadily increases in size and does not return to its original constricted size.

RESTING NYSTAGMUS

Jerking of the eyes as they look straight ahead.

SCLERA

A dense white fibrous membrane that, with the cornea, forms the external covering of the eyeball (i.e., the white part of the eye).

SENSORY NERVES

Nerves that carry messages to the brain, from the various parts of the body, including notably the sense organs(eyes, ears, etc.). Sensory nerves are also known as afferent nerves.

SINSEMILLA

The unpollenated female cannabis plant, having a relatively high concentration of THC.

STANDARDIZED FIELD SOBRIETY TESTING (SFST)

Standardized Field Sobriety Testing. There are three SFSTs, namely Horizontal Gaze Nystagmus (HGN), Walk and Turn, and One Leg Stand. Based on a series of controlled laboratory studies, scientifically validated clues of alcohol

impairment have been identified for each of these three tests. They are the only Standardized Field Sobriety Tests for which validated clues have been identified.

SNORTING

One method of ingesting certain drugs. Snorting requires that the drug be in powdered form. The user rapidly draws the drug up into the nostril, usually via a paper or glass tube. Snorting is also known as insufflation.

SPHYGMOMANOMETER

A medical device used to measure blood pressure. It consists of an arm or leg cuff with an air bag attached to a tube and a bulb for pumping air into the bag, and a gauge for showing the amount of air pressure being pressed against the artery.

STETHOSCOPE

A medical instrument used, for drug evaluation and classification purposes, to listen to the sounds produced by blood passing through an artery.

SYMPATHETIC NERVE

An autonomic nerve that commands the body to react in response to excitement, stress, fear, etc. The brain uses sympathetic nerves to send "wake up calls" and "fire alarms" to the muscles, tissues and organs.

SYMPATHOMIMETIC DRUGS

Drugs that mimic the neurotransmitter associated with the sympathetic nerves. These drugs artificially cause the transmission of messages that produce elevated blood pressure, dilated pupils, etc.

SYNAPSE (or Synaptic Gap)

The gap or space between two neurons (nerve cells).

SYNESTHESIA

A sensory perception disorder, in which an input via one sense is perceived by the brain as an input via another sense. In its simplest terms, it is a transposition of senses. For example, seeing a particular sight may cause the user to perceive a sound.

SYSTOLIC

The highest value of blood pressure. The blood pressure reaches its systolic value when the heart is fully contracted (systole), and blood is sent surging into the arteries.

TACHYCARDIA

Abnormally rapid heart rate; pulse rate above the normal range.

TACHYPNEA

Abnormally rapid rate of breathing.

THC (Tetrahydrocannabinol)

The principal psychoactive ingredient in drugs belonging to the cannabis category.

TIDAL BREATH

Breath from the upper part of the lungs and mouth.

TOLERANCE

An adjustment of the drug user's body and brain to the repeated presence of the drug. As tolerance develops, the user will experience diminishing psychoactive effects from the same dose of the drug. As a result, the user typically will steadily increase the dose he or she takes, in an effort to achieve the same psychoactive effect.

TRACKS

Scar tissue usually produced by repeated injection of drugs, via hypodermic needle, along a segment of a vein.

TRAFFIC SAFETY RESOURCE PROSECUTOR (TSRP)

Is usually a current or former prosecutor who provides training, education and technical support to traffic crimes prosecutors and law enforcement agencies throughout their state. For the contact information of your TSRP go to: www.ndaa.org/apri/programs/traffic/legal_issues_resources.html

VALID

Conforming to accepted principles. Producing accurate and reliable results.

VALIDATED

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

VEHICLE IN MOTION

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

VERTICAL GAZE NYSTAGMUS

An involuntary jerking of the eyes (up-and-down) which occurs as the eyes are held at maximum elevation. The jerking should be distinct and sustained.

VOIR DIRE

A French expression literally meaning “to see, to say.” Loosely, this would be rendered in English as “To seek the truth,” or “to call it as you see it.” In a law or court context, one application of voir dire is to question a witness to assess his or

her qualifications to be considered an expert in some matter pending before the court.

VOLUNTARY NERVE

A motor nerve that carries messages to a muscle that we consciously control.

WALK AND TURN (WAT)

A divided attention field sobriety test. The second test administered in SFST battery.

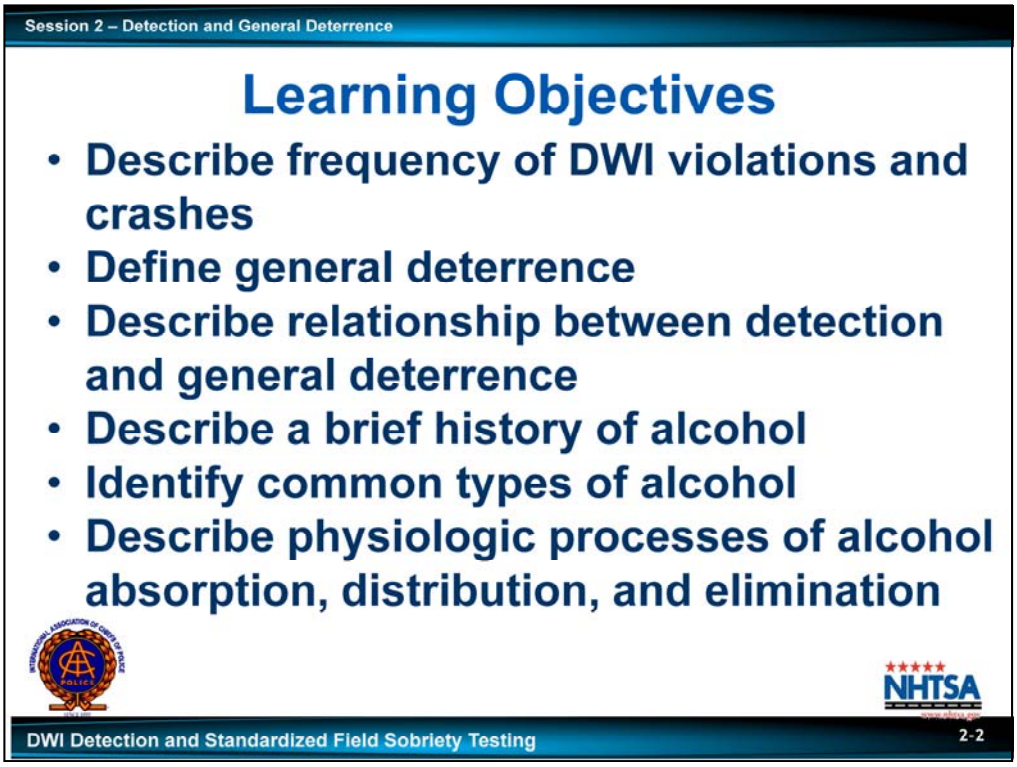
WITHDRAWAL

This occurs in someone who is physically addicted to a drug when he or she is deprived of the drug. If the craving is sufficiently intense, the person may become extremely agitated, and even physically ill.

50 Minutes

Session 2

Detection and General Deterrence



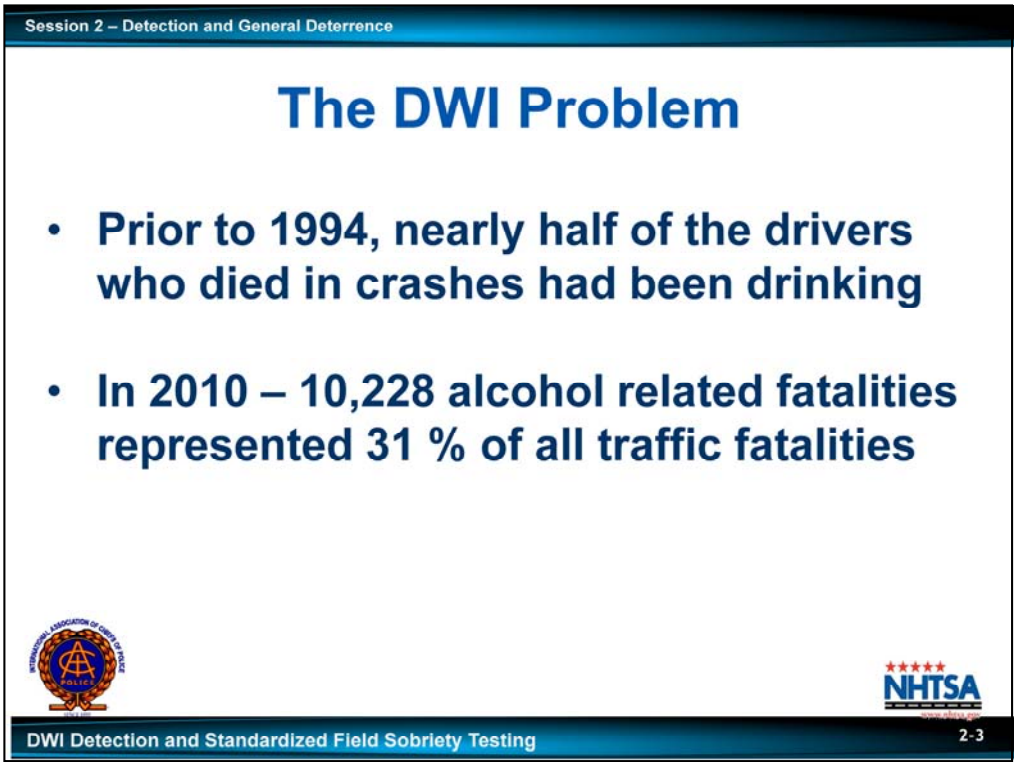
Briefly review the objectives, content, and activities of this session.

Learning Objectives

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

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

CONTENT SEGMENTS	LEARNING ACTIVITIES
A. The DWI Problem	Instructor Led Presentations
B. The Concept of General Deterrence	Video Presentation
C. Relating Detection to Deterrence Potential	Reading Assignments
D. Evidence of Effective Detection and Effective Deterrence	
E. Physiology of Alcohol	



A. <u>The DWI Problem (Local, State and National)</u>

How Widespread Is DWI?

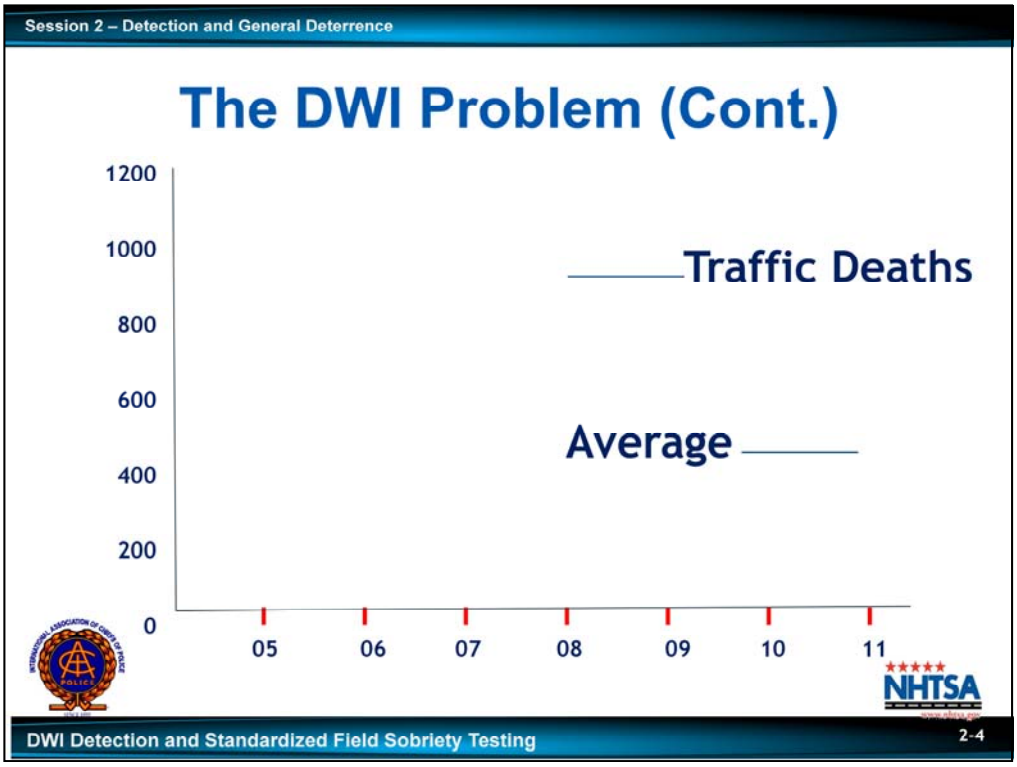
While not all of those who drive after drinking have a BAC of 0.08 or more, the presumptive or illegal per se limit for DWI in all states, some drivers do have BACs in excess of these limits.

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 2010, there were 10,228 alcohol related fatalities representing 31 % of all traffic fatalities. *(NHTSA, Traffic Safety Facts; 2010 Motor Vehicle Crashes: Overview, DOT HS 811 552, February 2012.)*

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***



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.

Compute figures for the participant's state and/or community from traffic records data.

Estimates indicate that nationwide about 8.8 million persons 16 and over, self reported that they drove over the legal limit in the past 12 months.

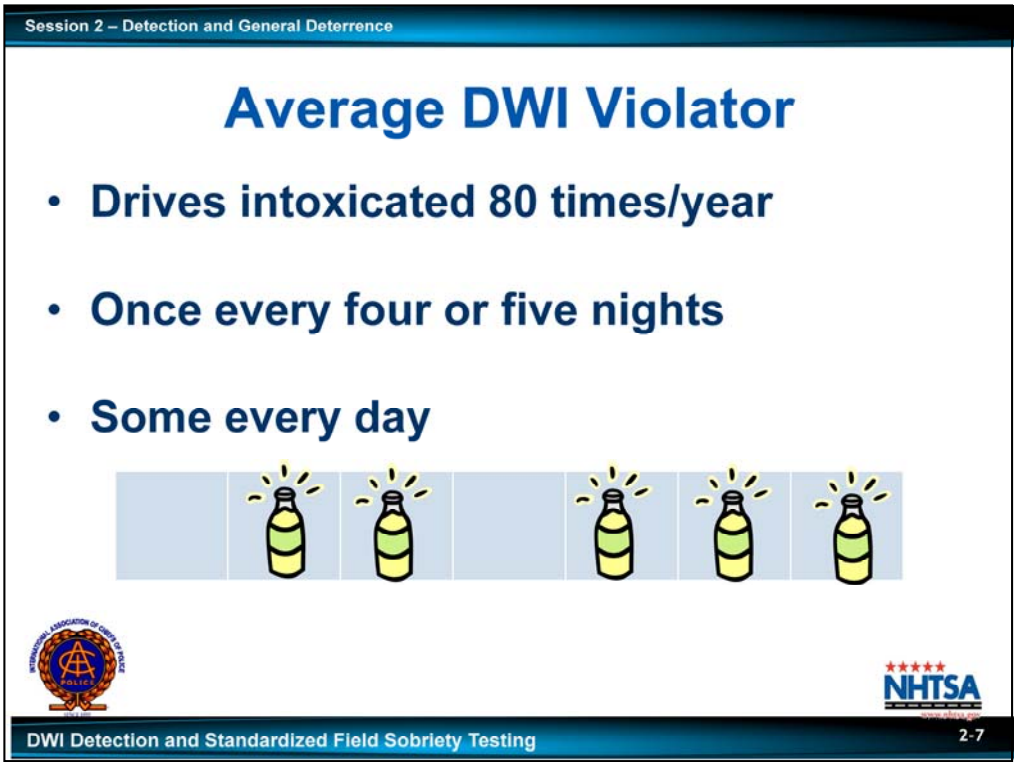
It is also estimated that 1 in 88 drivers over the legal limit was arrested for DWI.

Source, Drinking and Driving Trips, Stops by the Police and Arrests (DOT HS 809 184).

A frequently quoted, and often misinterpreted, statistic places the average incidence of DWI at one driver in fifty. 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 that at certain times and places many more than two percent of drivers are impaired. NHTSA research suggests that 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?



It is conservatively estimated that the typical DWI violator commits that offense about 80 times per year. In other words, the average DWI violator drives while under the influence once every four or five nights.

Clearly, it is more than one in fifty. Although it may be true that, on the average, two percent of drivers are DWI at any given time, it certainly is not the same two percent every time. It is even more than one in ten. 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.

An analysis of BAC roadside survey data suggests that the average DWI violator commits the violation approximately 80 times each year. Undoubtedly, there are some who drive impaired virtually everyday; others commit the violation less often. It is likely that 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 so called legal limit.

Instructor References:

Borkenstein, R.F., et al, Role of Drinking Driver in Traffic Accidents. Bloomington IN: Department of Police Administration, Indiana University, March 1964.
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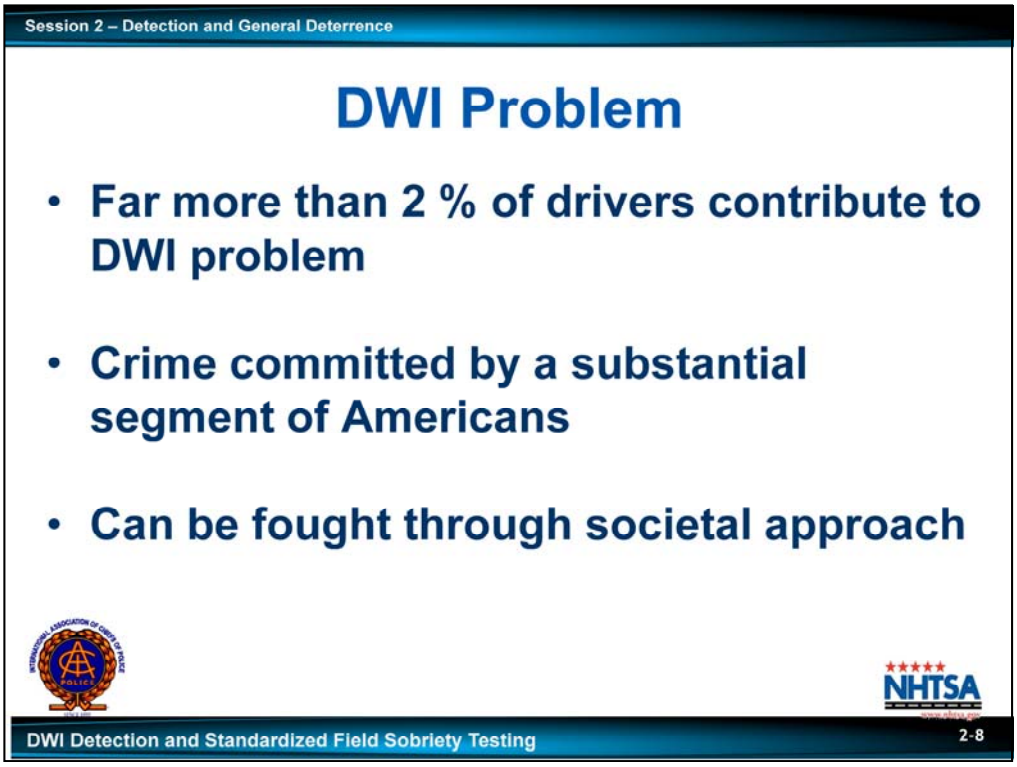


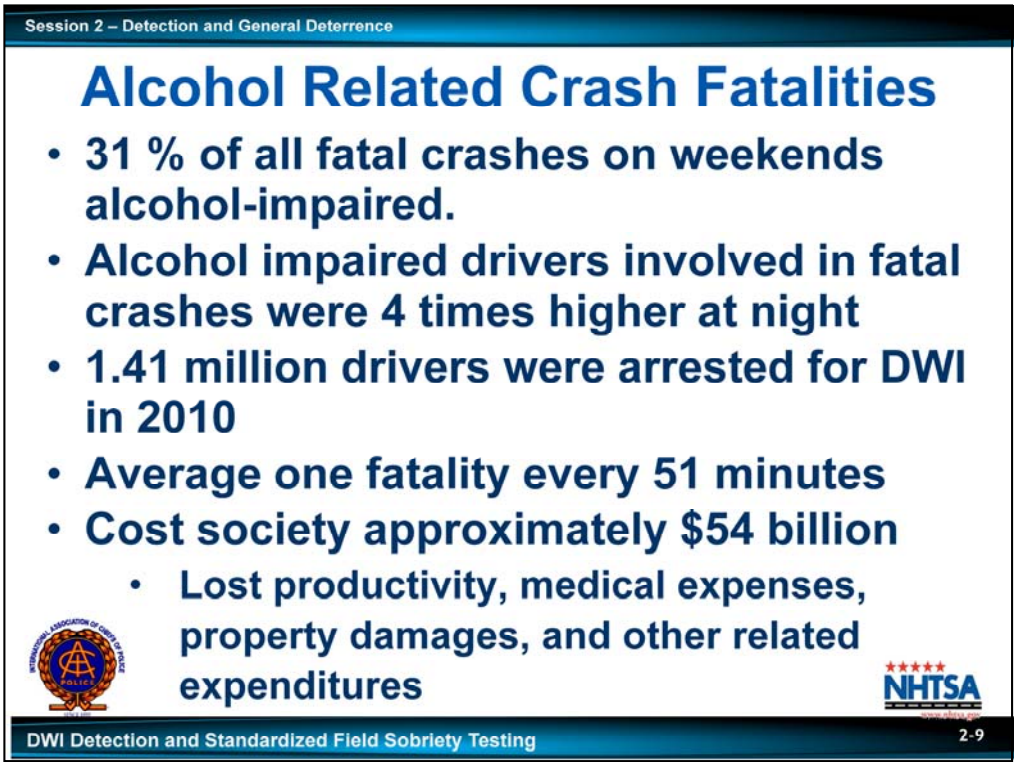
These estimates include everyone who drives impaired everyday, as well as everyone who commits the violation just once and never offends again; and it includes everyone in between. In short, it includes everyone who ever runs the risk of being involved in a crash while impaired.

Society's Problem and the Solution

The fact is that 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 that 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.

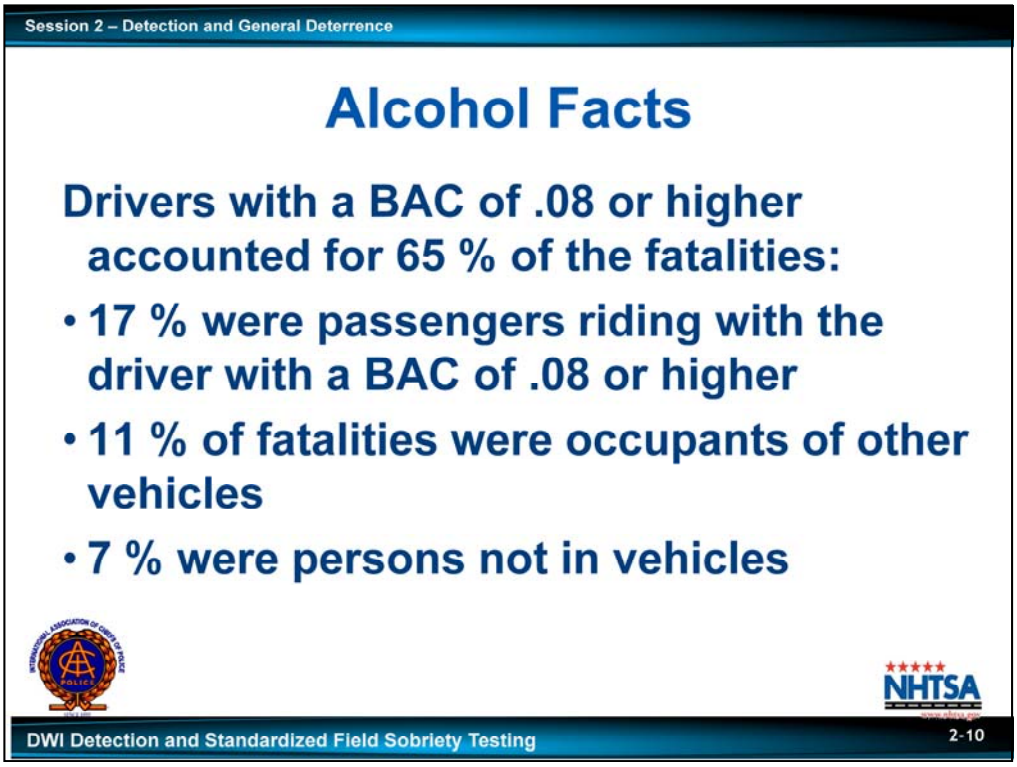
1. ***Explain that "alcohol related crash" per NHTSA refers to a driver with a .08 % BAC or higher. In 2008, 29 % of all fatally injured motorcycle operators had a BAC of .08 or higher. In 2008, the 25 - 34 year old group constituted 31 % of <u>all</u> alcohol impaired driving fatalities in the U.S. (NHTSA Traffic Safety Facts 2008 Data, DOT HS 811 155.)***

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



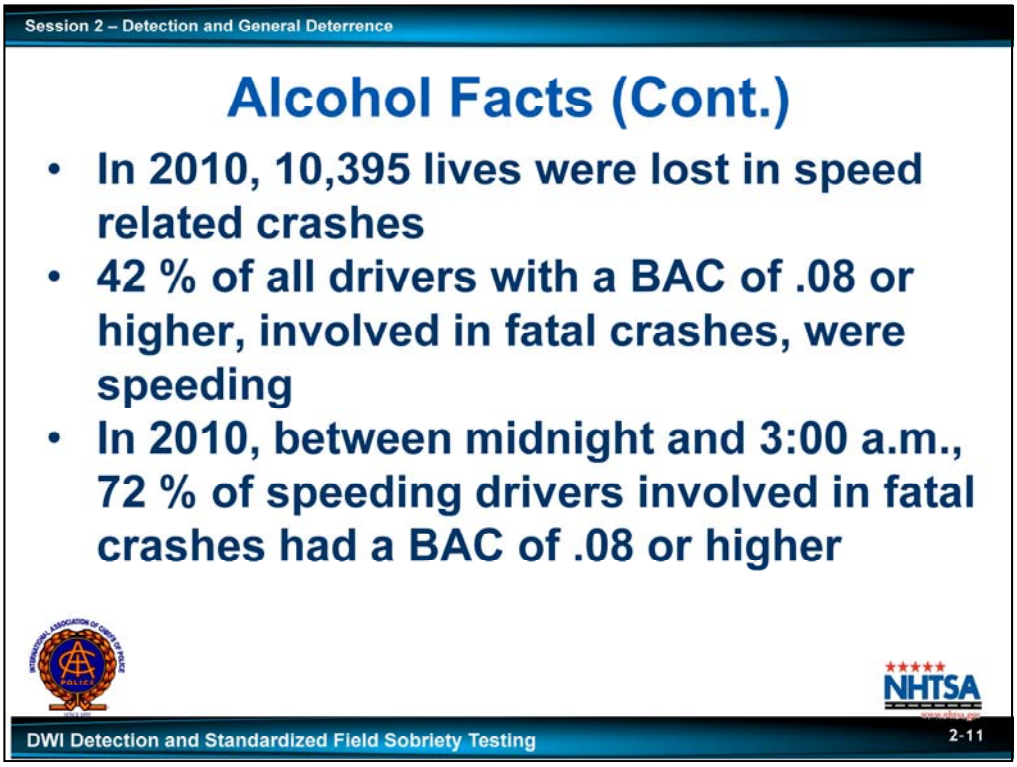
- 31 % of all fatal crashes on weekends alcohol-impaired;
- Alcohol impaired drivers involved in fatal crashes were 4 times higher at night; and
- 1.41 million drivers were arrested for DWI in 2010;
- These alcohol related fatalities represent an average of one alcohol related fatality every 51 minutes; and
- Based on the most current cost data available, these alcohol related fatalities cost society approximately $54 billion in lost productivity, medical expenses, property damages, and other related expenditures.

Source: NHTSA Traffic Safety Facts, 2010 Data, DOT HS 811 606, April 2012.



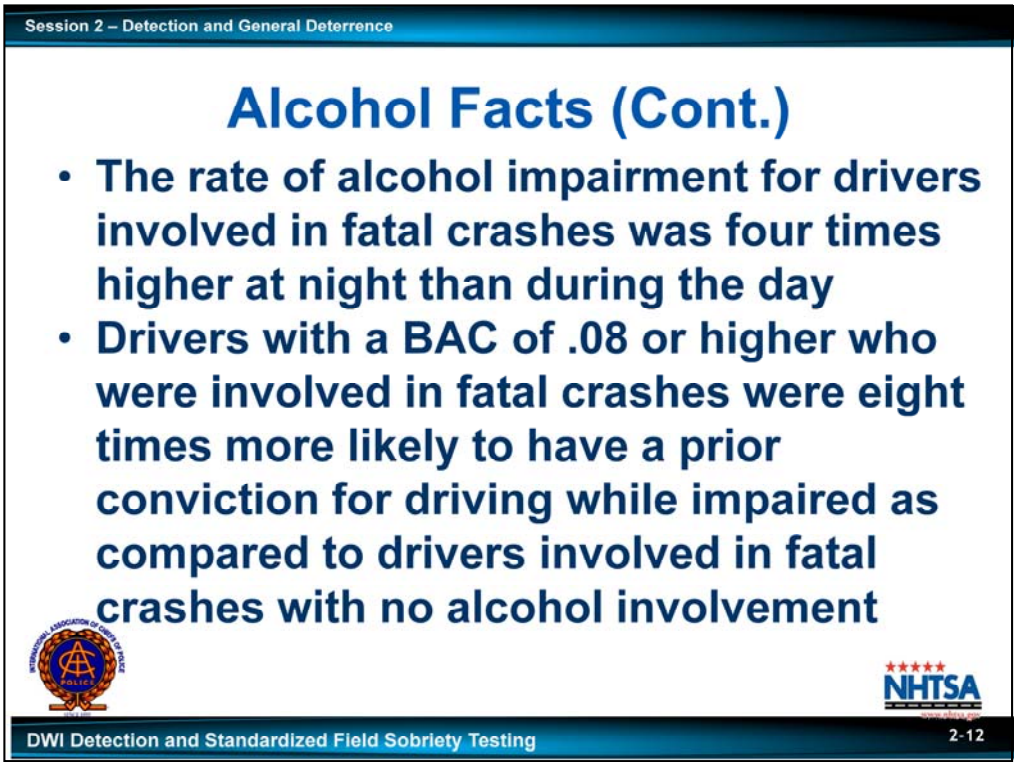
- In 2010, 11,773 lives were lost in alcohol impaired crashes representing 32 % of the total motor vehicle fatalities in the U.S.
- Drivers with a BAC of .08 or higher accounted for 65 % of the fatalities, 17 % were passengers riding with a driver with a BAC of .08 or higher, 11 % of these fatalities were occupants of other vehicles, and 7 % were persons not in vehicles.

Point out that 31 % of fatalities are not the DWI driver but innocent parties (passengers, other vehicle occupants, pedestrians, etc.)



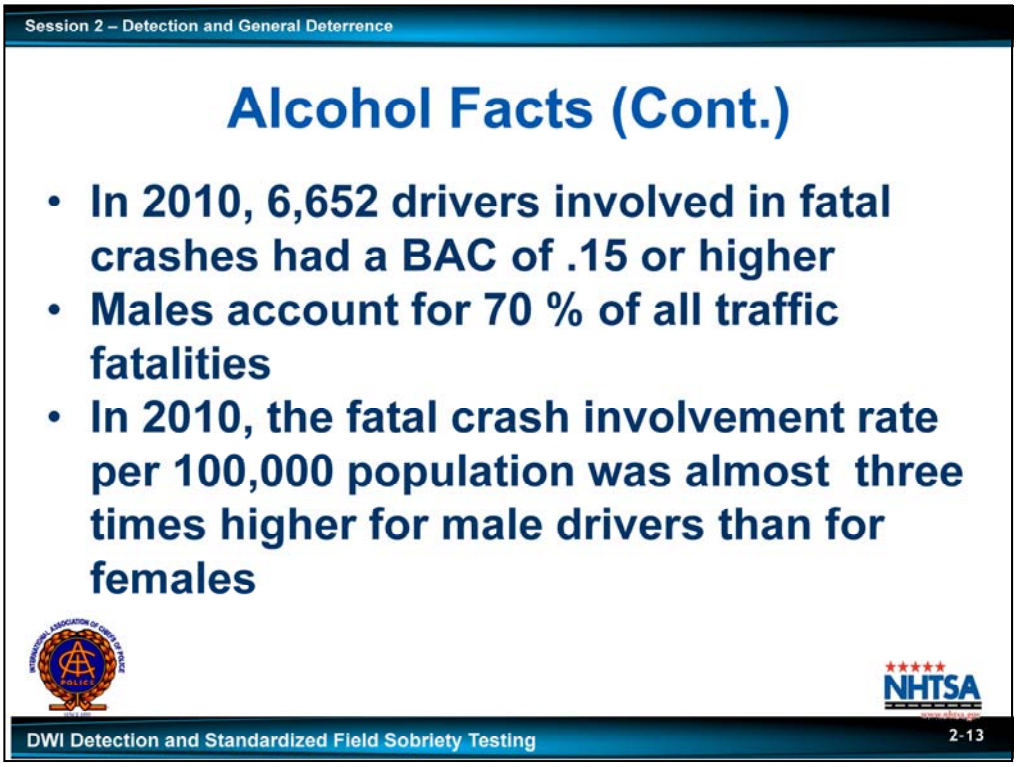
- In 2010, 10,395 lives were lost in speed related crashes
- 42 % of all drivers with a BAC of .08 or higher, involved in fatal crashes, were speeding
- In 2010, between midnight and 3:00 a.m., 72 % of speeding drivers involved in fatal crashes had a BAC of .08 or higher.

Source: NHTSA Traffic Safety Facts, 2010 Data, DOT HS 811, 636, August 2012.

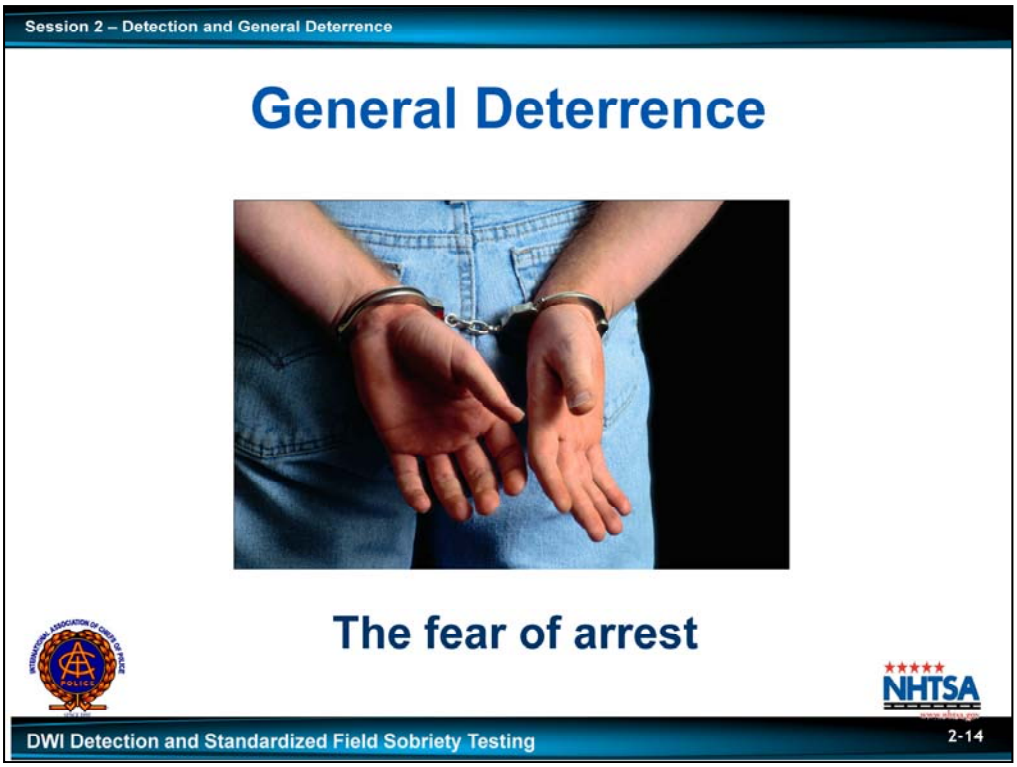


- The rate of alcohol impairment for drivers involved in fatal crashes was four times higher at night than during the day

- Drivers with a BAC of .08 or higher who were involved in fatal crashes were eight times more likely to have a prior conviction for driving while impaired as compared to drivers involved in fatal crashes with no alcohol involvement.



- In 2010, 6,652 drivers involved in fatal crashes had a BAC of .15 or higher.
- Males account for 70 % of all traffic fatalities.
- In 2010, the fatal crash involvement rate per 100,000 population was almost three times higher for male drivers than for females.



B. <u>Concept of General Deterrence</u>

The fear of arrest is the leading deterrent.
One approach to reducing the number of drinking drivers is <u>general deterrence</u> of DWI. General deterrence of DWI is based in the driving public's fear of being arrested. If enough violators come to believe that there is a good chance that 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.

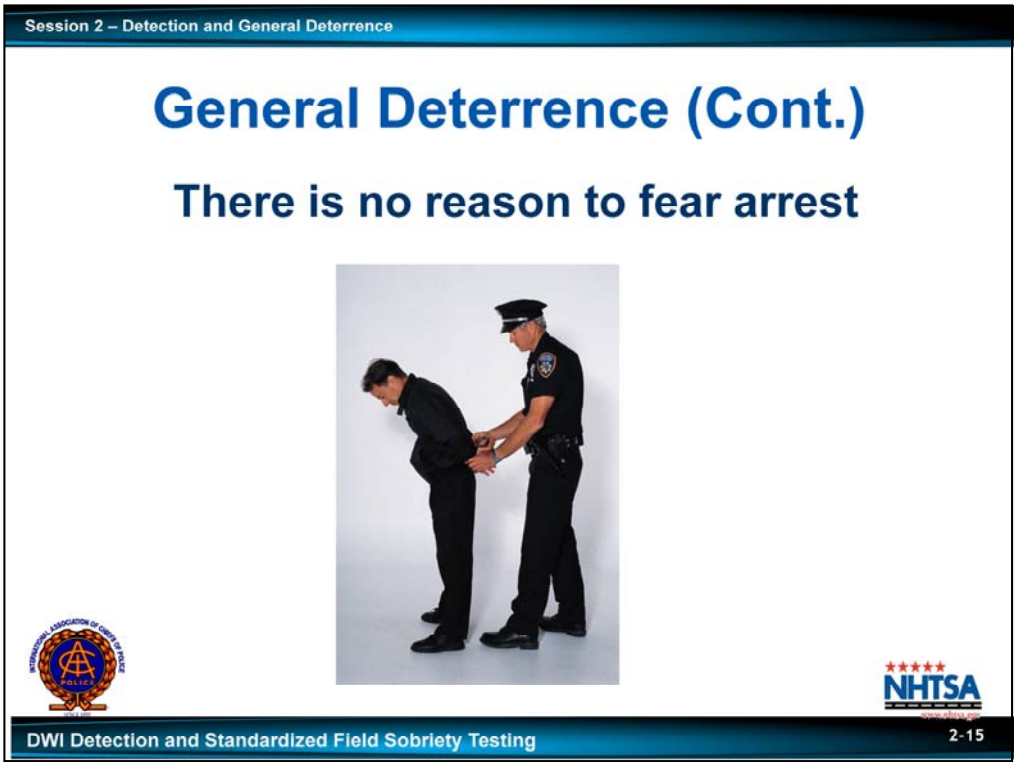
Law enforcement officers must arrest enough violators enough of the time to convince the general public that they <u>will</u> get caught, sooner or later, if they continue to drive while impaired.

How do we convince the public that there is a good chance of being arrested for DWI? Guide the discussion to bring out the fact that an appreciable number of violators must be arrested if others are to believe that there is a real risk that they will be arrested.

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

Are we presently arresting enough violators in this state to convince them there is a real risk of being caught?

Several programs have demonstrated that significant deterrence can be achieved by arresting one DWI violator for every 400 DWI violations committed. Currently, however, for every DWI violator arrested, there are between 500 and 2,000 DWI violations committed.



If the chances of being arrested are 1:2000, do you believe that the average DWI offender will fear arrest?

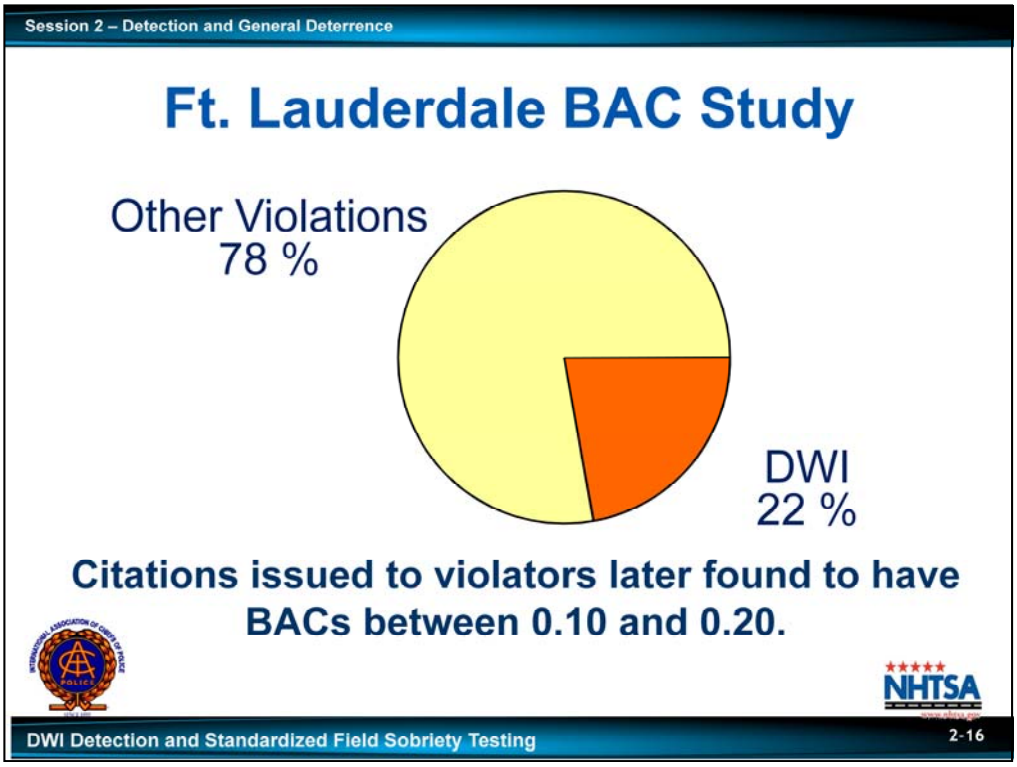
Draw the analogy – compare with housebreaking a puppy by punishing the puppy once only every 2000 times it messes on the carpet.

When the chances of being arrested are one in two thousand, the average DWI violator really has little to fear.

Why is the DWI arrest to violations ratio (1:2000) so low?

There are three noteworthy reasons.

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



Significant Findings

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

Police officers sometimes fail to recognize and arrest a DWI violator. Ft. Lauderdale (Florida) BAC study (1975): only 22 % of traffic violators with BACs between 0.10 and 0.20 were arrested for DWI.

In the Ft. 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.

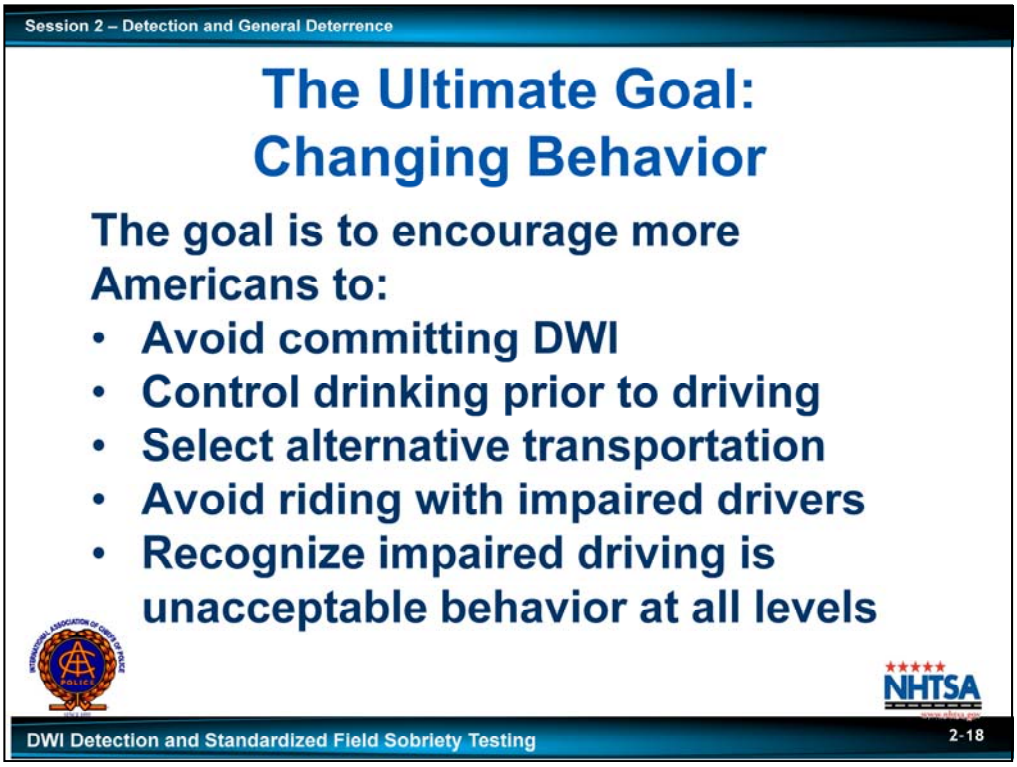
Implication: For every DWI violator actually arrested three others are contacted by police officers, face to face, but are released without arrest.

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

Point out that this study was the reason for NHTSA developing this course.

This study demonstrated the need for SFST training.

See Appendix for " The Ultimate Goal, Changing Behavior"



The Solutions

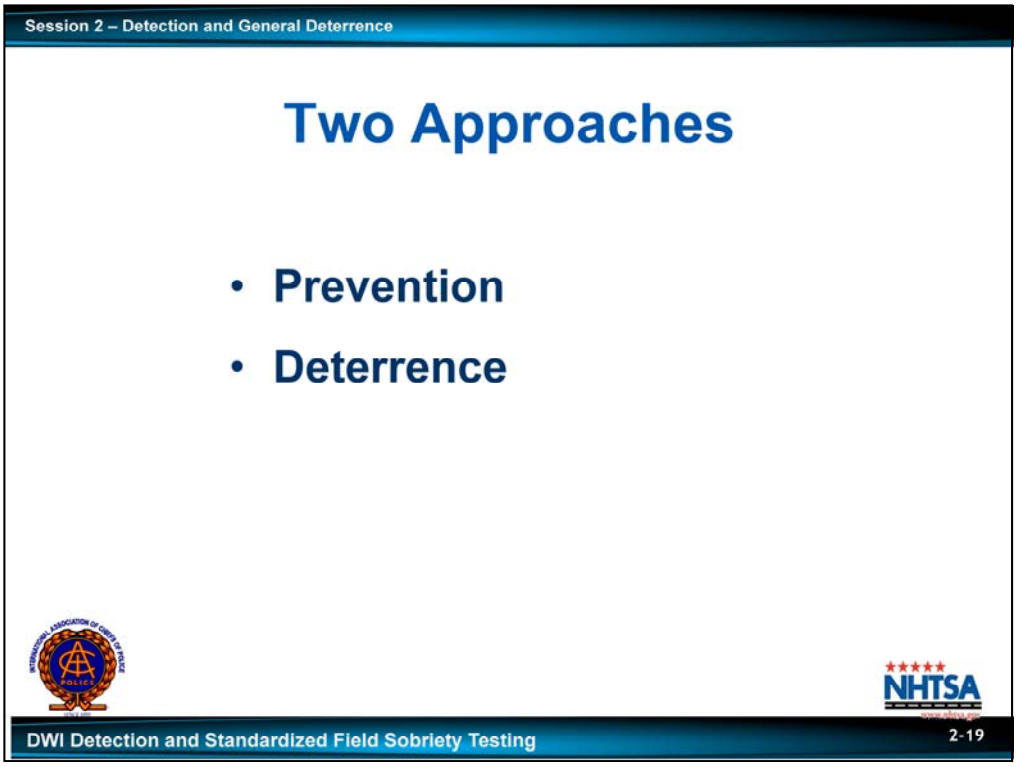
The Ultimate Goal: Changing Behavior

What must the comprehensive community based DWI programs seek to accomplish?

Ultimately, nothing less than fundamental behavioral change, on a widespread basis. The goal is to encourage more Americans to:

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

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



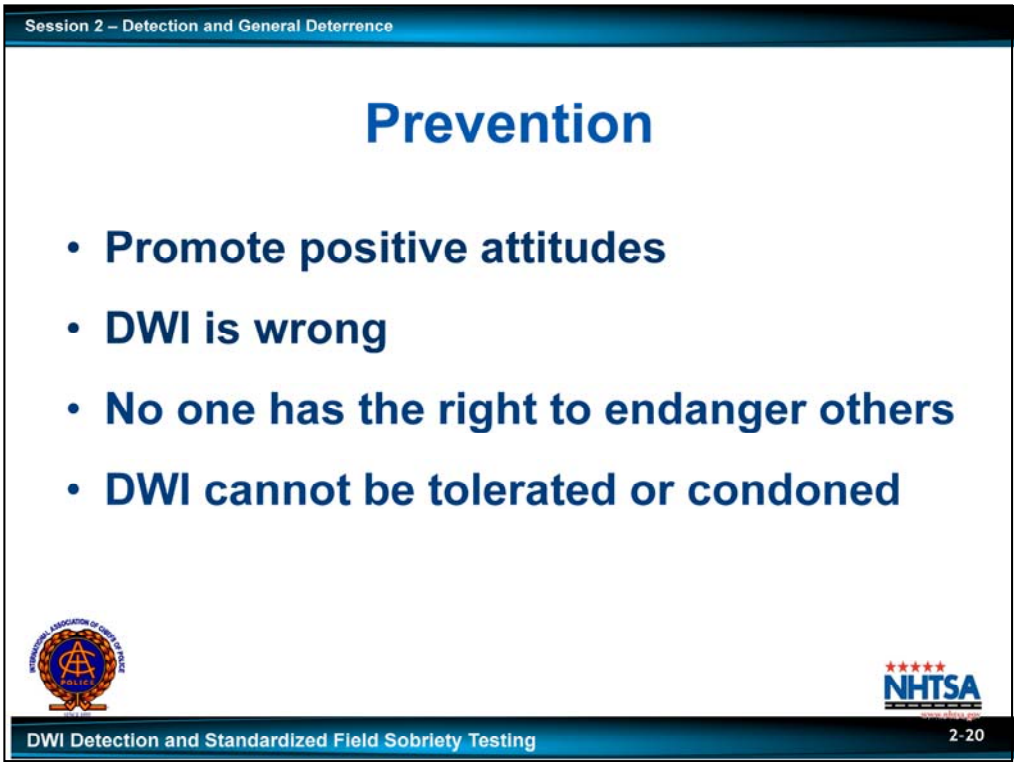
Pursuing the Goal: Two Approaches

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

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

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

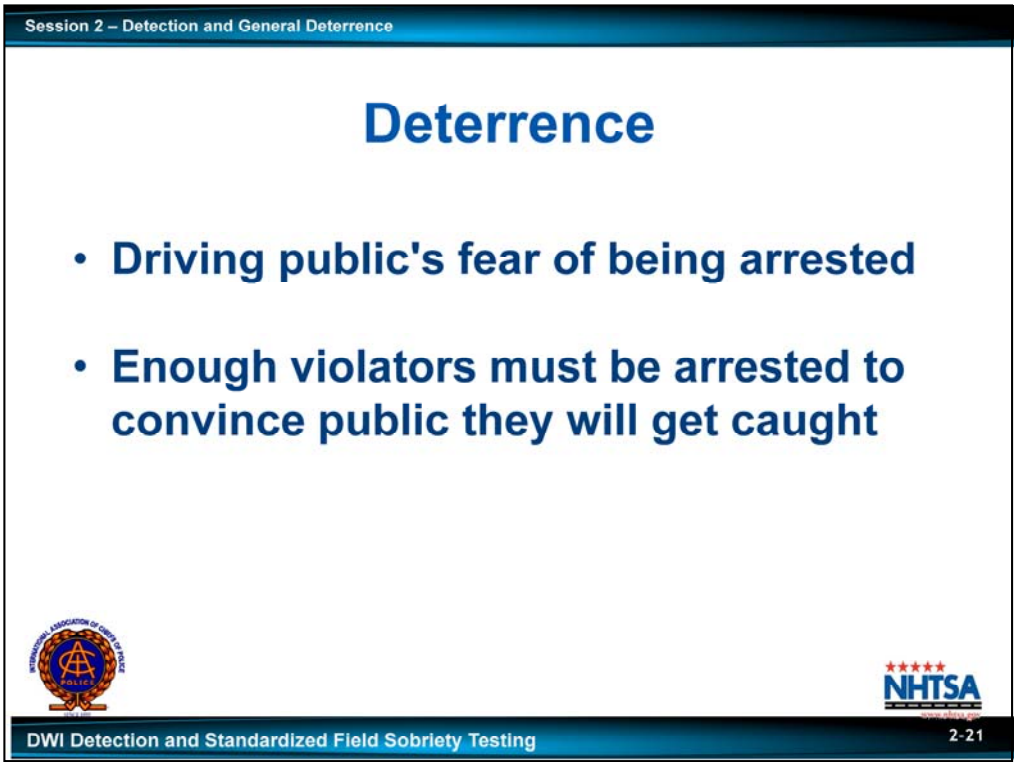
Two: deterrence -- only offers a partial or limited solution, but it is available right now.



Prevention: 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 that drinking and driving is strictly an individual's personal business; that 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 that 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.

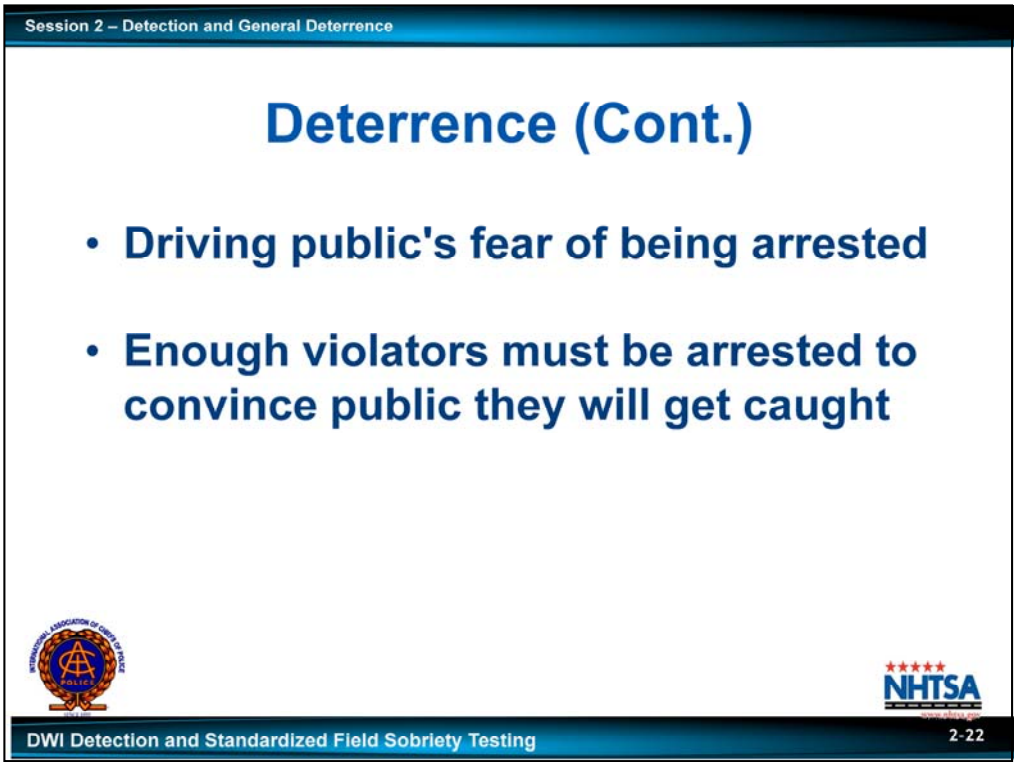


General deterrence of DWI is based on the driving public's fear of being arrested. If enough violators come to believe that there is a good chance that they will get caught, some of them (at least) will stop committing DWI at least some of the time.

Pose this question to class: "How do we convince the public that there is a good chance of being arrested for DWI?" Gently guide the discussion to bring out the fact that an appreciable number of violators must be arrested if others are to believe there is a real risk that 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 that they will get caught, if they continue to drive while impaired.

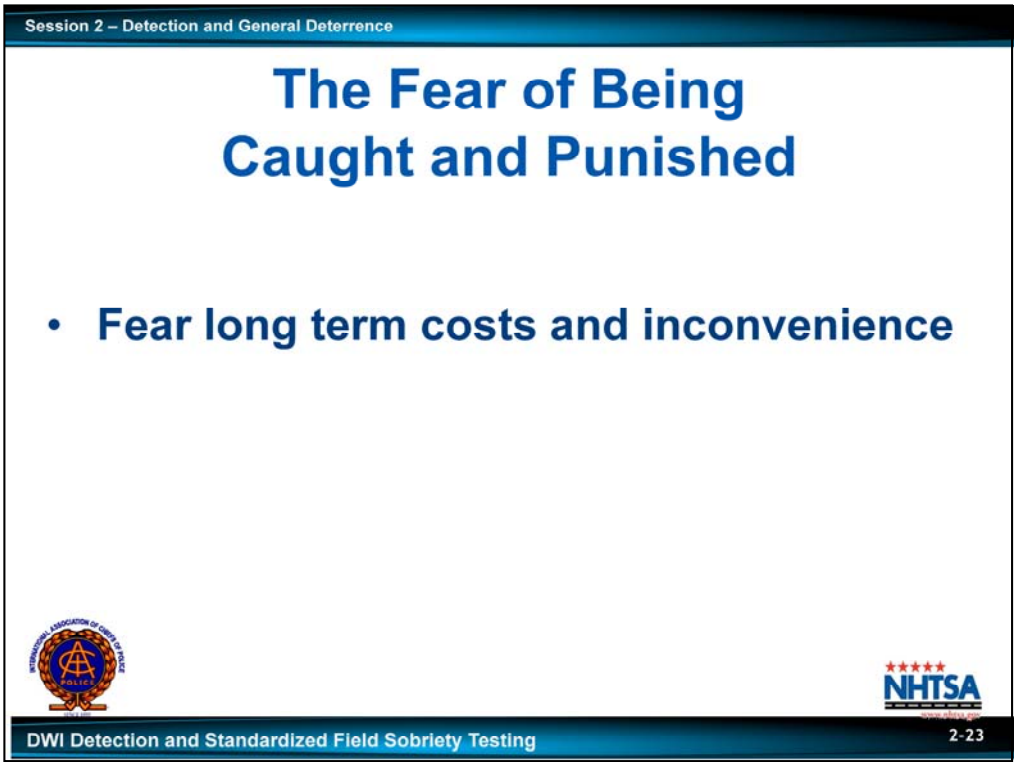


C. Relating Detection to Deterrence Potential

Deterrence: the Interim Solution

DWI countermeasures that seek a short cut 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.

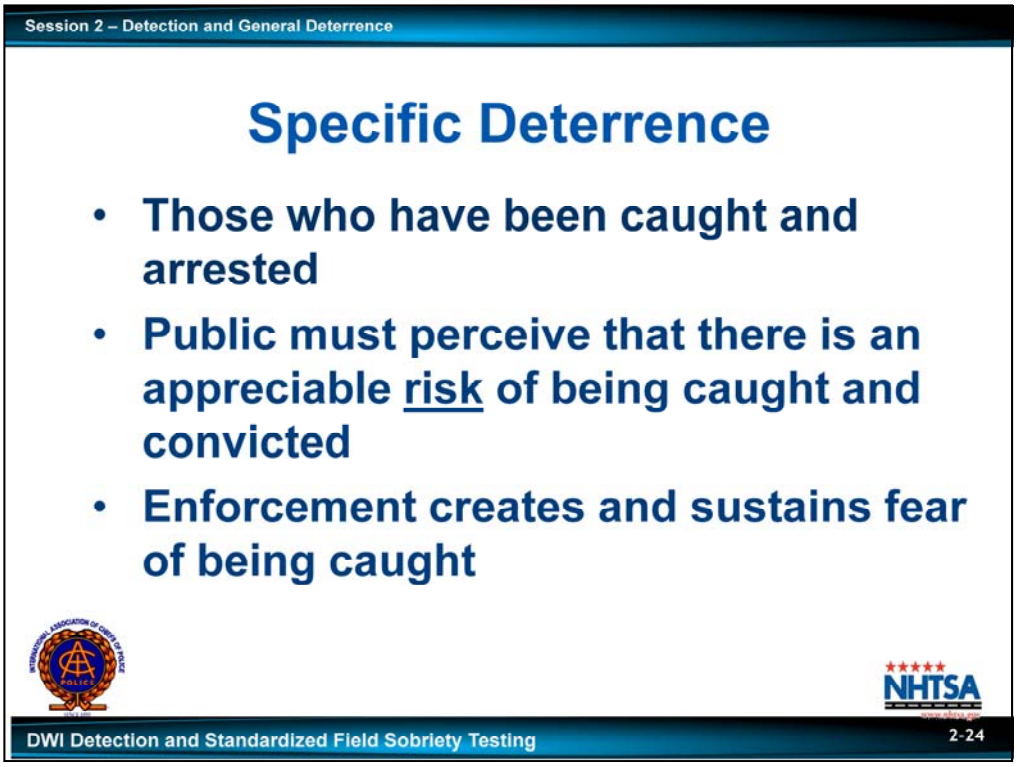
The key feature of deterrence is that it strives to change DWI behavior without dealing directly with the prevailing attitudes about the rightness or wrongness of DWI. Deterrence uses a mechanism quite distinct from attitudinal change: fear of apprehension and application of sanctions.



The Fear of Being Caught and Punished

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 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 see the light. 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.

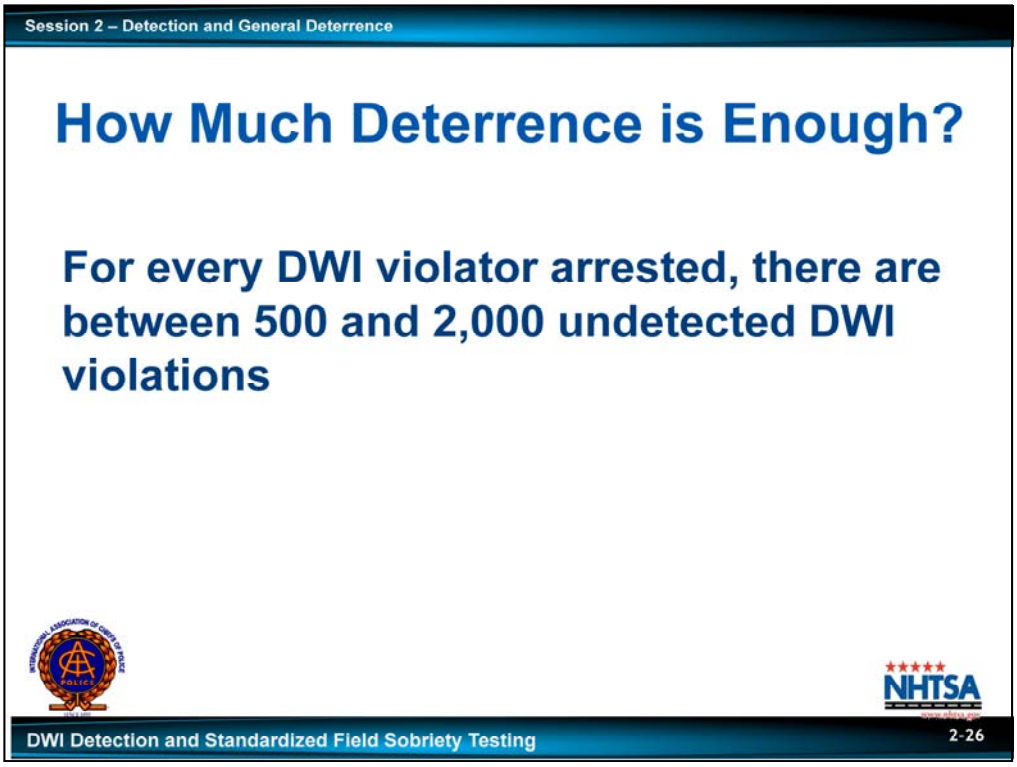


Another type of DWI deterrence, called specific deterrence, applies to those who have been caught and arrested. The typical specific deterrent involves some type of punishment, perhaps a fine, involuntary community service, a jail term or action against the driver's license. The punishment is imposed in the hope that it will convince the specific violator that there is indeed something to fear as a result of being caught, and to emphasize that 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 that there is an appreciable risk of being caught and convicted if they commit the crime. If actual and potential DWI violators come to believe that 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.

Obviously, the police alone cannot do the job. Legislators must supply laws that 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 that the risk is not worth the probable outcome. Each of these elements plays a supportive role in DWI deterrence.



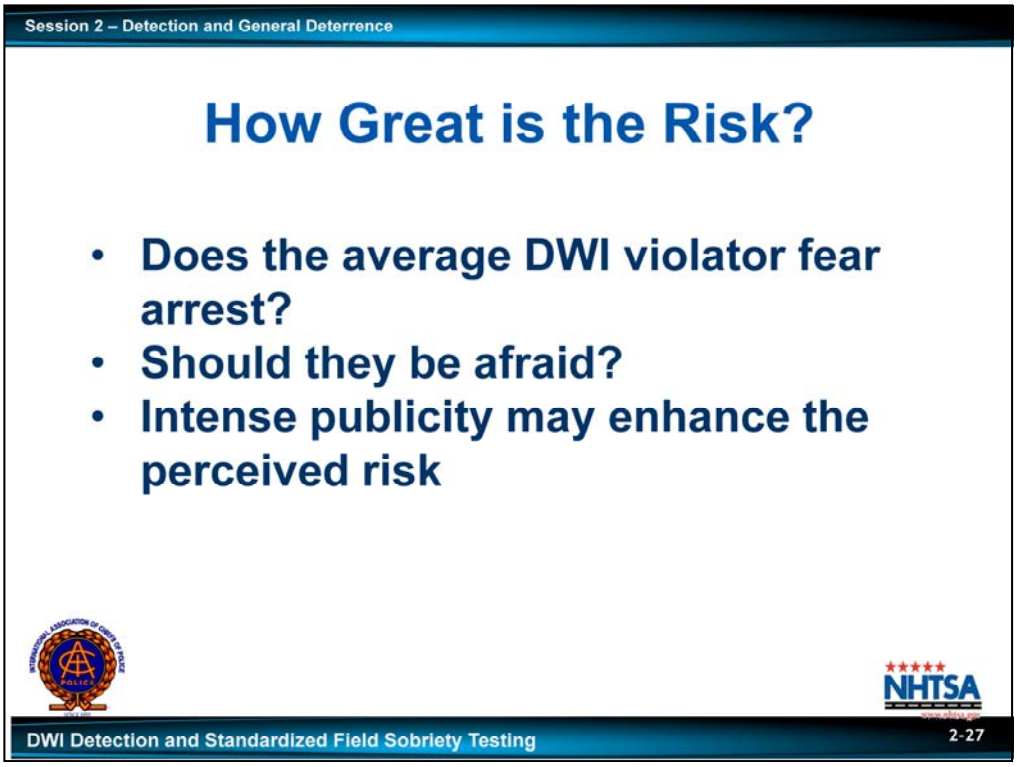
How much deterrence is enough?

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 that there is a real risk that they will be arrested?

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

Estimates from around the country: For every DWI violator arrested, there are between 500 and 2,000 undetected DWI violations.



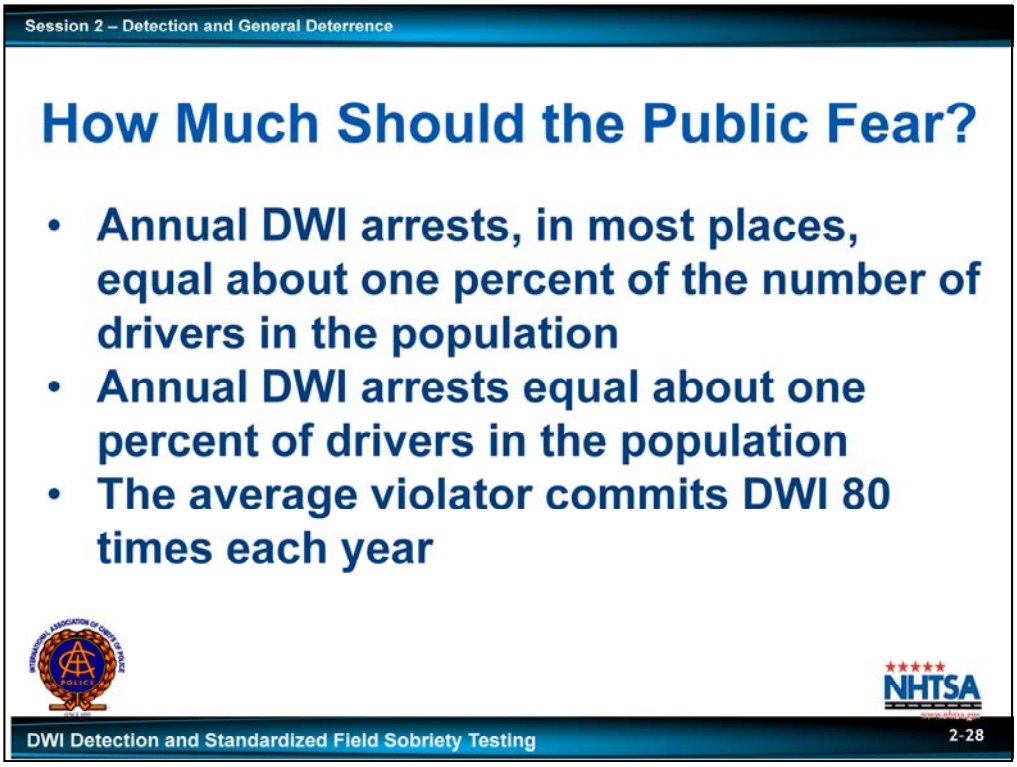
How Great is the Risk?

Question #3: If the chances of being arrested are one in 2,000, do you believe that the average DWI violator will fear arrest?

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

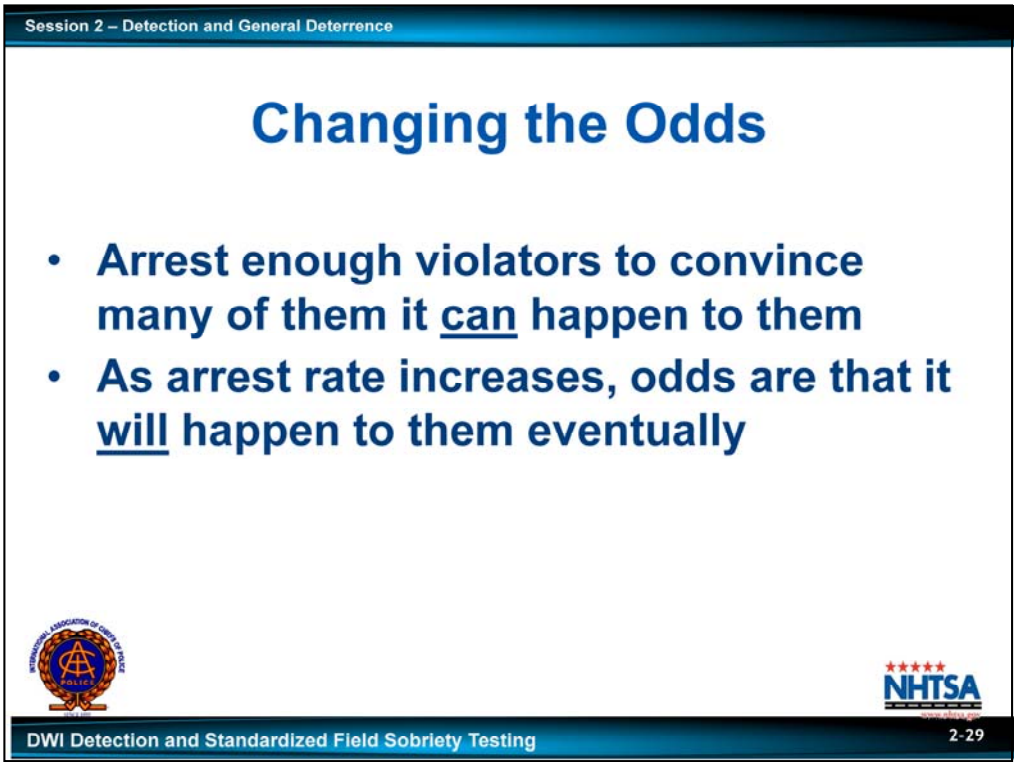
The answer to all of these questions unfortunately is: <u>probably not</u>. In most jurisdictions, the number of DWI arrests appears to fall short of what would be required to sustain a public perception that there is a significant risk of being caught.

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.



How Much Should the Public Fear?

We can draw some reasonable estimates of DWI enforcement intensity, based on what we know and on certain assumptions we have already made. Suppose we deal with a random sample of 100 Americans of driving age. If they come from typical enforcement jurisdictions, chances are that exactly one of them will be arrested for DWI in any given year: our annual DWI arrests, in most places, equal about one percent of the number of drivers in the population. That is one arrest out of 100 drivers during one year; however, how many DWI violations do those drivers commit? Recall our previous estimates that some 25 % of America's drivers at least occasionally drive while under the influence, and that the average violator commits DWI 80 times each year. Then, our sample of 100 drivers includes 25 DWI violators who collectively are responsible for 2,000 DWI violations yearly.



Changing the Odds

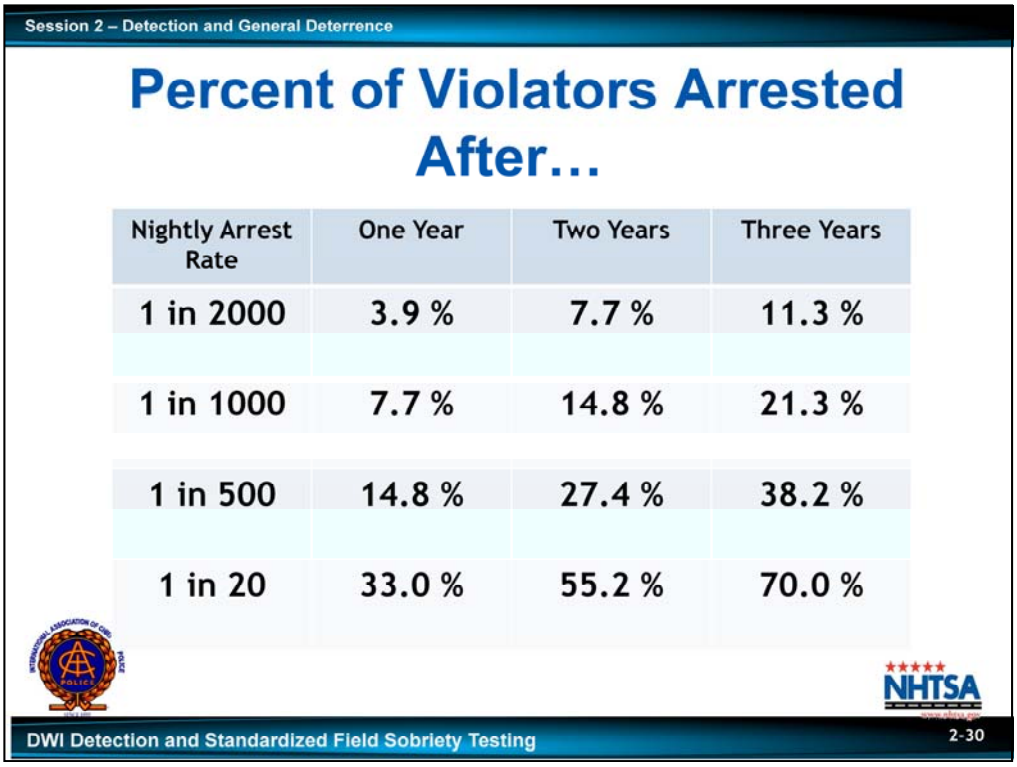
Gently guide the discussion to bring out two possibilities:

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

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

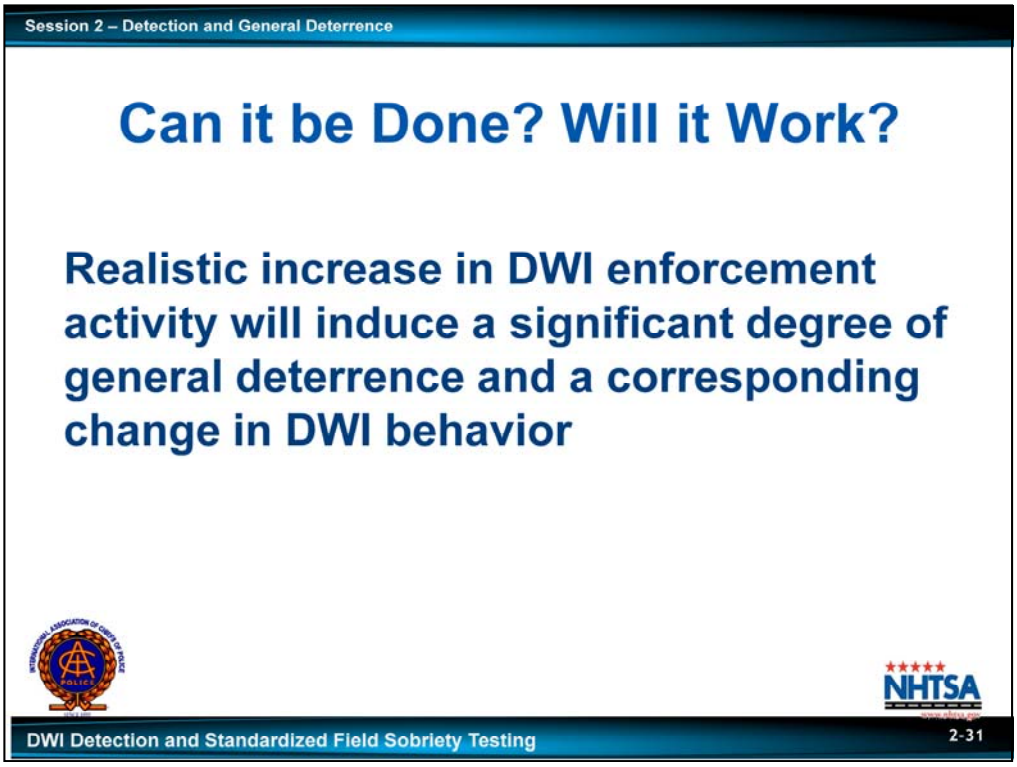
If an arrest/violation ratio of 1 in 2,000 is not enough to make deterrence work, is it then reasonable to think that we can ever make deterrence work? After all, if we doubled DWI arrests to 1 in 1,000, we would still be missing 999 violators for every one we managed to catch. If we increased arrests ten fold, to 1 in 200, 199 would escape for every one arrested. How much deterrence would that produce?

Surprisingly, it would probably produce quite a bit. We don't have to arrest every DWI offender every time in order to convince them that they have something to fear. We only have to arrest enough of them enough of the time to convince many of them that it can happen to them. As the arrest rate increases, the odds are that 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.



The statistics on the chart display the cumulative probability (as a percentage) of being arrested at least once during the course of one, two or three years as a function of the arrest rate on any given night. These statistics are based on the assumption that the average violator commits DWI 80 times each year.

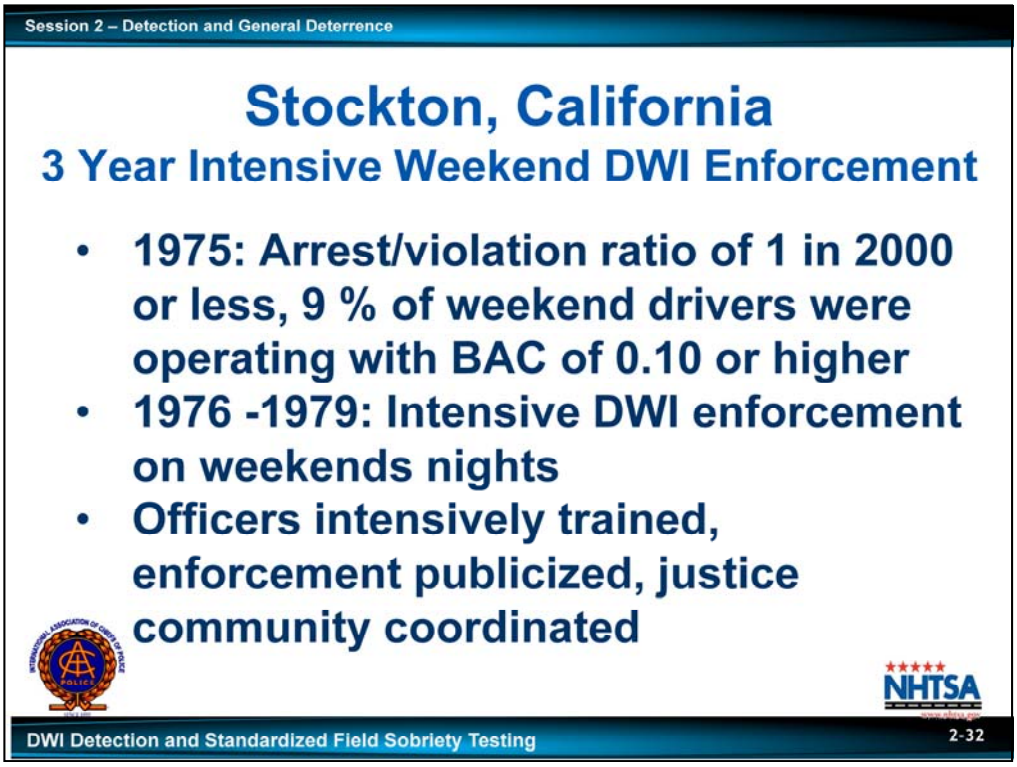
Clearly, the chances of being caught accumulate very quickly as the arrest/violation ratio increases. If we could maintain a ratio of one arrest in every 500 violations (a level of enforcement currently maintained in some jurisdictions), then by the time one year has passed, slightly more than one of every seven people (14.8 %) who have committed DWI during that year will have been arrested at least once. It probably is a high enough chance to get the attention -- and fear -- of many violators. If we could achieve an arrest ratio of 1 in 200 (a level attainable by officers skilled in DWI detection) we will arrest fully one third of all DWI violators at least once every year and we will arrest more than half of them by the time two years have gone by.



D. <u>Evidence of Effective Detection and Effective Deterrence</u>

Can it Be Done, and Will it Work?

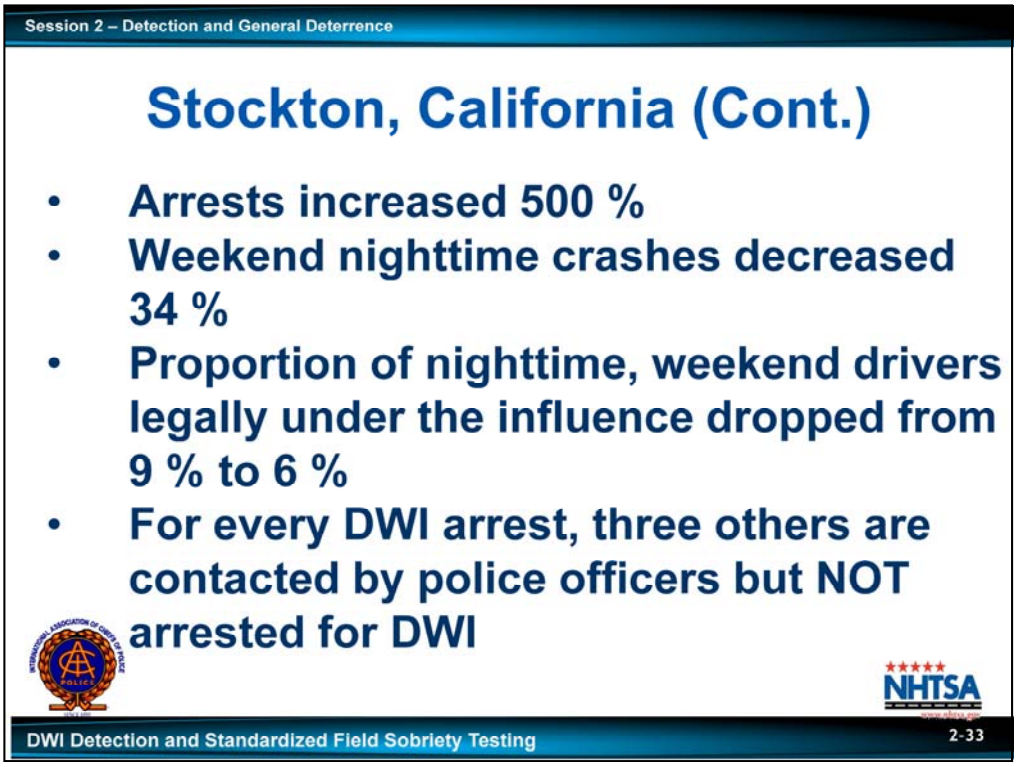
Is there any evidence that a practical and realistic increase in DWI enforcement activity will induce a significant degree of general deterrence and a corresponding change in DWI behavior? Yes there is.



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 that 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 that 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 that 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.

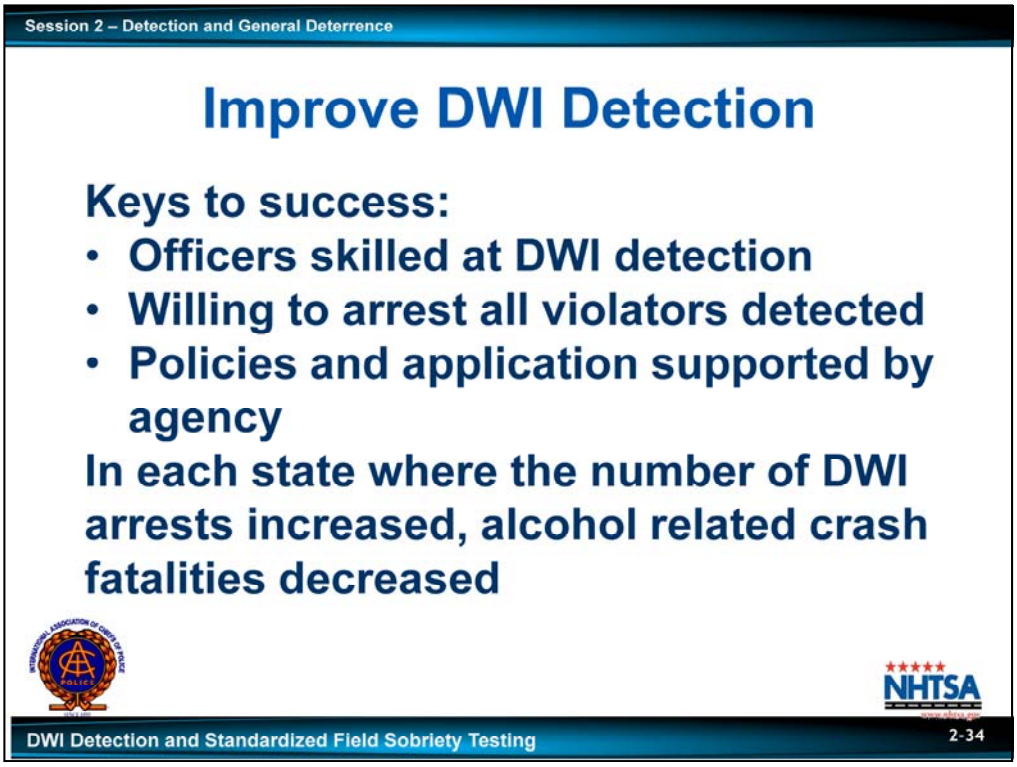


All this paid off. By the time the project came to a close (in 1979) DWI arrests had increased by over 500 %, and weekend nighttime collisions had decreased by 34 %, and the number of operators committing DWI dropped one third.

The implication of this study, and of other similar studies, is that for every DWI violator actually arrested for DWI, three others are contacted by police officers, but are not arrested for DWI. It is clear that 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



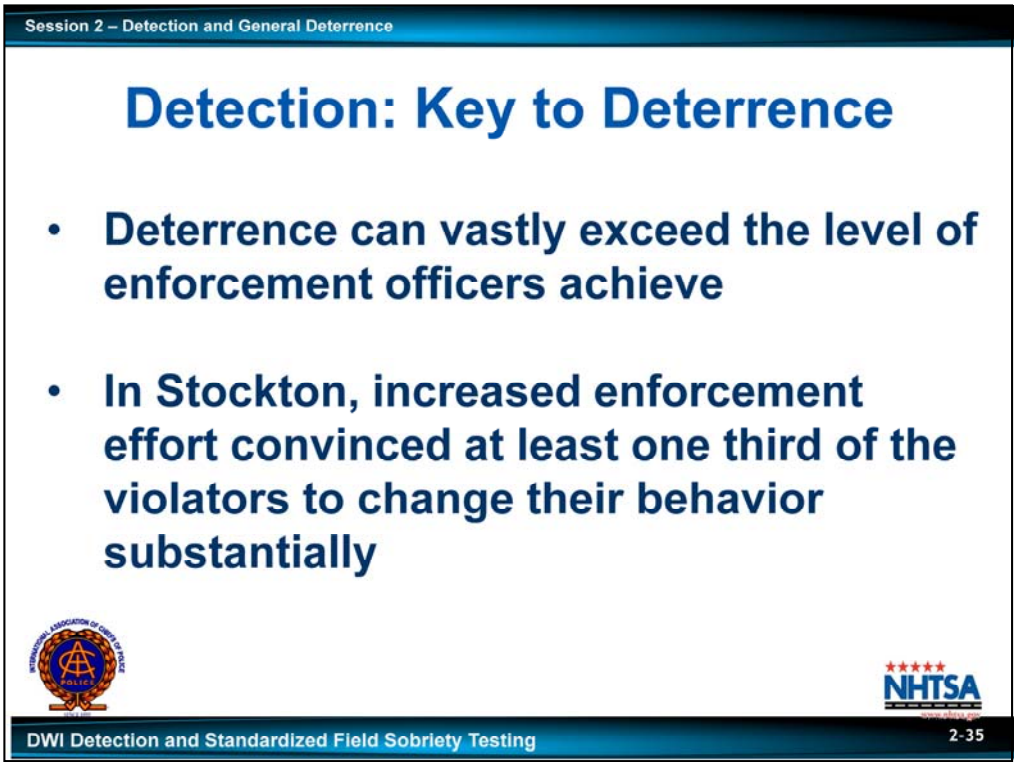
Improved DWI detection can be achieved in virtually every jurisdiction in the country.

The keys to success are police officers who are:

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

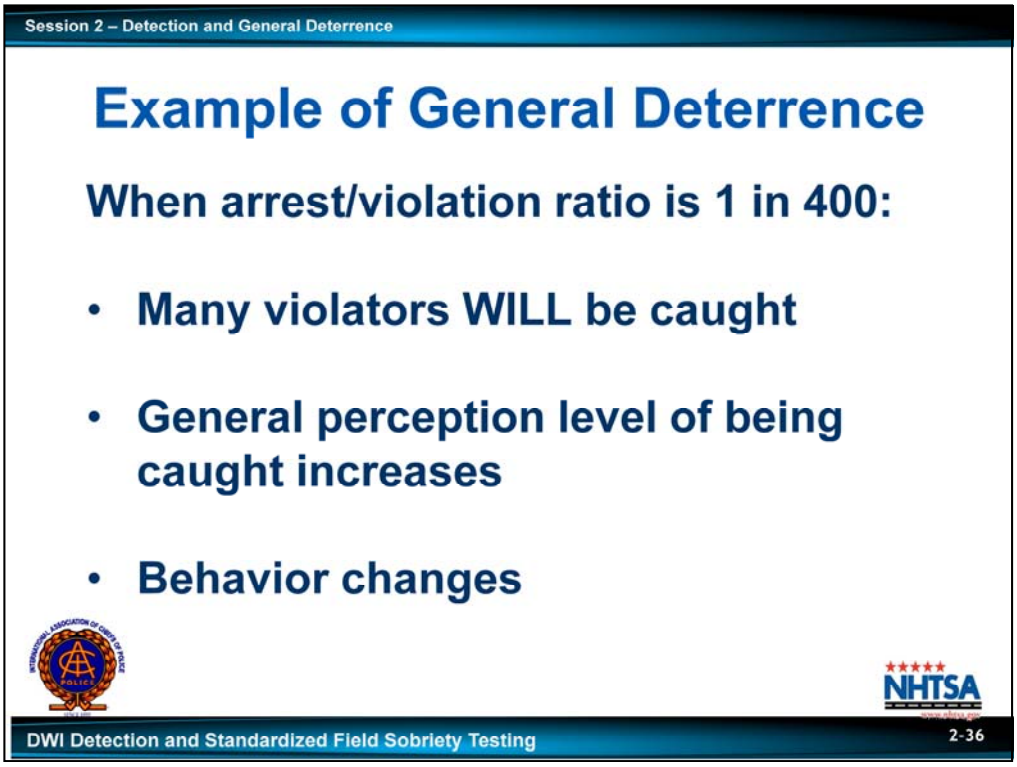
Since the historical Stockton study numerous states have conducted similar studies to determine the degree of effect that DWI arrests would have on alcohol related fatalities in general, and total fatalities in particular. Most of these studies were conducted between 1978 and 1986.

The results of these studies graphically illustrated in each state that 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 that when DWI arrests per licensed driver increased, total fatalities decreased (12 month moving average).



Detection: The Key to Deterrence

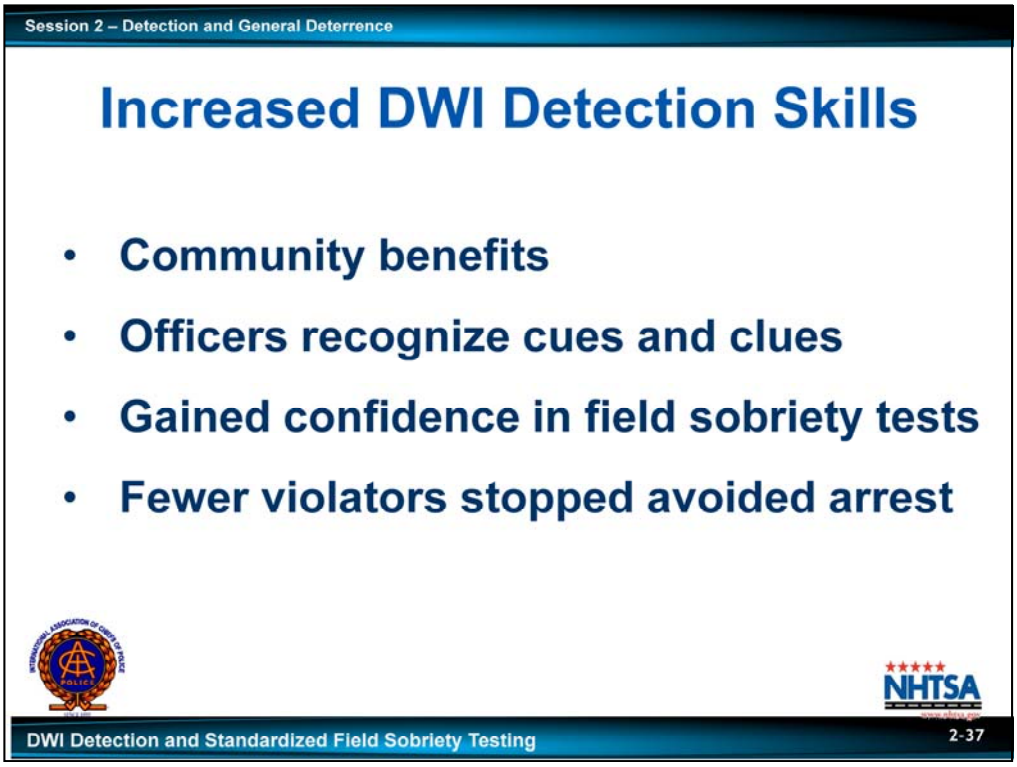
It is important to understand how increased DWI enforcement can affect deterrence. Deterrence can vastly exceed the level of enforcement officers achieve on any given night. True, weekend DWI arrests can increase by as much as 500 %, as in the Stockton study. However, even though the study showed they started with an enforcement ratio no better than 1 in 2000, the tremendous increase in DWI arrests probably only brought the arrest ratio to about 1 in 400. Regardless of the fact that 399 DWI drivers avoided arrest, the increased enforcement effort convinced at least one third of the violators to change their behavior substantially.



- ***Point out that this level of deterrence was achieved with an arrest/violation ration of about 1 in 400.***
- ***Increased skills coupled with increased efforts resulted in more arrests and less crashes.***

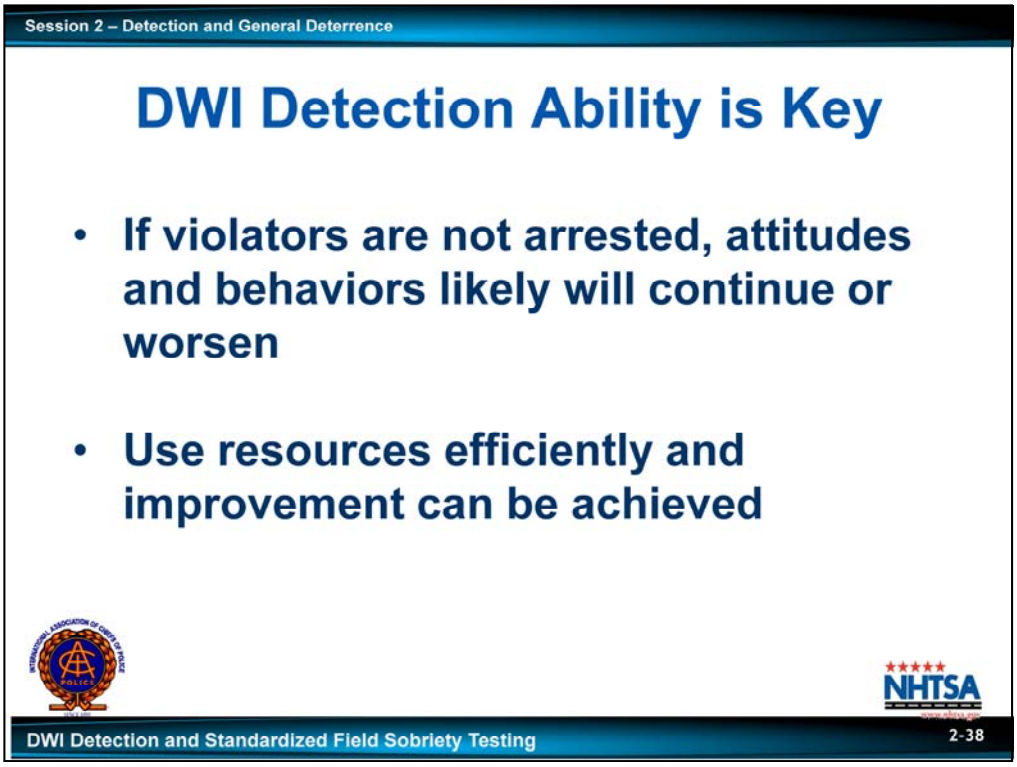
The law of averages quickly starts to catch up with DWI drivers when the enforcement ratio improves to the 1 in 400 ratio. At that level, unless violators change their behavior, many of them will be caught, or at least will have known someone who has been arrested. Coupled with the heavy publicity given 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 that DWI arrests went up over 500 % in Stockton, citations for other traffic violations increased by a comparatively modest 99 %. The implication is that 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.



What have the results of these studies shown? Basically, they have shown that 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 that far fewer of the violators being stopped now avoided detection and arrest.

The difficulty in detecting DWI among operators personally contacted by officers has been well documented. Analysis of roadside survey and arrest data suggest that 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 that police officers arrested only 22 % of the DWI operators they contacted, whose BAC levels were subsequently shown to be between 0.10 and 0.20.



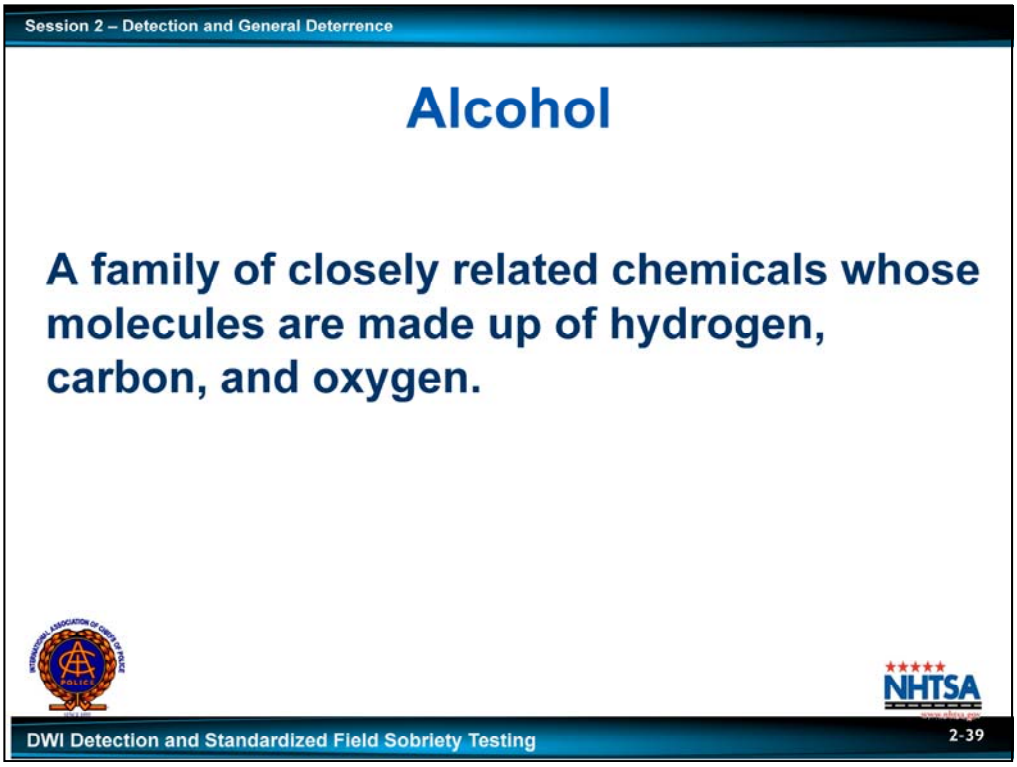
The ability to detect DWI violators is the key to general deterrence and possibly, the greatest impediment to it. If we accept the three to one ratio of failed detections as being reasonably accurate, the implications are rather alarming. Consider the impact on a DWI violator's subsequent behavior when, after being stopped by the police, 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 that 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 that 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 that 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 of 1 in 500 without any increase in contacts.

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

Point out that they keys to success are:

- ***Better training in detection skills.***
- ***Willingness to arrest every DWI violator who is detected.***
- ***Solicit participant's questions concerning general deterrence.***



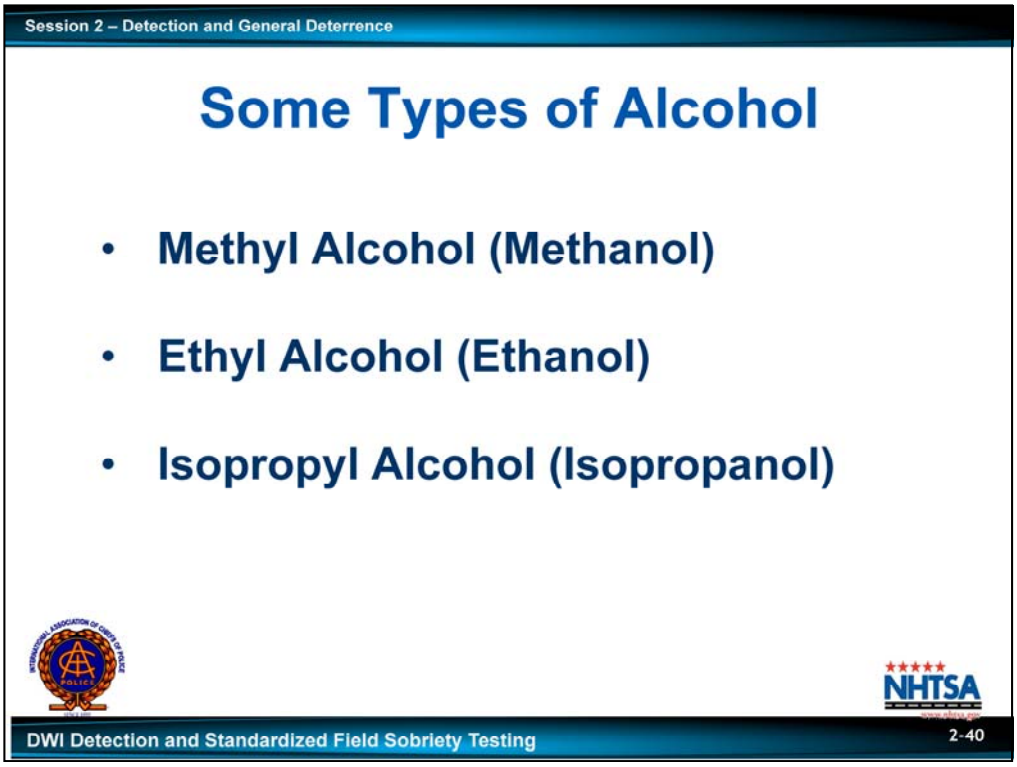
E. Physiology of Alcohol

A brief overview of alcohol:

Alcohol is the most abused drug in the United States.

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

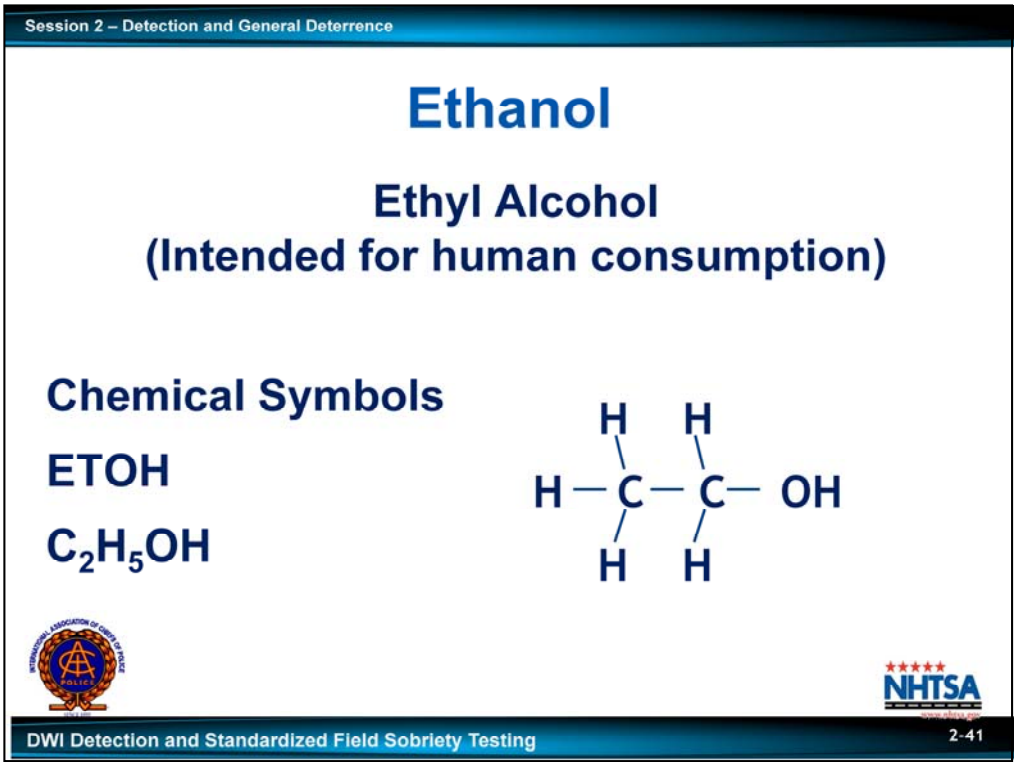
Alcohols are molecularly very similar and produce similar effects. They produce intoxicating effects when ingested into the human body. Only one of them is meant for human consumption. However, when ingested in substantial quantities it can cause death.



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

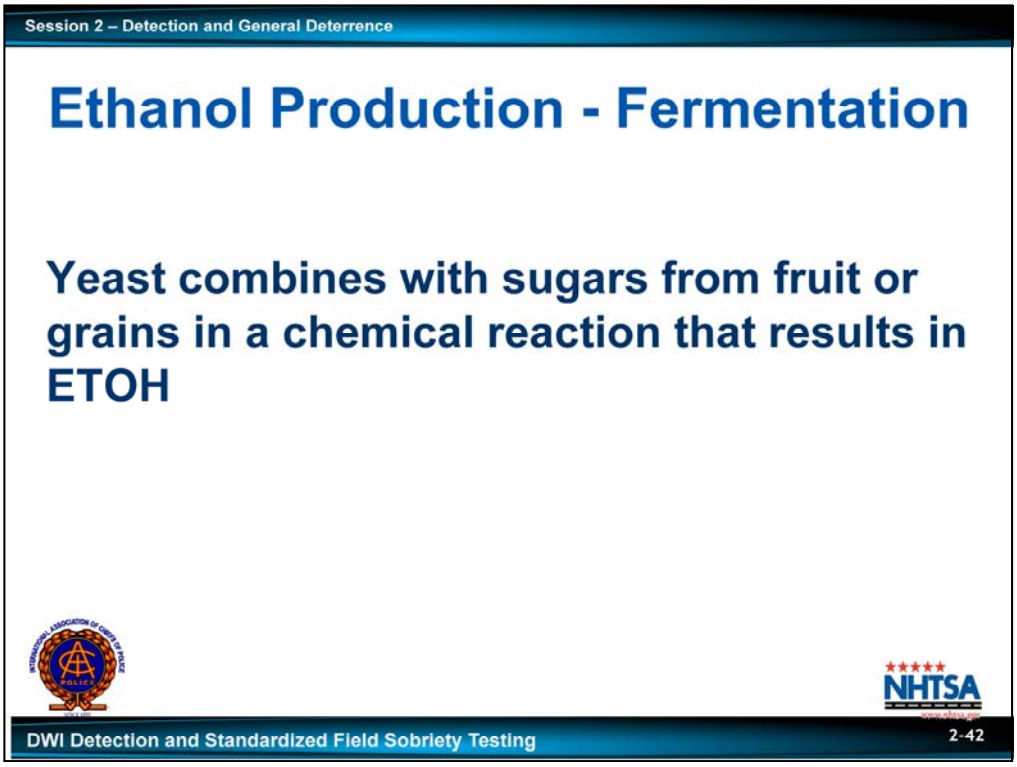
Three of the more commonly known alcohols are Methyl, Ethyl, and Isopropyl.

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



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".

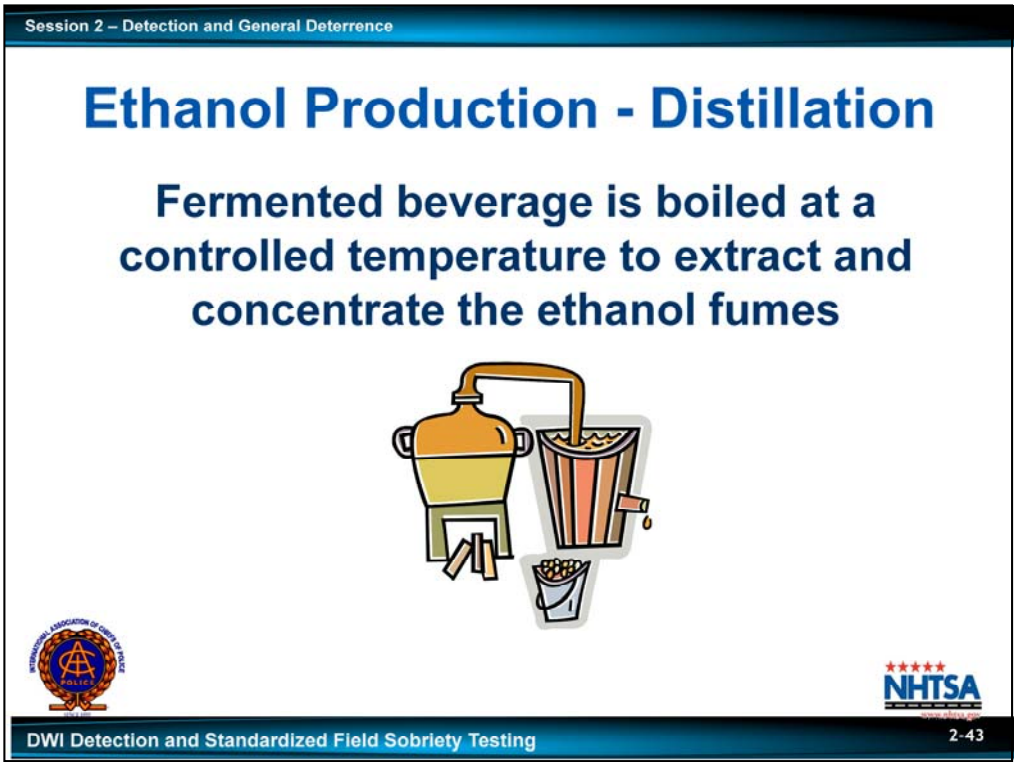
The "ET" represents "ethyl", and the "OH" represents an oxygen atom and hydrogen atom, bonded together in what the chemists refer to as the "hydroxy radical". All alcohols have an hydroxy radical in their molecules.



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 product the chemical we call ethanol. This can occur naturally, as yeast spores in the air come into contact with decomposing fruit and grains. However, most of the ethanol in the world didn't ferment naturally, but was produced under human supervision.

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

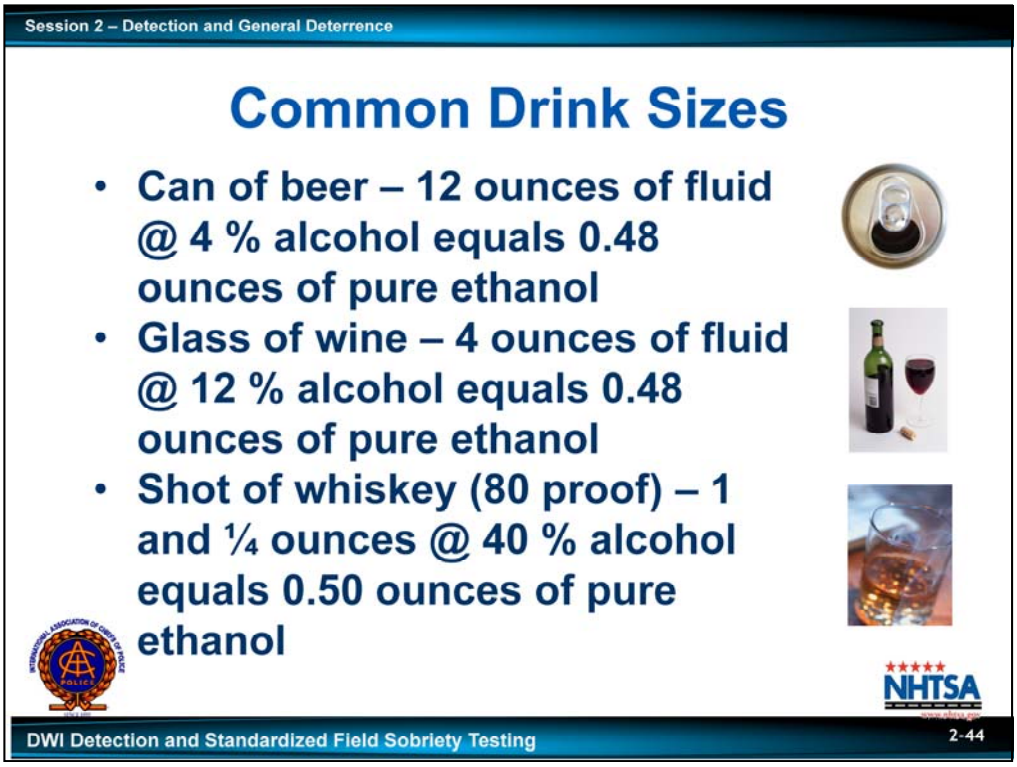
- ***Point out that humans almost certainly first encountered ethanol that had been produced accidentally in this fashion.***
- ***Ask the question: "Why can't fermentation produce a higher ethanol concentration than 14 %?"***
- ***Point out that ethanol starts to boil at a lower temperature than water does.***



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

For example, an 80 proof beverage has an ethanol concentration of 40 %.

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



- Over the millennia during which people have used and abused ethanol, some common sized servings of the different beverages have evolved. Beer, for example, is normally dispensed in 12 ounce servings. Since beer has an ethanol concentration of about four percent, the typical bottle or can of beer contains a little less than one half ounce of pure ethanol.
- A standard glass of wine has about four ounces of liquid. Wine is about 12 % alcohol, so the glass of wine also has a bit less than one half ounce of ethanol in it.
- Whiskey and other distilled spirits are dispensed by the "shot glass", usually containing about one and one quarter ounce 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.

(National Institute on Alcohol Abuse and Alcoholism of the National Institute of Health.)

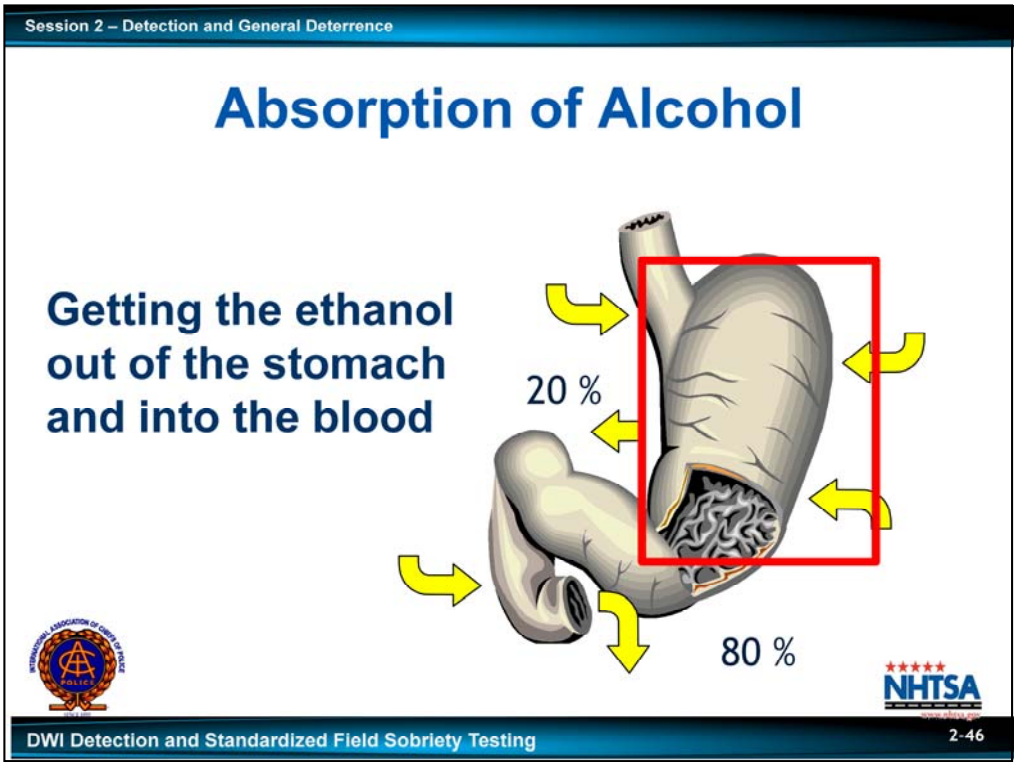
- ***Point out that the proof of a distilled spirit is equal to twice the ethanol concentration. Point out that alcohol concentration may vary greatly depending on type/brand.***
- ***Solicit participant comments and questions on this overview of alcohol.***

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 blood alcohol concentration (BAC) will develop.

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

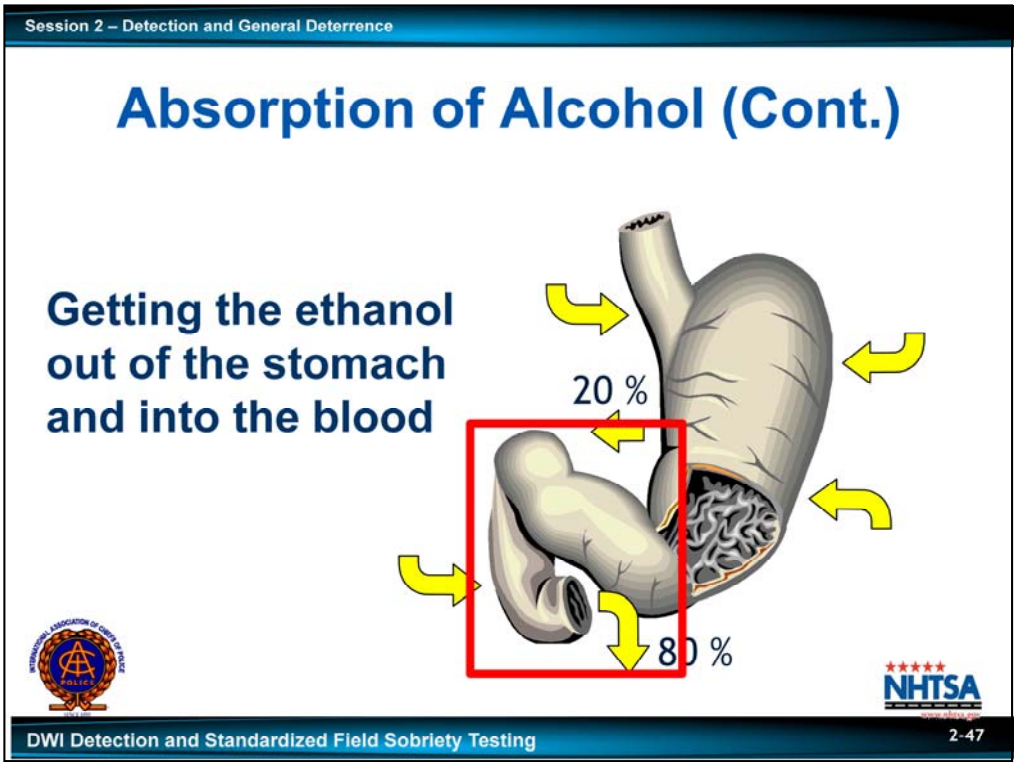
Point out that a person would have to inhale concentrated alcohol fumes for a prolonged period of time in order to develop a significant blood alcohol concentration.



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 that pertains to alcohol absorption is that it doesn't have to be digested in order to move from the stomach to the blood.

Another very important fact is that alcohol can pass directly through the walls of the stomach. These two facts, taken together, mean that, 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.

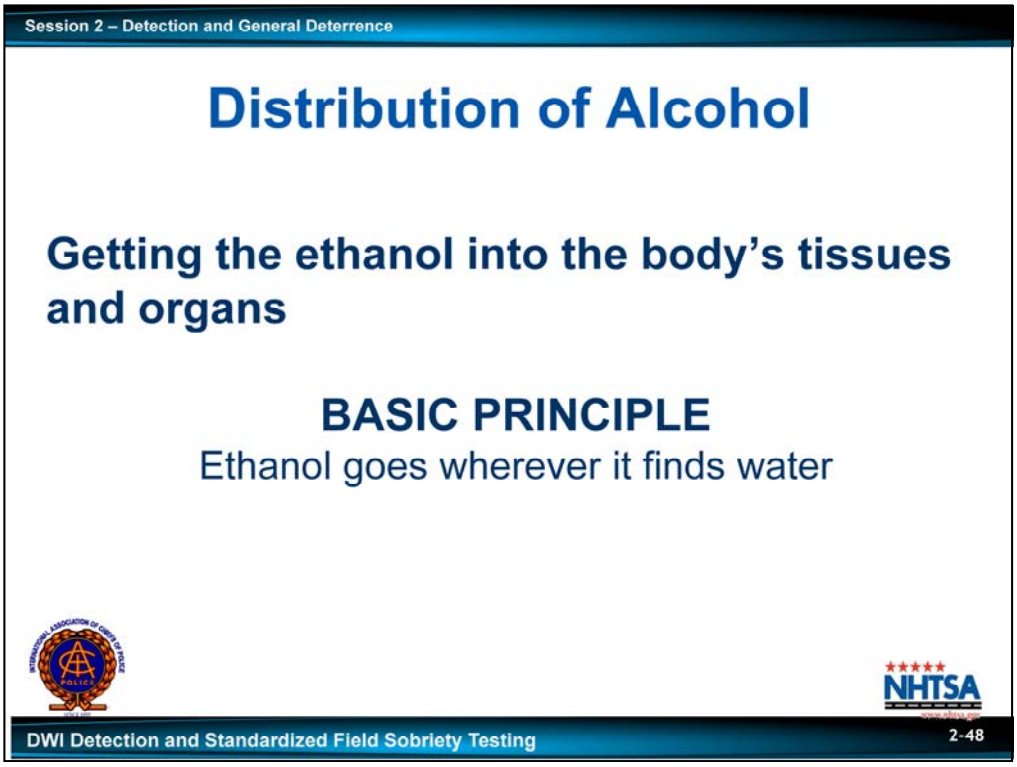
When the alcohol enters the empty stomach, about 20 % of it will make its way directly through the stomach walls. The remaining 80 % will pass through the stomach and enter the small intestine, from which it is readily absorbed into the blood. Because the body doesn't need to digest the alcohol before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

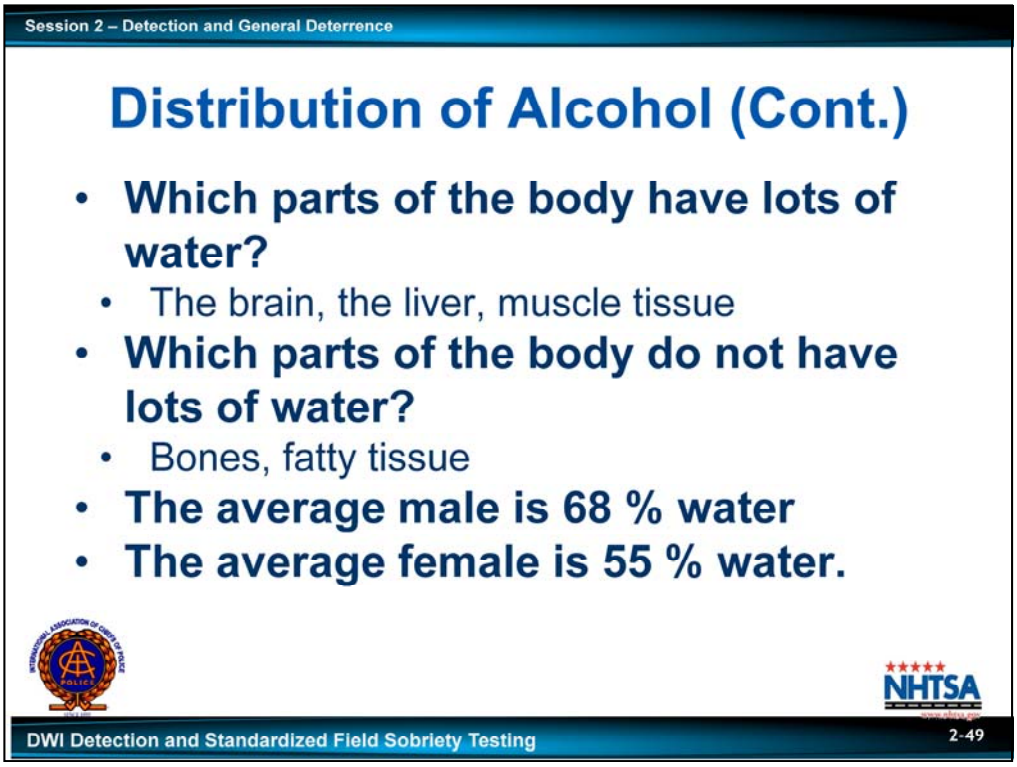
Yes it will. Food has to be at least partially digested in the stomach before it can pass to the small intestine. When the brain senses that food is in the stomach, it commands a muscle at the base of the stomach to constrict, and cut off the passage to the small intestine. The muscle is called the pylorus, 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.

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



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

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



Ask participants to suggest why this significant difference exists.

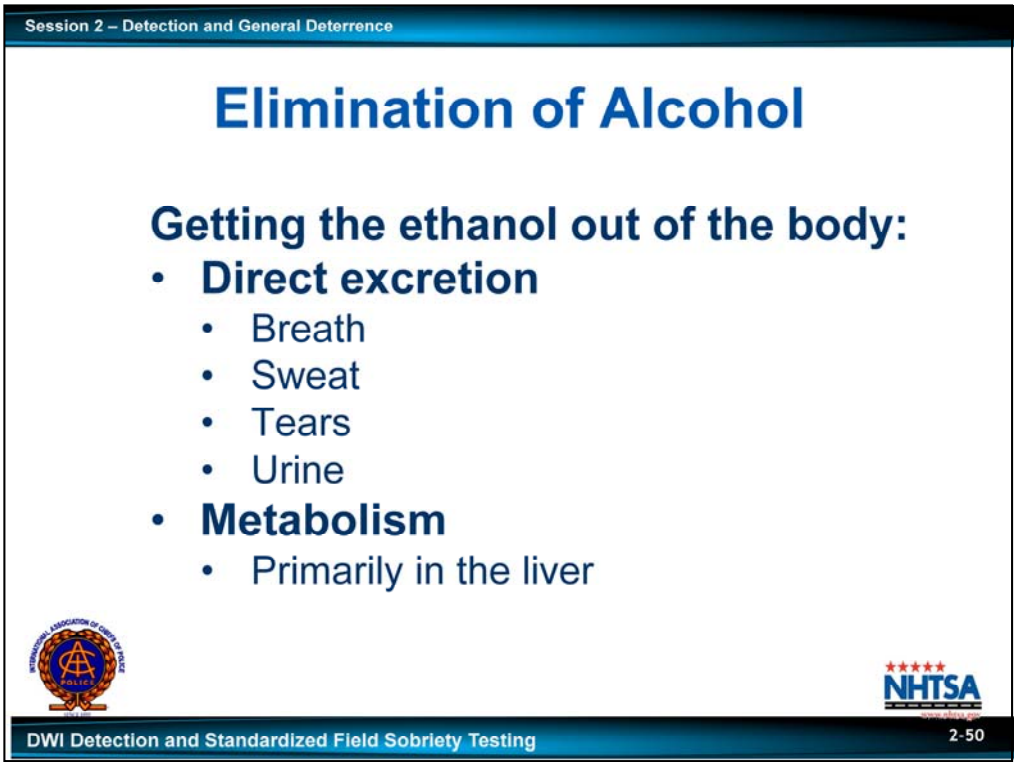
The affinity of alcohol for water, and its lack of affinity for fat, helps explain an important difference in the way alcohol affects women and men. Pound for pound, the typical female's body contains a good deal less water than does the typical man's.

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 that 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 the question: 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?

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 that the average woman is smaller than the average man, it becomes apparent that 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.

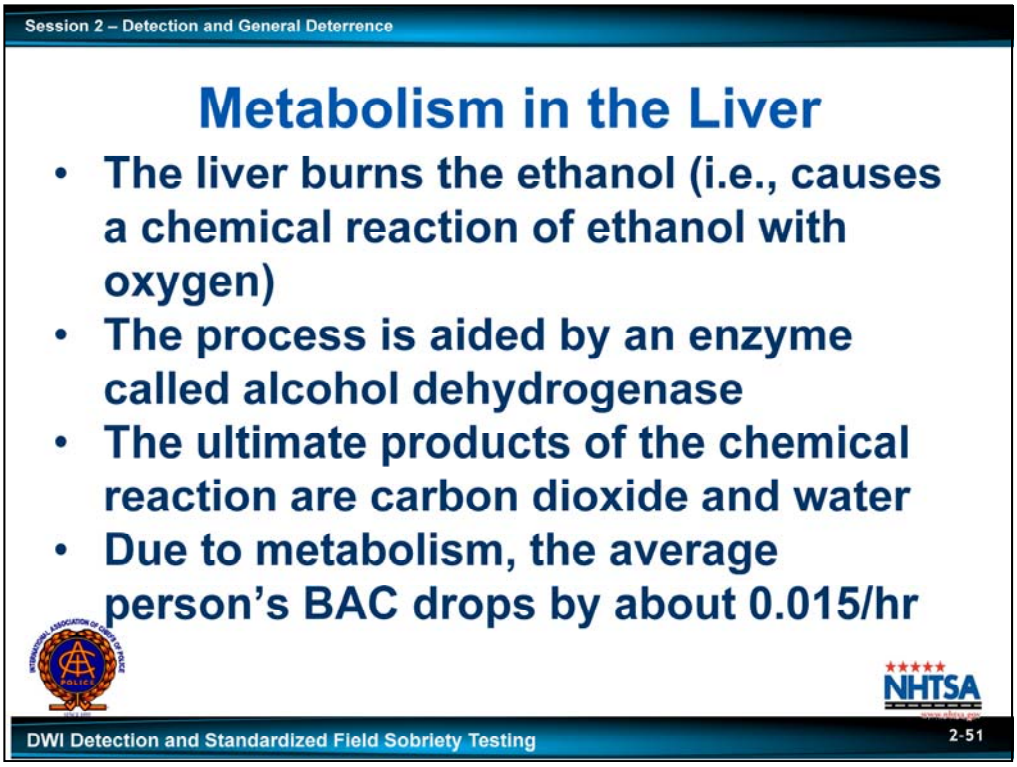


As soon as the alcohol enters the blood stream, the body starts trying to get rid of it. Some of the alcohol will be directly expelled from the body chemically unchanged. For example, some alcohol will leave the body in the breath, in the urine, in sweat, in tears, etc. However, only a small portion (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 the question: What organ in the body is primarily responsible for chemically breaking the alcohol down?

Reveal answer to question.



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.

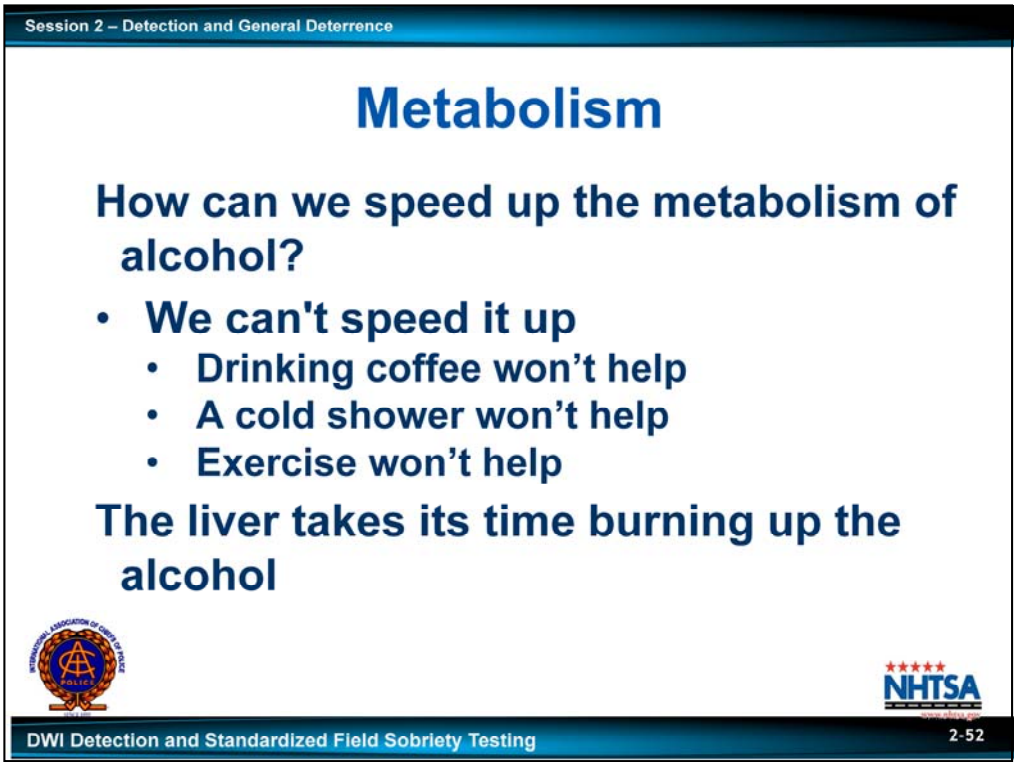
For the average sized male, a BAC of 0.015 is equivalent to about two thirds of the alcohol content of a standard drink (i.e., about two thirds of a can of beer, or glass of wine or shot of whiskey). For the average sized female, that same BAC would be reached on just one half of a standard drink. So 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 hours

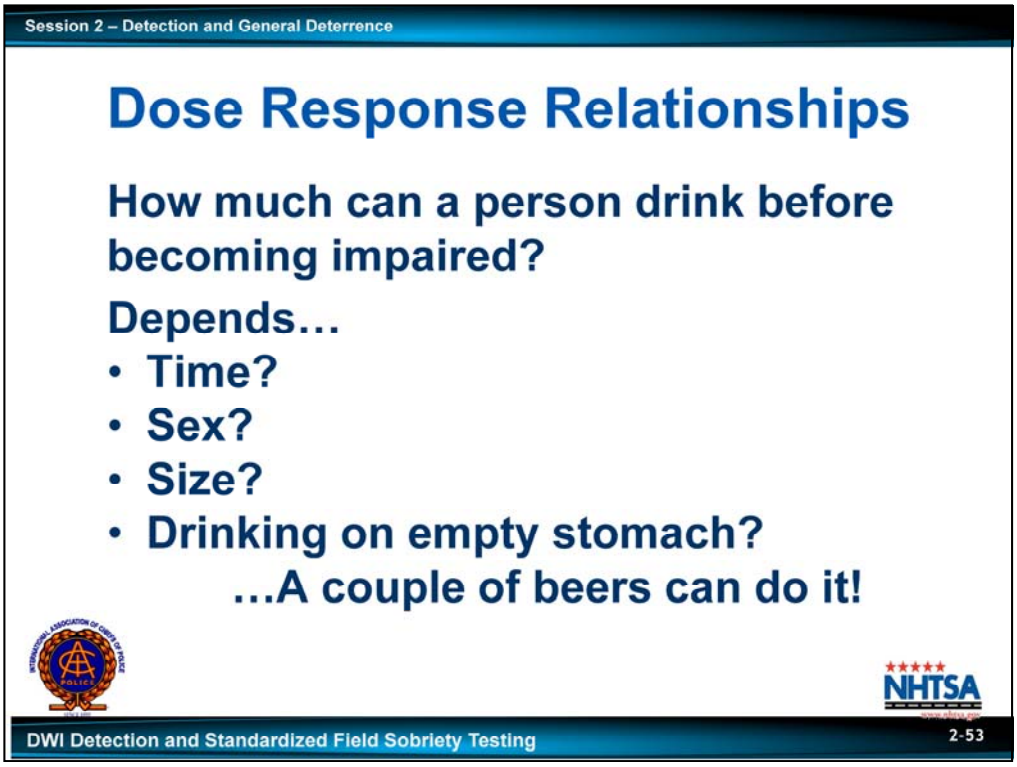


Ask the question: How can we speed up the metabolism of alcohol? We can't speed it up. Drinking coffee won't help. A cold shower won't help. Exercise won't help. The liver takes its time burning up the alcohol.

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.

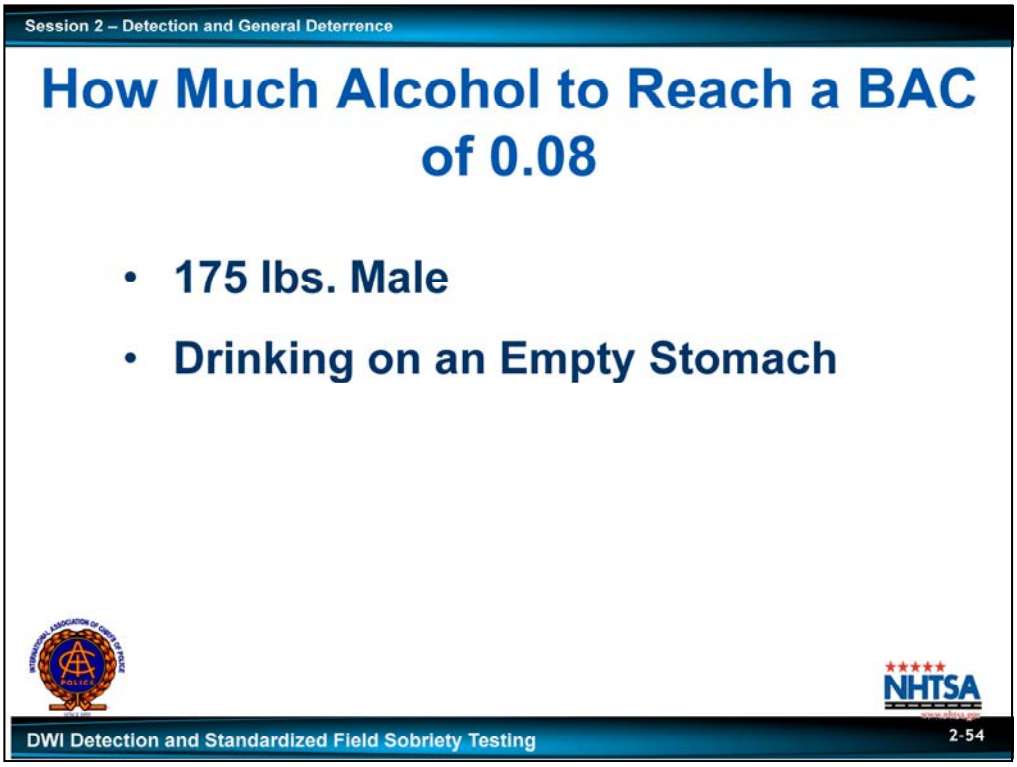
Solicit the participants for comments and questions about the elimination of alcohol from the body.



Dose Response Relationships

People sometimes ask, "how 'high' is 'drunk'?" What is the "legal limit" for "drunk driving"? How much can a person drink before becoming "impaired"?

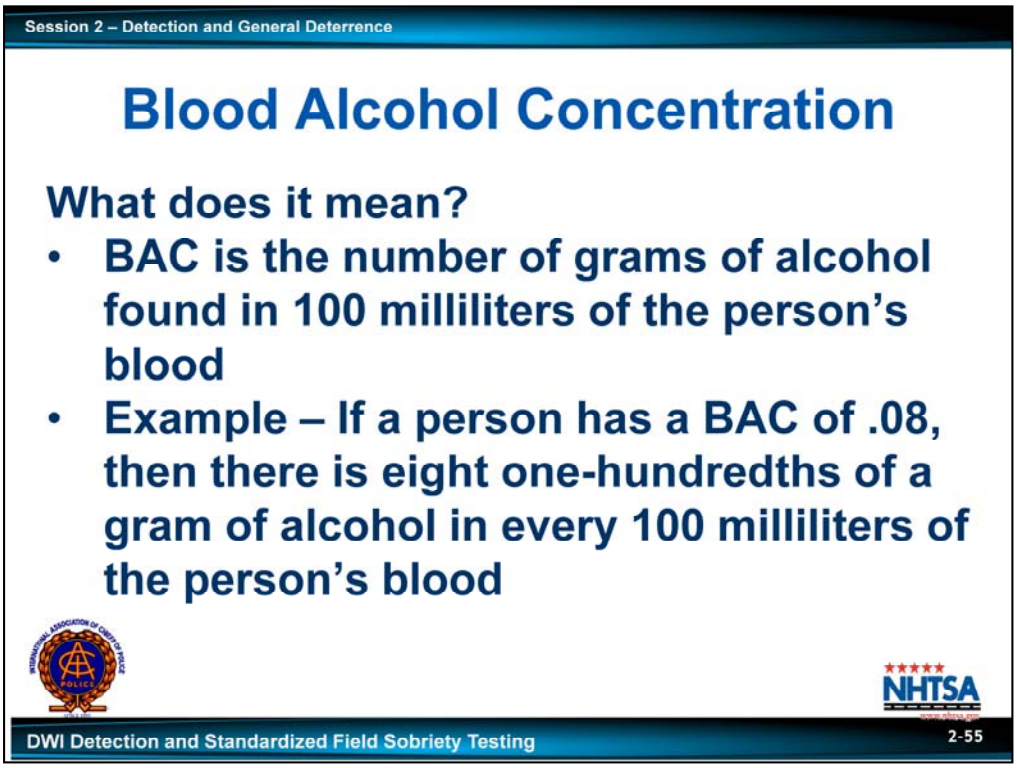
There is no simple answer to these or similar questions, except to say that any amount of alcohol will affect a person's ability to drive to some degree. It is true that the laws of nearly all States establish a BAC limit at which it is explicitly unlawful to operate a vehicle. In those cases, that "limit"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

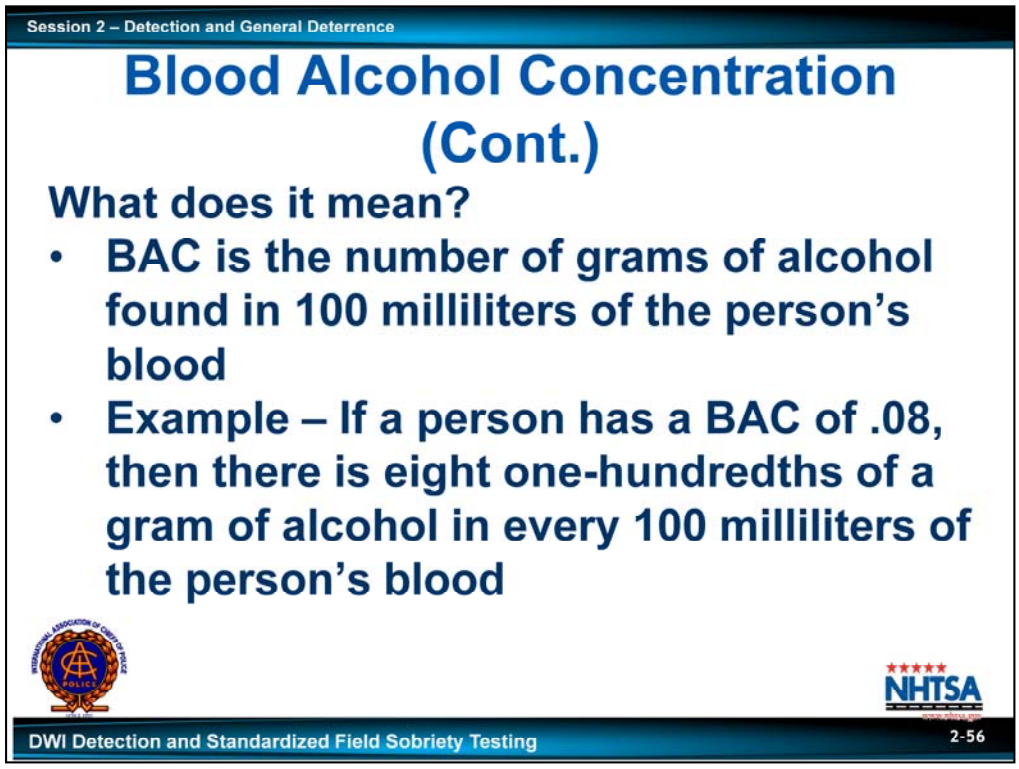
Obviously, as we've already seen, it depends on how much time the person spends drinking, on whether the person is a man or a woman, on how large the person is, on whether the drinking takes place on an empty stomach, and on certain other factors. But let's take as an example a 175 pound man. If he drinks 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 very much alcohol to impair someone: "a couple of beers" can do it.

It actually takes 454 grams to make a pound.



But in another respect, when we contrast alcohol with virtually any other drug, we find that impairment by alcohol requires a vastly larger dose than does impairment by the others. Consider exactly what a BAC of 0.08 means. Blood alcohol concentration is expressed in terms of the "number of grams of ethanol in every 100 milliliters of blood". Therefore, 0.08 means that there is 0.08 grams (g) of ethanol in every 100 milliliters (mL) of blood. You will find that 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, 0.08 grams equals 80 milligrams (mg) and a BAC of 0.08 would be reported as 80 mg of ethanol/100 mL of blood. Percent means parts per one hundred. In this example 0.08 grams/100 milliliters 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.

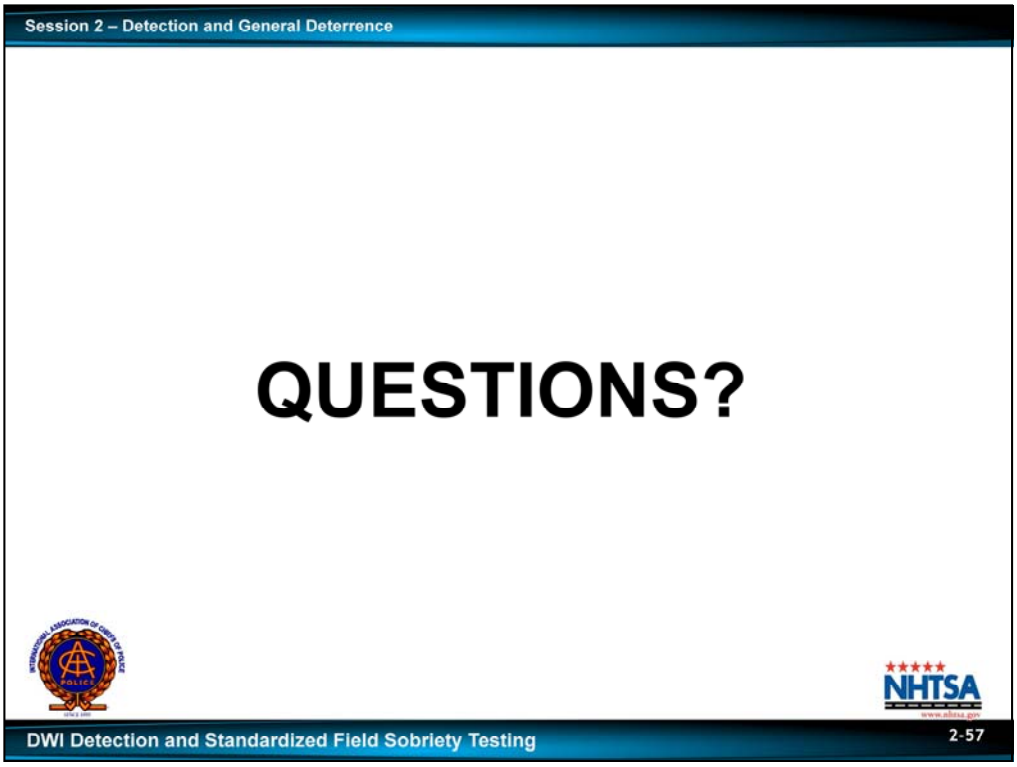


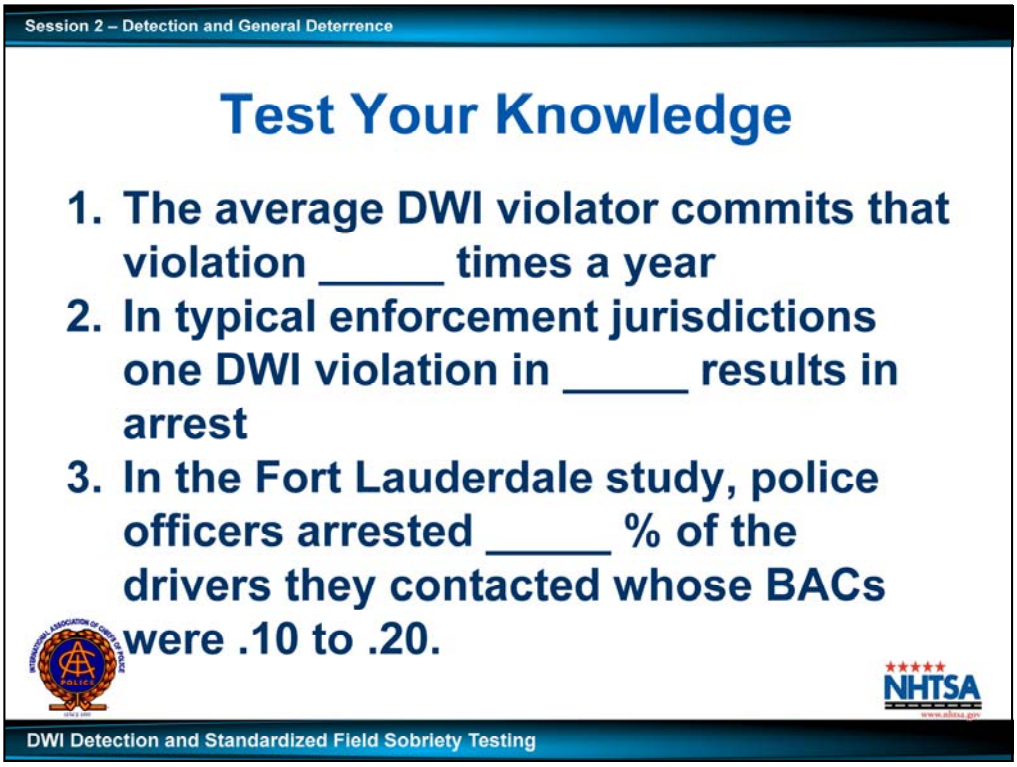
Ask the question: How much alcohol does a person have to drink to reach a BAC of 0.08?

- ***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 that 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.***

Note: 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 II (Optional Test*).**

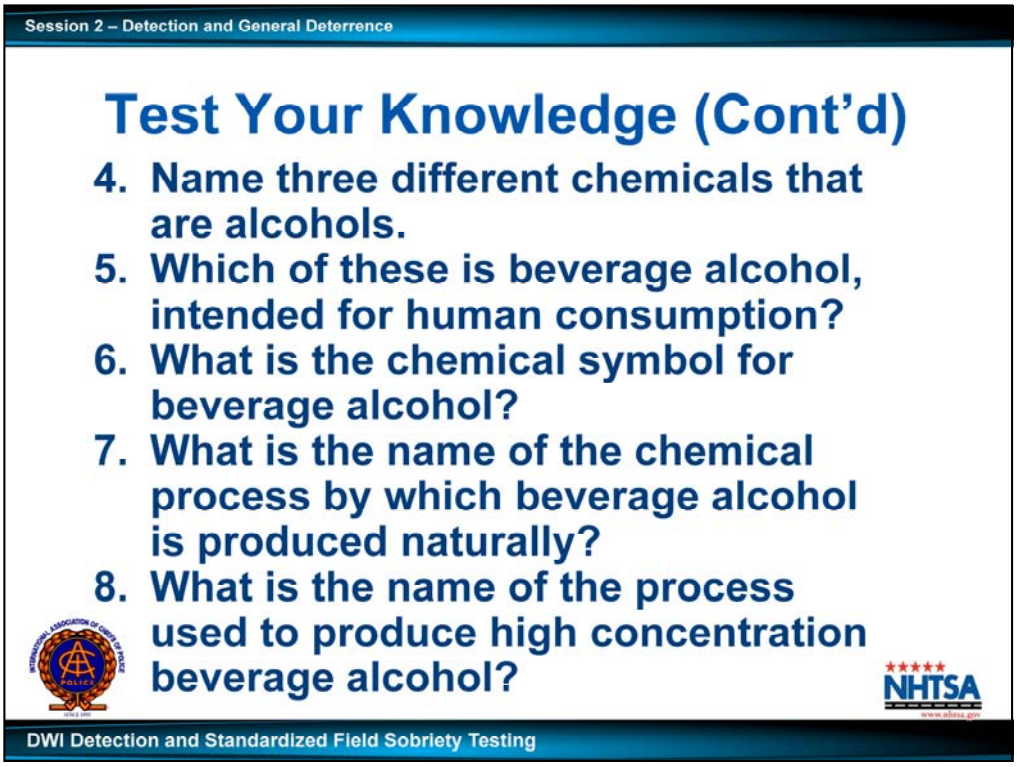

Session 2 – Detection and General Deterrence
QUESTIONS?
NHTSA
DWI Detection and Standardized Field Sobriety Testing
2-57



1. ***The average DWI violator commits that violation __80__ times a year.***

2. ***In typical enforcement jurisdictions one DWI violation in __2,000__ results in arrest.***

3. ***In the Fort Lauderdale study, police officers arrested __22__ % of the drivers they contacted whose BACs were .10 to .20.***



4. Name three different chemicals that are alcohols.

Methyl, Ethyl and Isopropyl. (or, Methanol, Ethanol and Isopropanol.) (or, Wood Alcohol, Beverage Alcohol, and Rubbing Alcohol.)

5. Which of these is beverage alcohol, intended for human consumption?

Ethanol is the beverage alcohol, intended for human consumption.

6. What is the chemical symbol for beverage alcohol?

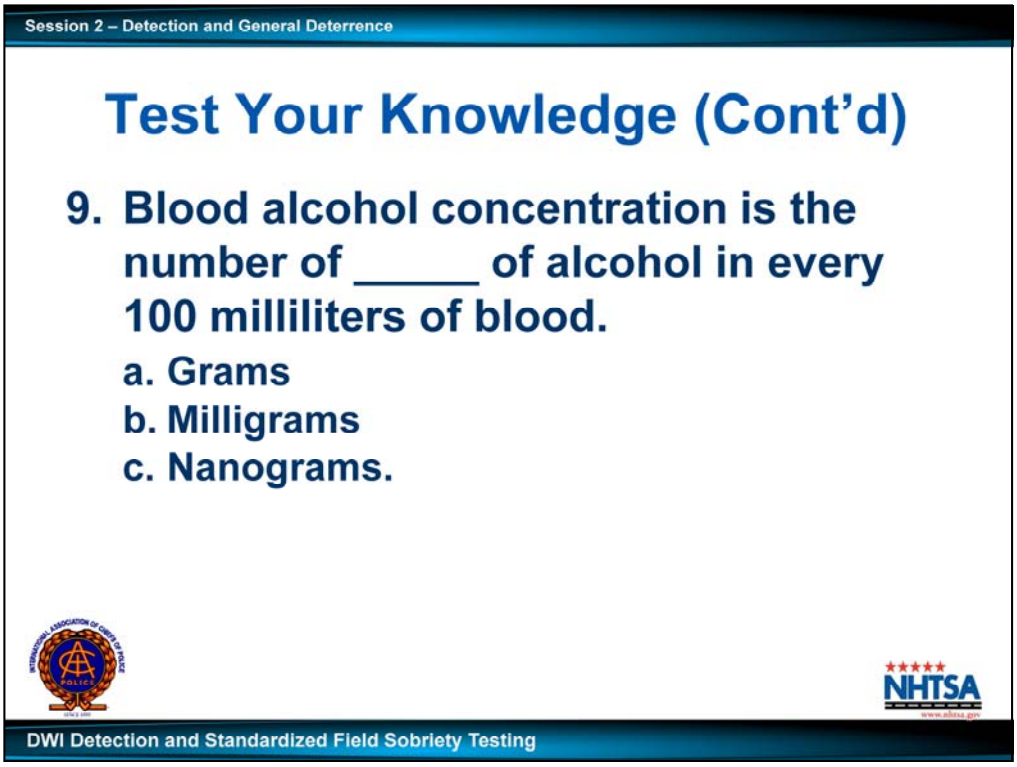
The four letter chemical symbol is ETOH.

7. What is the name of the chemical process by which beverage alcohol is produced naturally?

Fermentation

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

Distillation



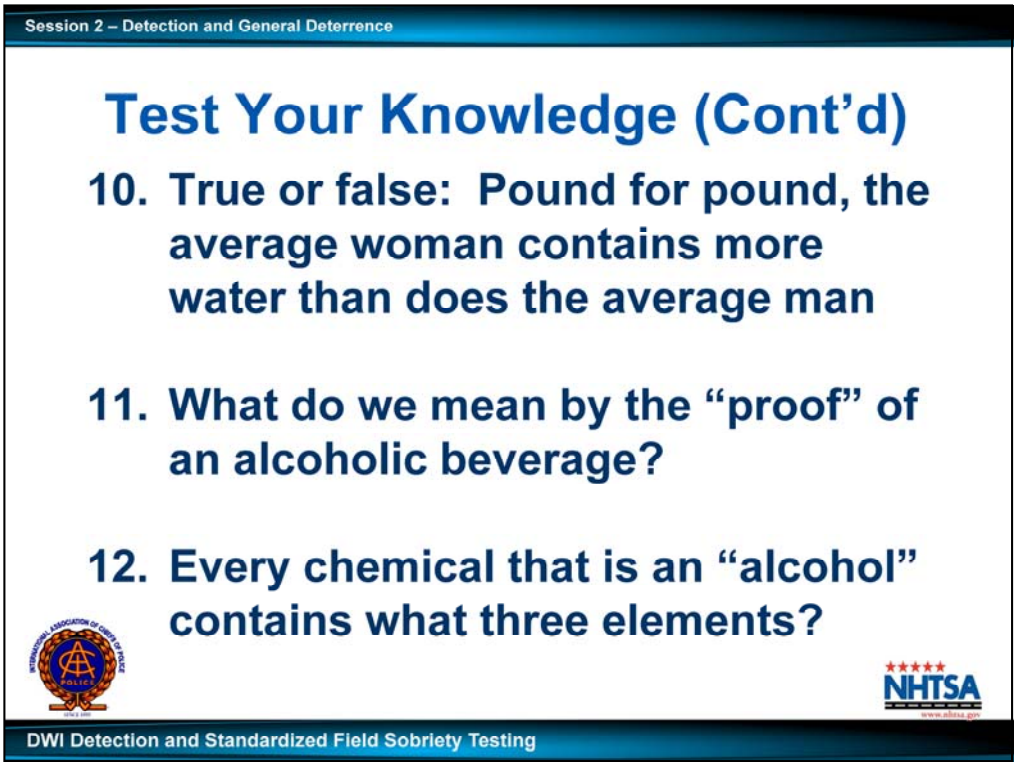
9. Multiple choice: Blood alcohol concentration is the number of ____ of alcohol in every 100 milliliters of blood.

a. Grams

b. Milligrams

c. Nanograms

Correct answer is A, "grams".



10. True or false: Pound for pound, the average woman contains more water than does the average man.

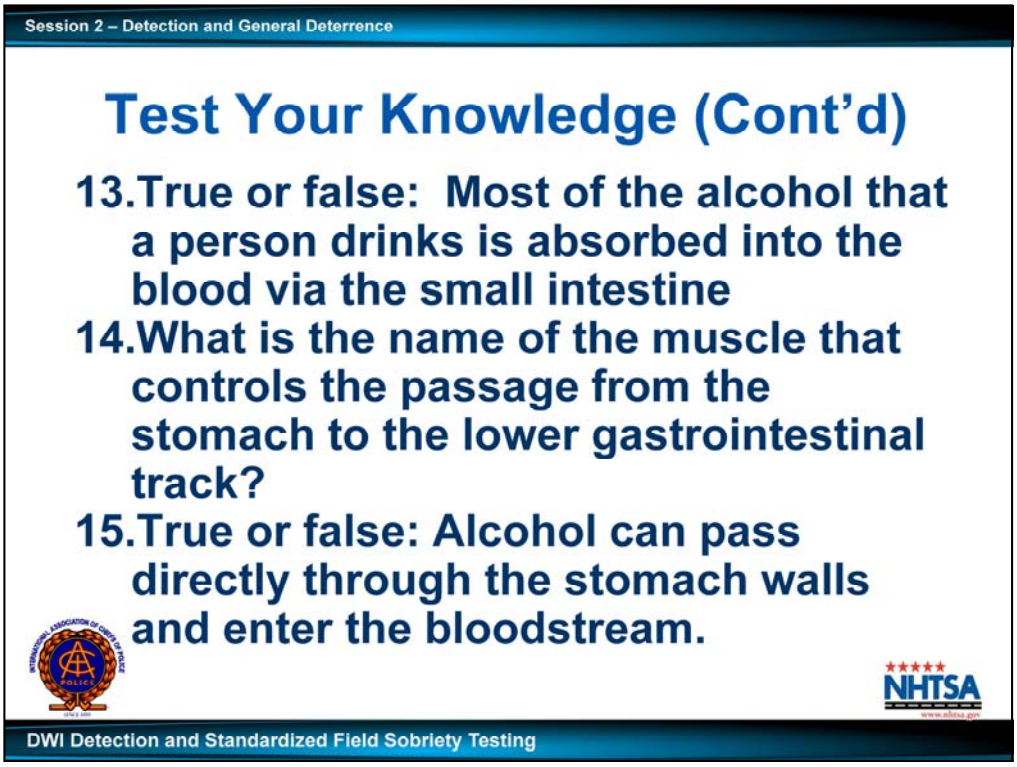
The statement is false. The average woman actually has a good deal less water, pound for pound, than does the average man. She is about 55 % water, he is about 68 %.

11. What do we mean by the "proof" of an alcoholic beverage?

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

12. Every chemical that is an "alcohol" contains what three elements?

The three elements common to all alcohols are: carbon, hydrogen and oxygen.



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

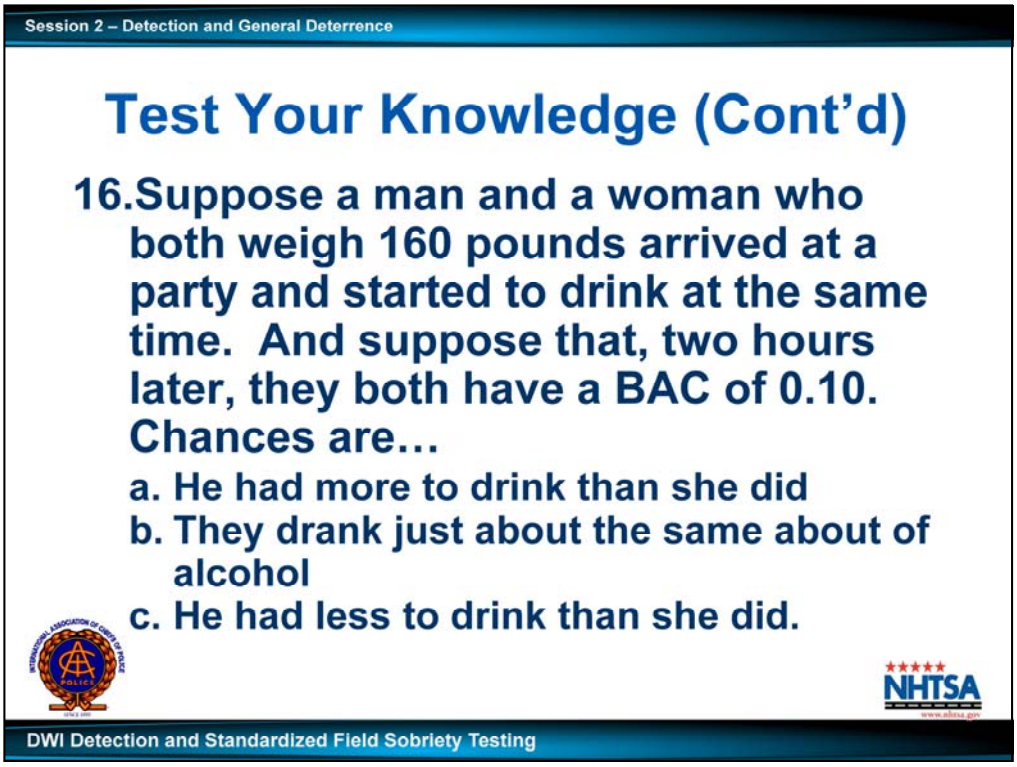
The statement is true. Under normal conditions, about 80 % of the ethanol in the stomach will pass through the pyloric valve into the small intestine, from which it will quickly move into the bloodstream.

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

The muscle is called the pylorus, or pyloric valve.

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

The statement is true. Usually, about 20 % of the ethanol a person drinks diffuses through the stomach walls to enter the blood.



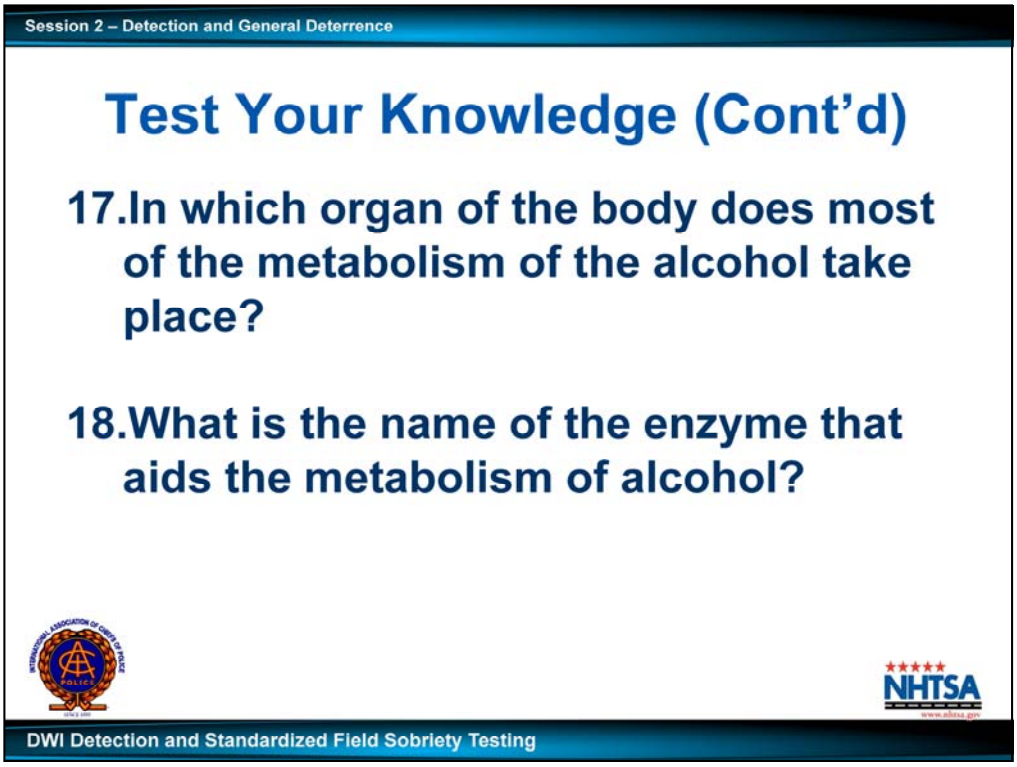
16. Multiple choice: Suppose a man and a woman who both weigh 160 pounds arrived at a party and started to drink at the same time. And suppose that, two hours later, they both have a BAC of 0.10. Chances are ....

a. He had more to drink than she did.

b. They drank just about the same amount of alcohol.

c. He had less to drink than she did.

Correct answer is A, "more".

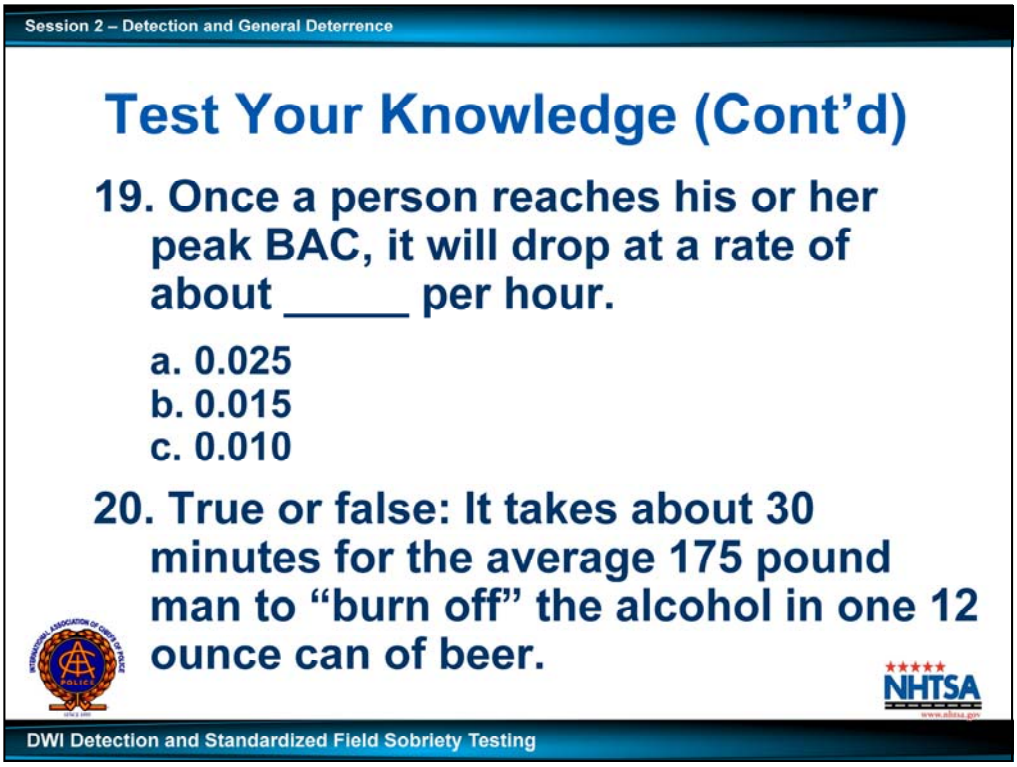


17. In which organ of the body does most of the metabolism of the alcohol take place?

The liver is where most metabolism takes place.

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

Alcohol dehydrogenase is the enzyme that serves as a catalyst for alcohol's metabolism in the liver.



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

a. 0.025

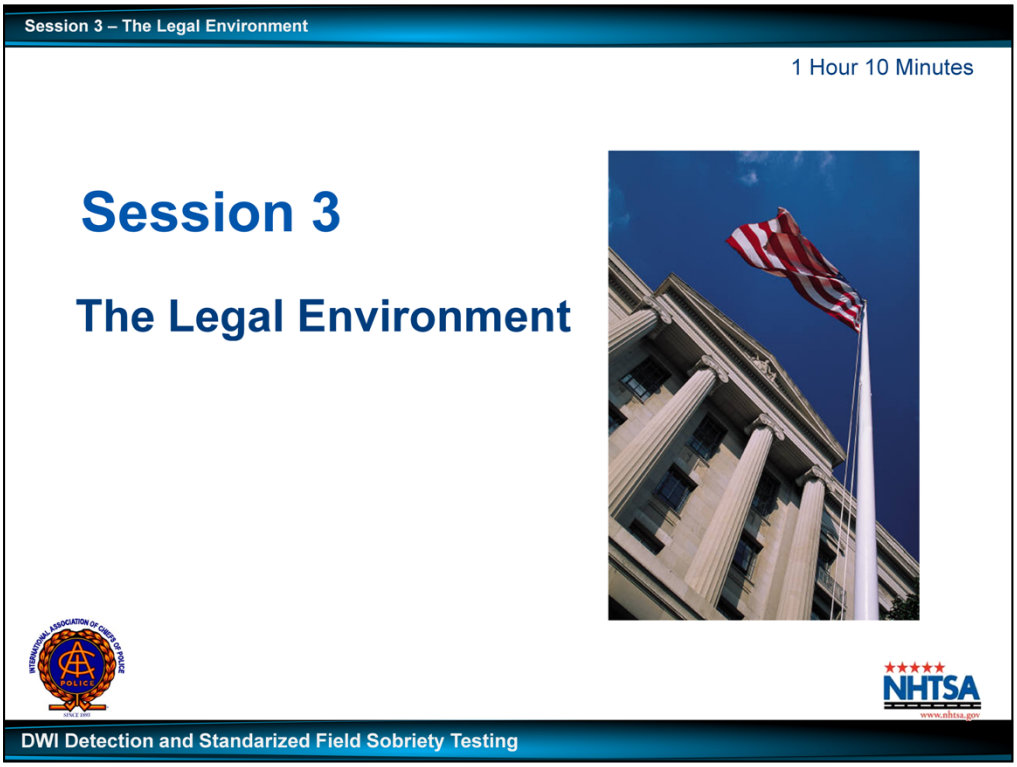
b. 0.015

c. 0.010

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

20. 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.

The statement is false. The average 175 pound man will need 90 minutes to metabolize the alcohol.



(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 module are based on a generic set of drinking and driving laws, patterned after the Uniform Vehicle Code. Significant modification may be required to adapt this module to the current statutes of your state.

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:

- Basic DWI Law
- Implied Consent Law
- Illegal Per Se Law
- Preliminary Breath Testing Law

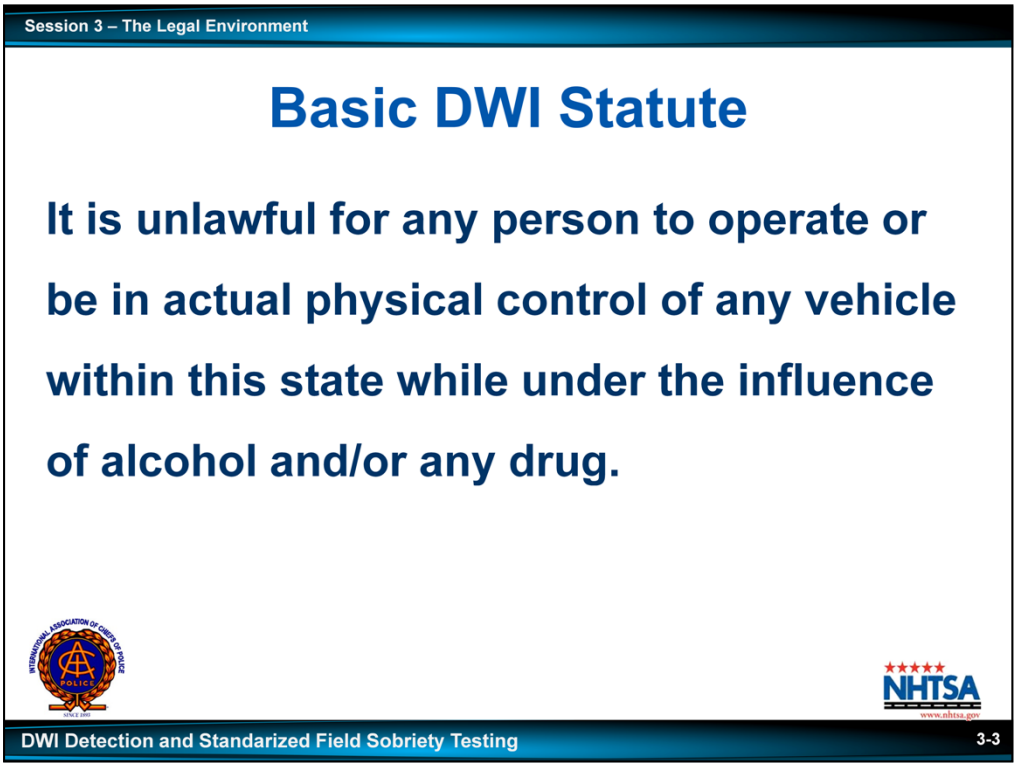
Briefly review the objectives, content and activities of this session.

At the conclusion of this session, participants will be familiar with:

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

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

CONTENT SEGMENTS	LEARNING ACTIVITIES
A. Basic DWI Statute: Driving While Under the Influence	Instructor Led Presentations
B. Illegal Per Se Statute: Driving With a Prohibited Blood Alcohol Concentration	
C. Implied Consent Law and Presumptions	Reading Assignments
D. Preliminary Breath Testing	
E. Case Law Review	

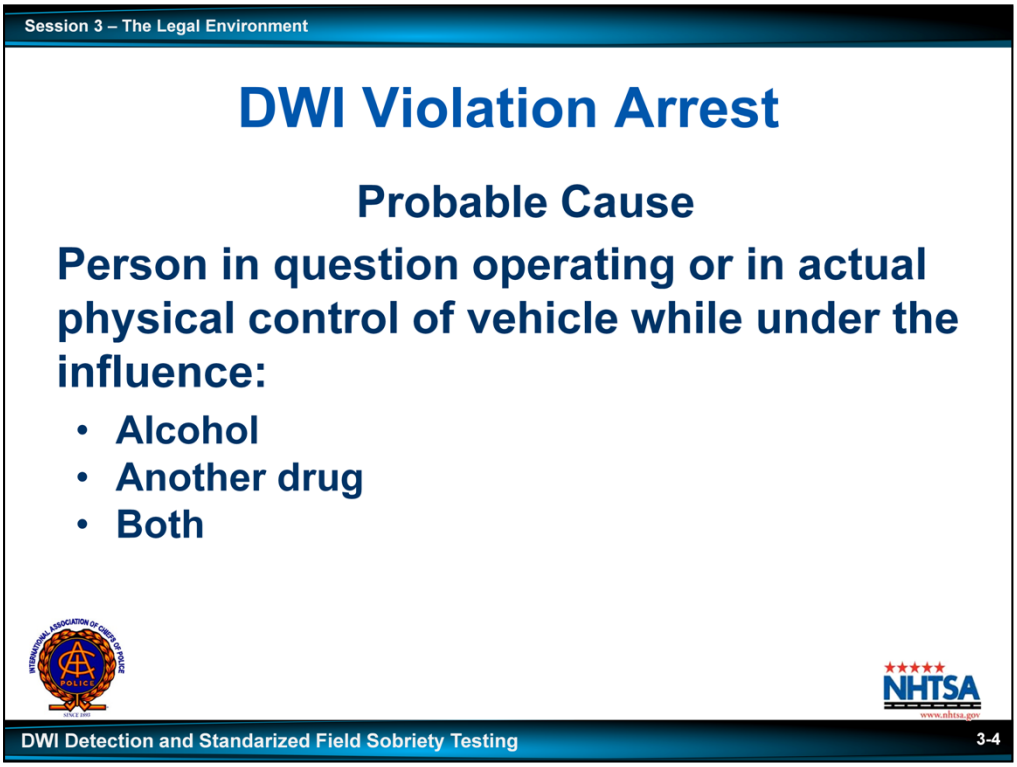


A. <u>Basic DWI Statute: Driving While Under the Influence</u>

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

For example:

It is unlawful for any person to operate or be in actual physical control of any vehicle within this state while under the influence of alcohol and/or any drug.



DWI Violation Arrest

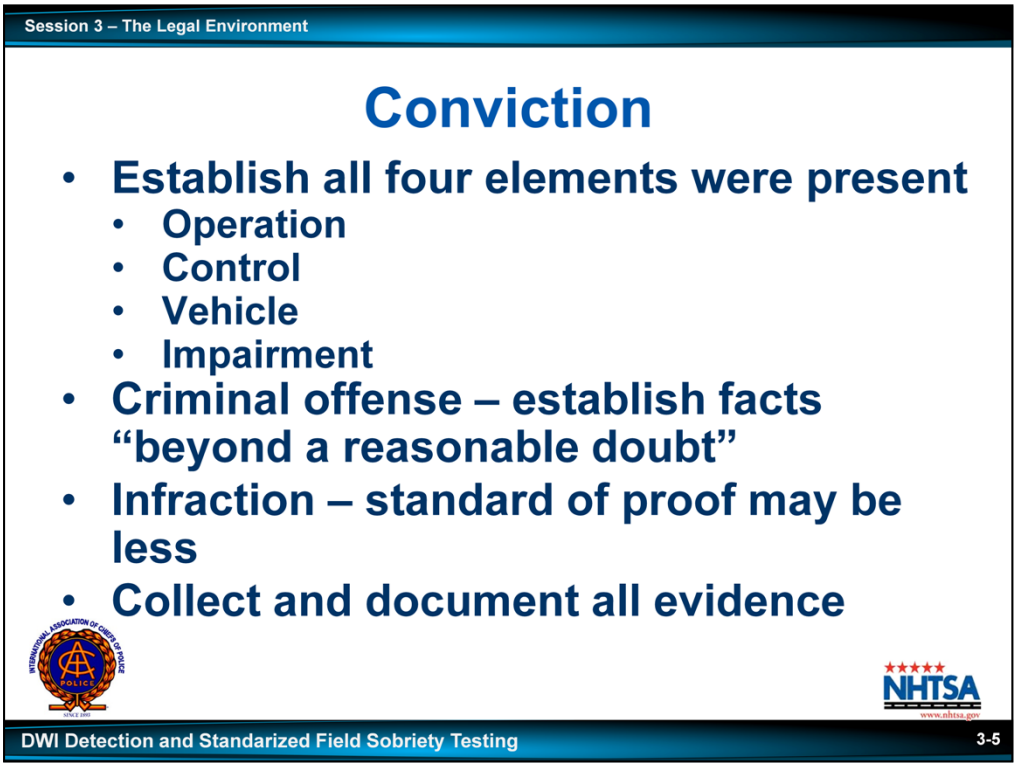
In order to arrest someone for a basic DWI violation, a law enforcement officer must have probable cause to believe that all elements of the offense are present. That is, the officer must believe that:

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 meaning/interpretation of "operational/actual physical control."

Discuss meaning of "vehicle".

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.



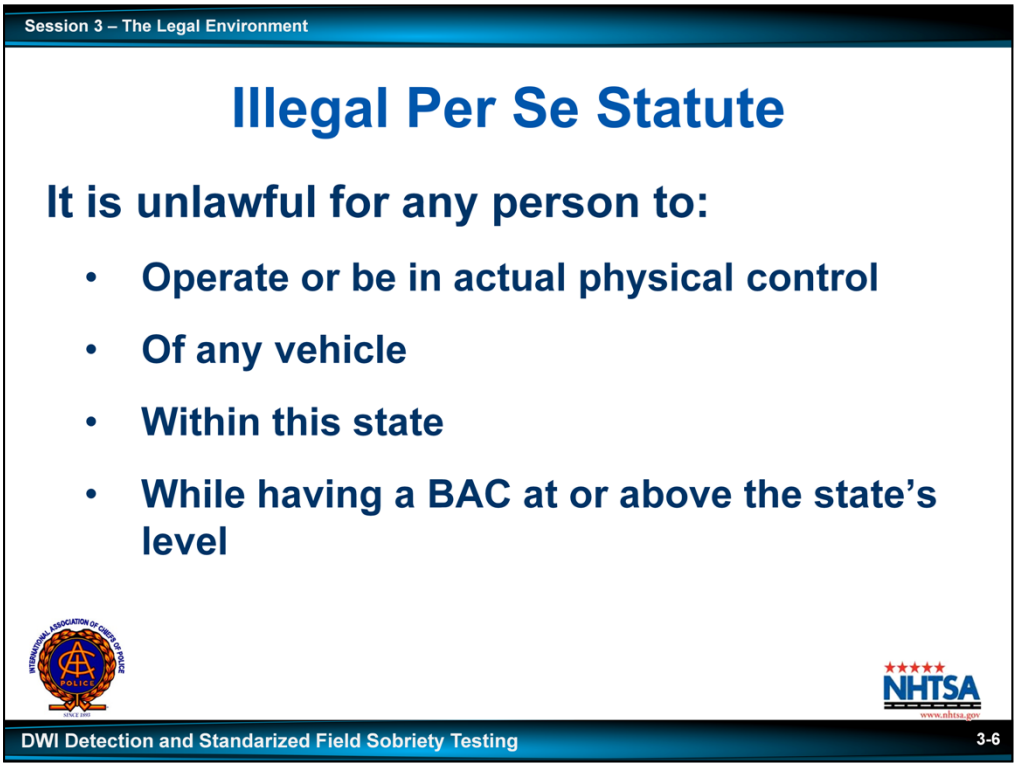
Conviction

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

- Operation
- Control
- Vehicle
- Impairment

With regard to under the influence, courts have usually held that phrase to mean that the ability to operate a vehicle has been affected or impaired. To convict a person of a basic DWI violation, it is usually necessary to show that the person's capability of safely operating the vehicle has been impaired. If DWI is a criminal offense, the facts must be established "beyond a reasonable doubt." If DWI is an infraction, the standard of proof may be less. In either case, it is the officer's responsibility to collect and thoroughly document all evidence.

Ask class: "What does under the influence mean?" Probe for a variety of responses.



B. <u>Illegal Per Se Statute: Driving with a Prohibited Blood Alcohol Concentration</u>

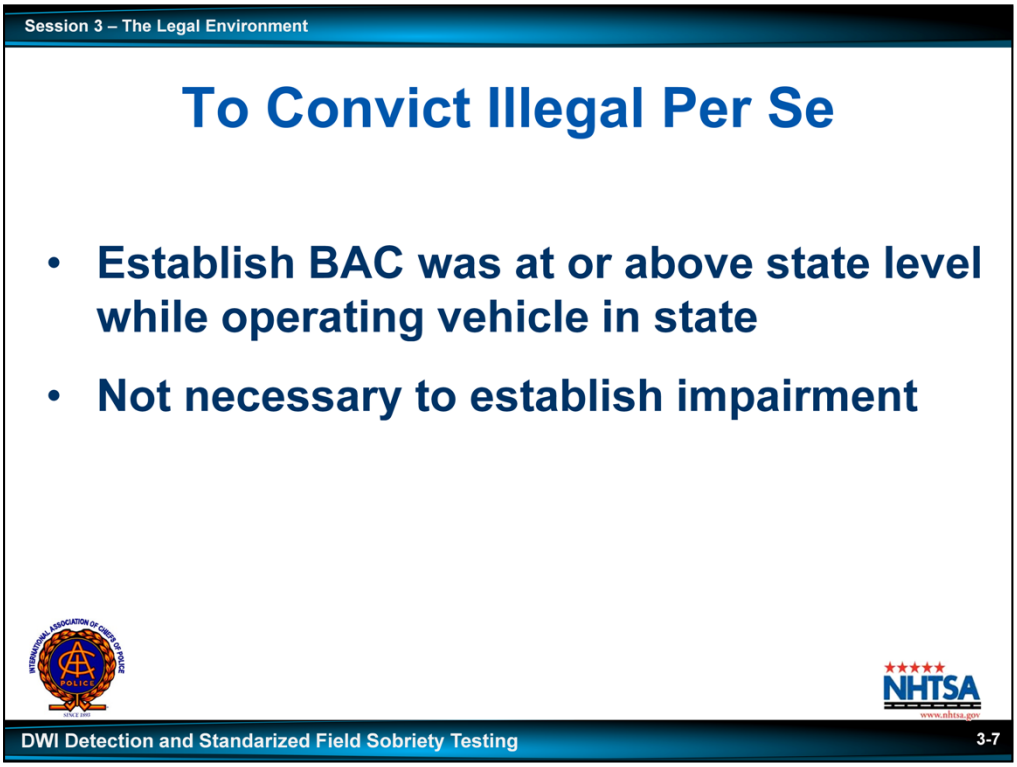
Description

Most states include in their DWI law or implied consent law a provision making it illegal to drive with a prescribed blood alcohol concentration (BAC). This provision, often called an <u>illegal per se law</u>, creates another alcohol-related driving offense which is related to, but different from the basic DWI offense. Following is a typical illegal per se provision:

It is unlawful for any person to:

- Operate or be in actual physical control
- Of any vehicle
- Within this state
- While having a blood alcohol concentration at or above state's level.

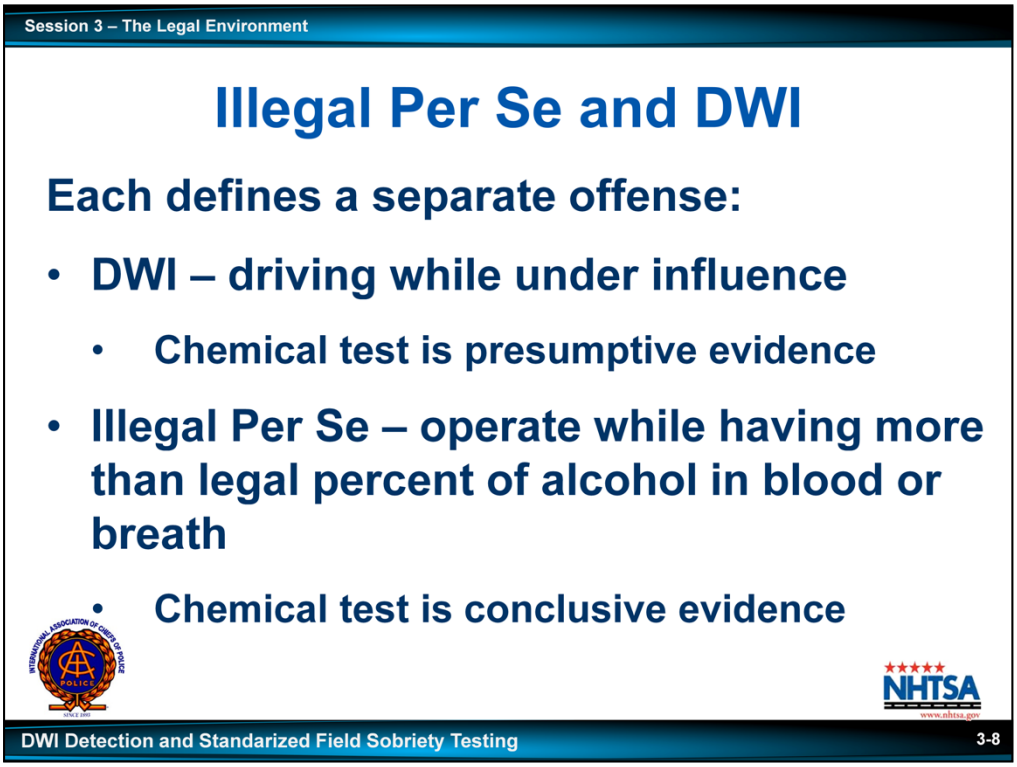
Compare and contrast these elements with the elements of DWI.



The illegal per se law makes it an offense in and of itself to drive while having a BAC at or above state's level. To convict a driver of an illegal per se violation, it is sufficient to establish that their BAC was at or above state's level while operating a vehicle in the state. It is not necessary to establish impairment.

"Per Se" roughly translates as "in and of itself."

These laws vary from state to state. Know your state's law.



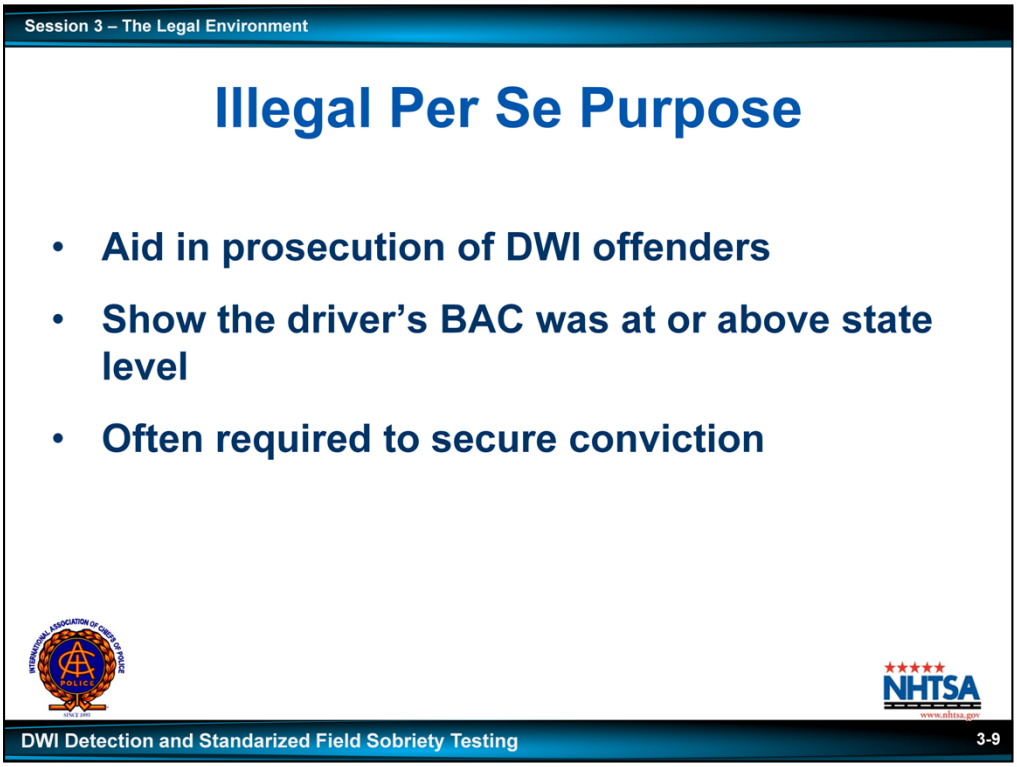
The illegal per se law does not replace the basic DWI law. Rather, the two work together. Each defines a separate offense:

- The basic DWI law makes it an offense to drive while under the influence of alcohol and/or any drug.
- The illegal per se law makes it an offense to drive while having more than a certain percentage of alcohol in the blood or breath.

For the basic DWI offense, the chemical test result is presumptive evidence. For the illegal per se offense, the chemical test result is conclusive evidence.

Pose the question to the class. "Since there is an illegal 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***



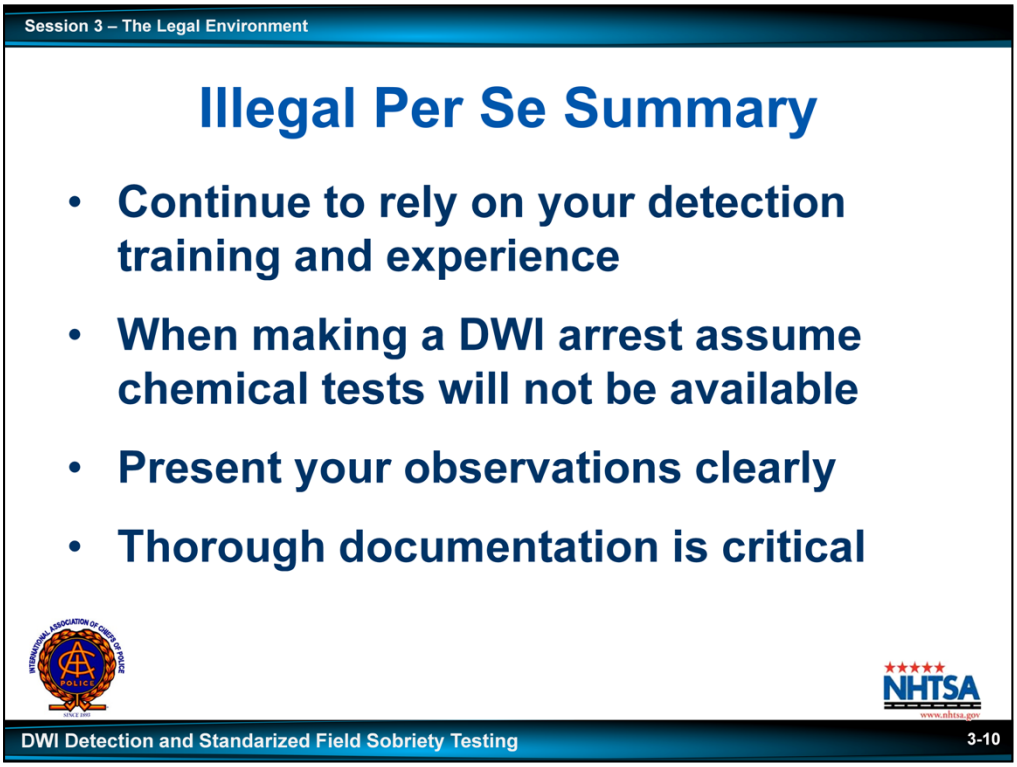
Illegal Per Se Purpose

The principal purpose of the illegal per se law is to aid in prosecution of DWI offenders. It is not necessary for the prosecutor to show that the driver was "under the influence." The state is not required to demonstrate that the driver's ability to drive was affected. It is sufficient for the state to show that the driver's BAC was at or above the state's level.

Although the illegal per se law does not require proof that the driver's ability to drive was affected, often in practice it is required to secure conviction. This is a good opportunity to have the class discuss what this means.

While the statute aids in prosecution, it does not really make DWI enforcement easier. An officer must still have probable cause to believe that the driver is impaired before making an arrest. The implied consent law usually requires that the driver be arrested before the request of a chemical test. The law also requires that 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 that the offense has been committed and make a valid arrest before the chemical test can be requested.

- ***Sufficient grounds for making the stop must be articulated.***
- ***Remind participants that allegation is more than mere suspicion: requires probable cause to believe the offense has been committed.***
- ***This may be a good opportunity for the instructors to discuss commercial vehicle and enforcement of underage drinking.***

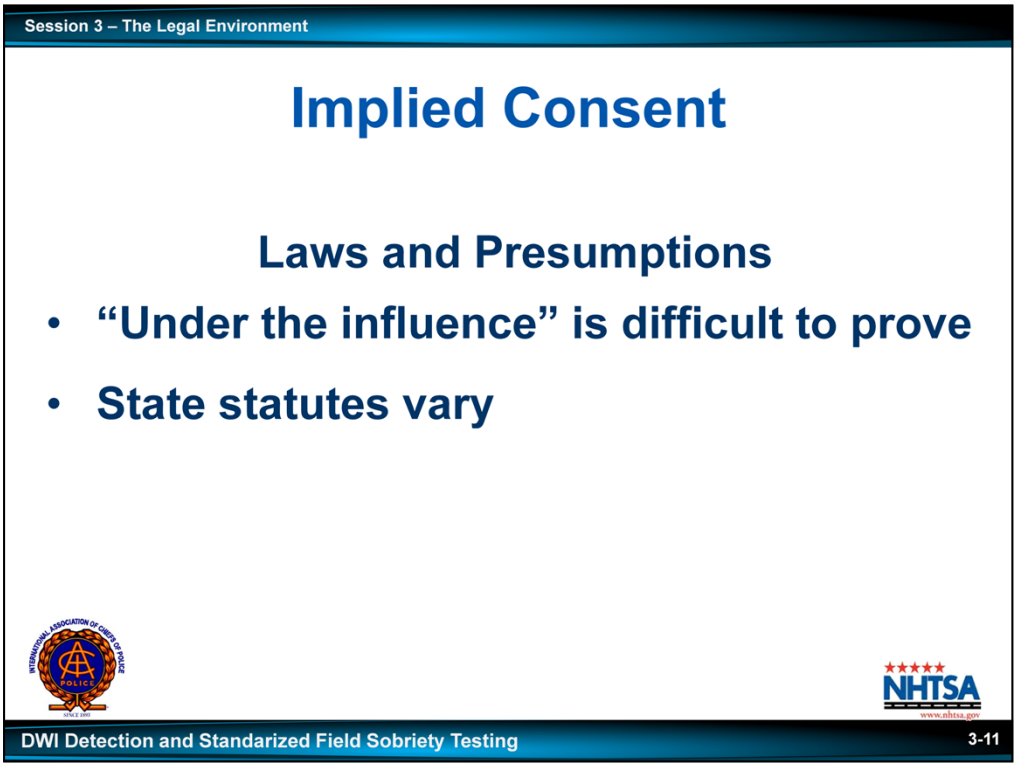


Illegal Per Se Summary

Police officers dealing with impaired drivers must continue to rely primarily on their own training and experience in detection to determine whether an arrest should be made. Usually 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. Then the case will depend primarily upon the officer's observations and ability to articulate their testimony. When making a DWI arrest, always assume that the chemical test evidence will not be available. It is critical that you organize and present your observations and testimony in a clear and convincing manner. This will allow more impaired drivers to be convicted regardless of whether they take the chemical test(s) or the test(s) results.

Stress the importance of thorough documentation, i.e., "The DWI Investigative Field Notes" that will be explained in Session 4.

If your state does not have a preliminary breath testing law, skip this segment.



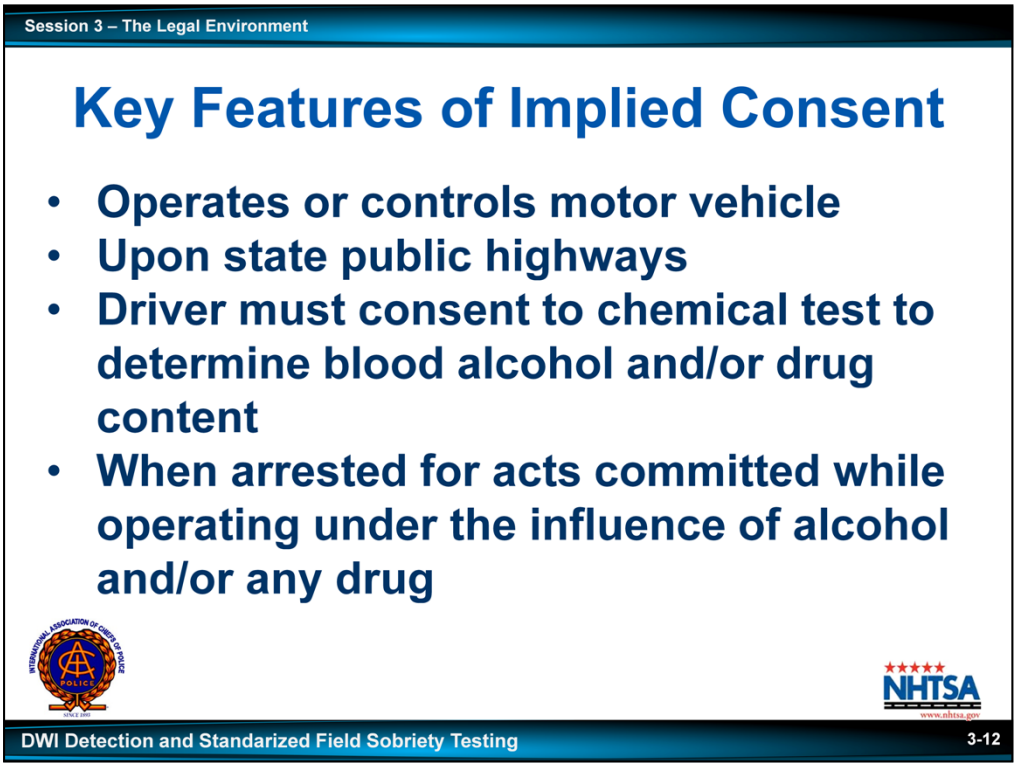
C. <u>Implied Consent Law and Presumptions</u>

Description

It is not completely clear to what degree the level of impairment equates to driving while under the influence. Some courts have held that the slightest degree of impairment in the ability to drive means the driver is "under the influence." Other courts have held that there must be evidence of substantial impairment of the ability to drive before a DWI conviction is warranted. Therefore, proving that a driver was "under the influence" has been (and continues to be) difficult.

Remind participants that some state statutes vary regarding driving impairment.

To help resolve this difficulty, states have enacted implied consent laws. The principal purpose of the implied consent law is to encourage people arrested for DWI to submit to a chemical test to provide scientific evidence of alcohol influence.



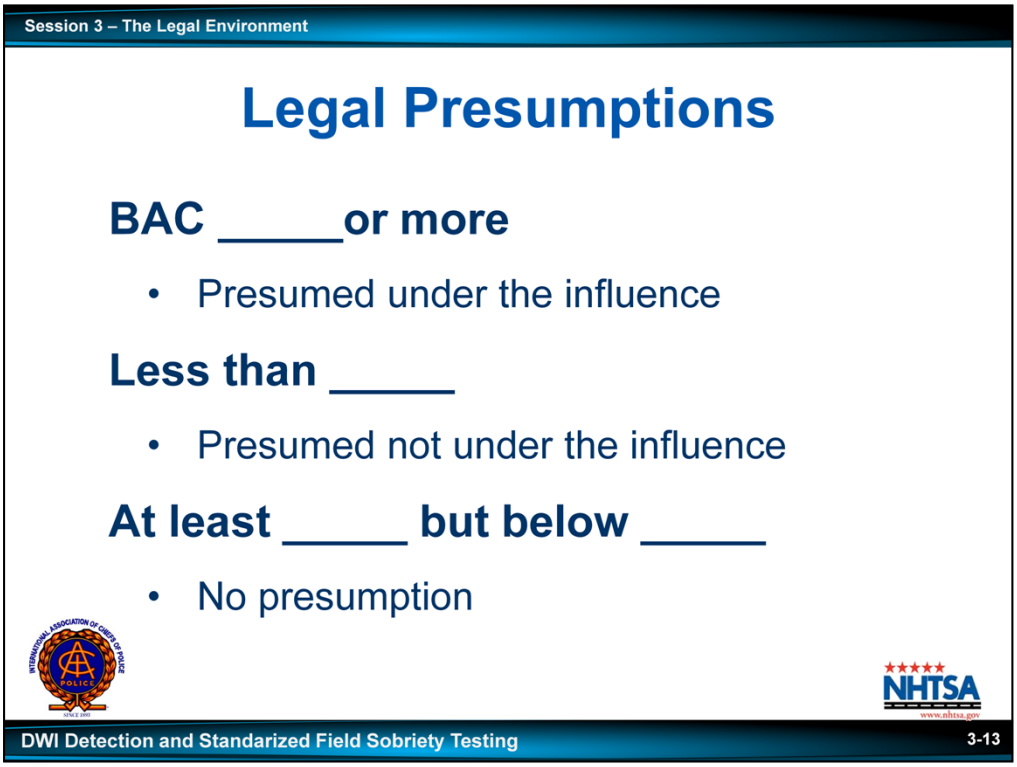
The implied consent law usually includes language similar to “Any person who”:

- Operates or is in actual physical control of a motor vehicle
- Upon the public highways of this state
- Shall be deemed to have given consent to a chemical test for the purpose of determining the alcohol and/or drug content of that person’s blood
- When arrested for any acts alleged to have been committed while the person was operating or in actual physical control of a vehicle while under the influence of alcohol and/or any drug.

Alter this slide to more accurately reflect the state statute. Review the local state’s implied consent statute at this time.

The implied consent law states drivers must submit to a chemical test(s). The law provides penalties for refusal to submit to the test. The law also provides that the individual's driver's license may be suspended or revoked if the refusal is found to be unreasonable. The purpose of the implied consent law is to encourage those arrested for DWI to submit to a chemical test so that valuable evidence may be obtained.

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



Legal presumptions define the significance of the scientific chemical test evidence. Usually the implied consent law provides an interpretation or presumption for the chemical test evidence like the following, for example:

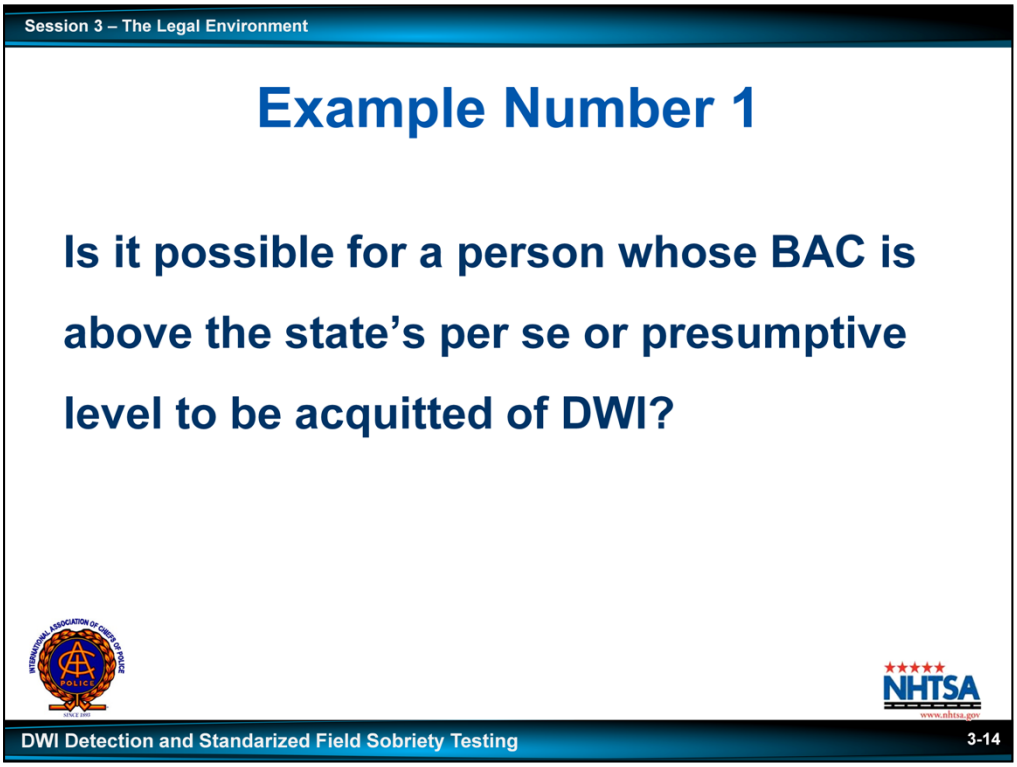
If the chemical test shows that the person's blood alcohol concentration (BAC) is .08 or more it shall be presumed that the person is under the influence.

In some states – If the test shows that the BAC is _____ or less, it shall be presumed that the person is not under the influence.

If the test shows that 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 court may accept the legal presumption and conclude that 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.



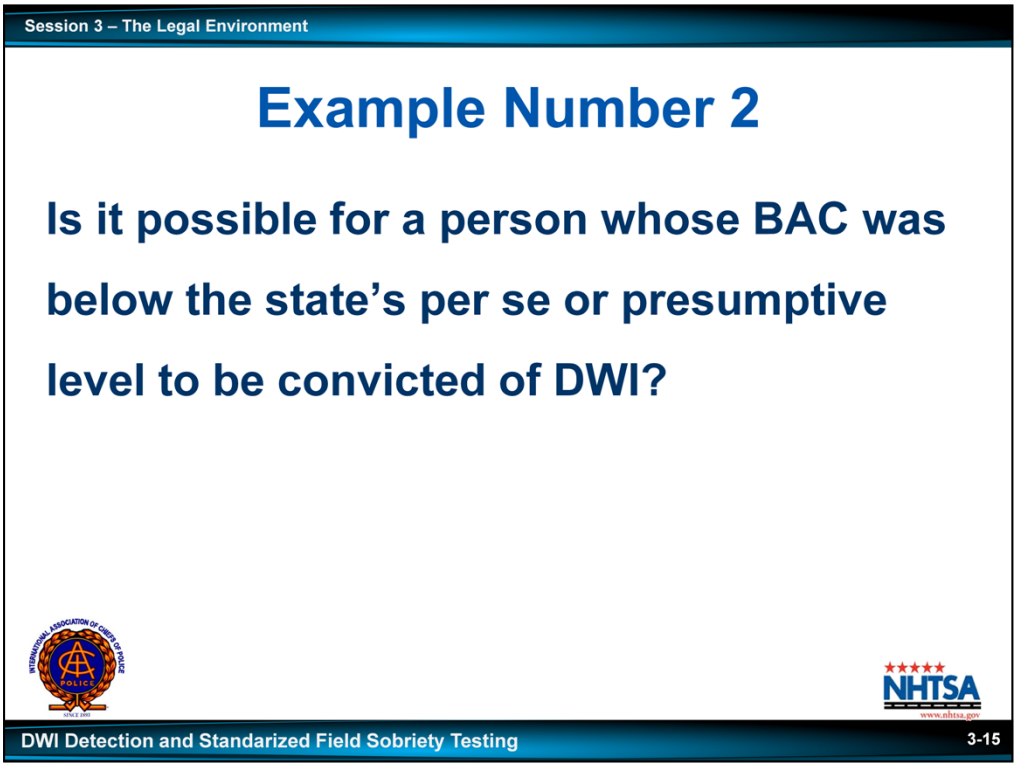
It is possible for a person whose BAC at the time of arrest is above the per se or presumptive level legal limit to be acquitted of DWI. It is also possible for a person whose BAC at the time is below the per se or presumptive level to be convicted of DWI. Consider the following examples:

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. In addition, the arresting officer testifies about the defendant's driving, appearance and behavior. The testimony is sketchy, confused and unclear.

Another witness testifies that the driver drove, behaved and spoke normally. The court finds the defendant not guilty of DWI.

***Emphasize: Participants must be prepared to articulate the impairment exhibited by the defendant at the time of the stop*.**

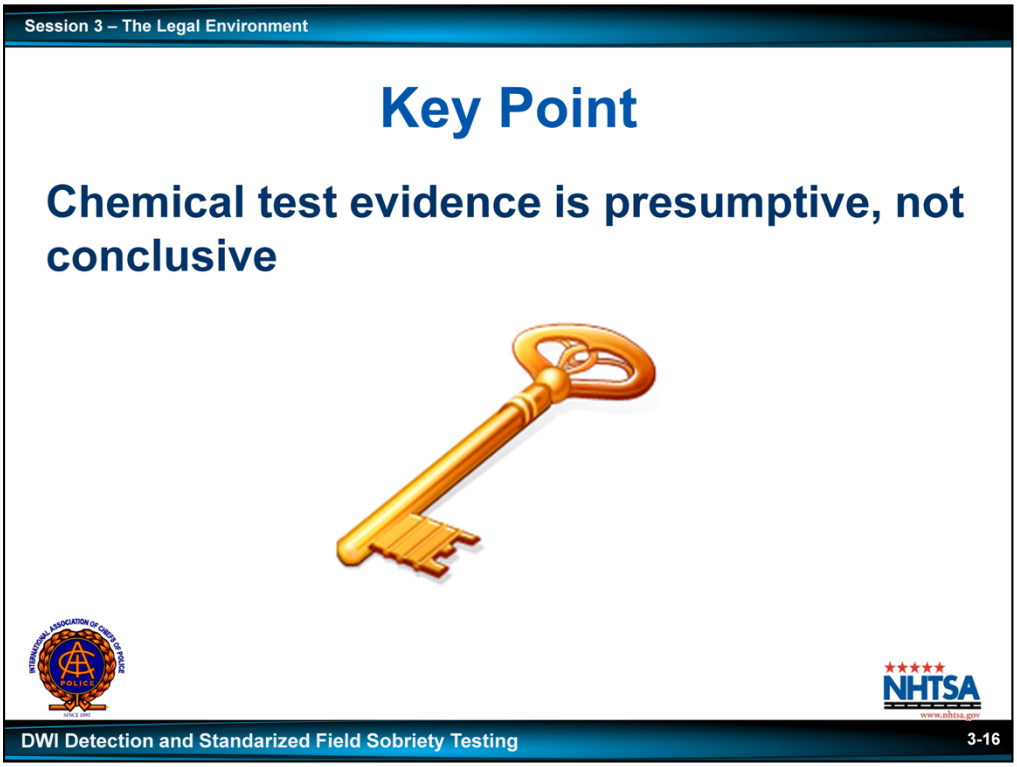


Example 2

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.

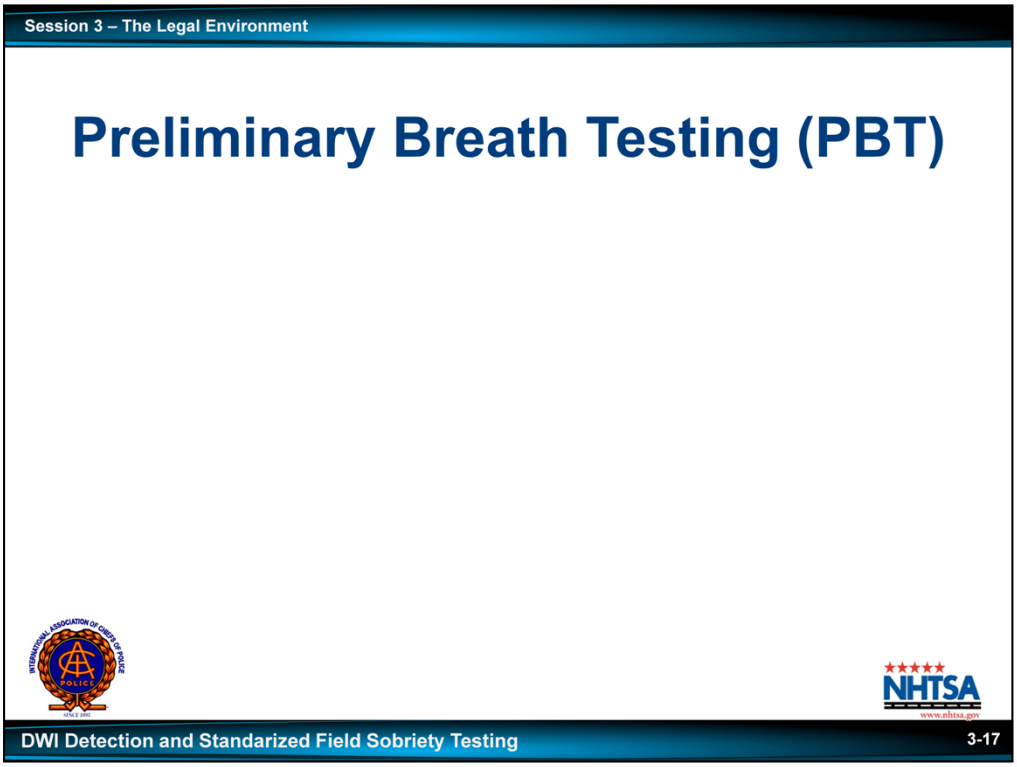
The difference in outcomes in the two examples cited is directly attributable to how well the arresting officer articulates the evidence other than the chemical test. Remember that the chemical test provides presumptive evidence of alcohol influence; it does not provide conclusive evidence. While the "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 that "legal limit" does not actually exist. Statutory BACs establish an illegal limit.



Summary point: The chemical test provides presumptive evidence of alcohol influence, but does not provide conclusive evidence.

Solicit participant's questions concerning the nature and legal significance of "presumptive evidence."

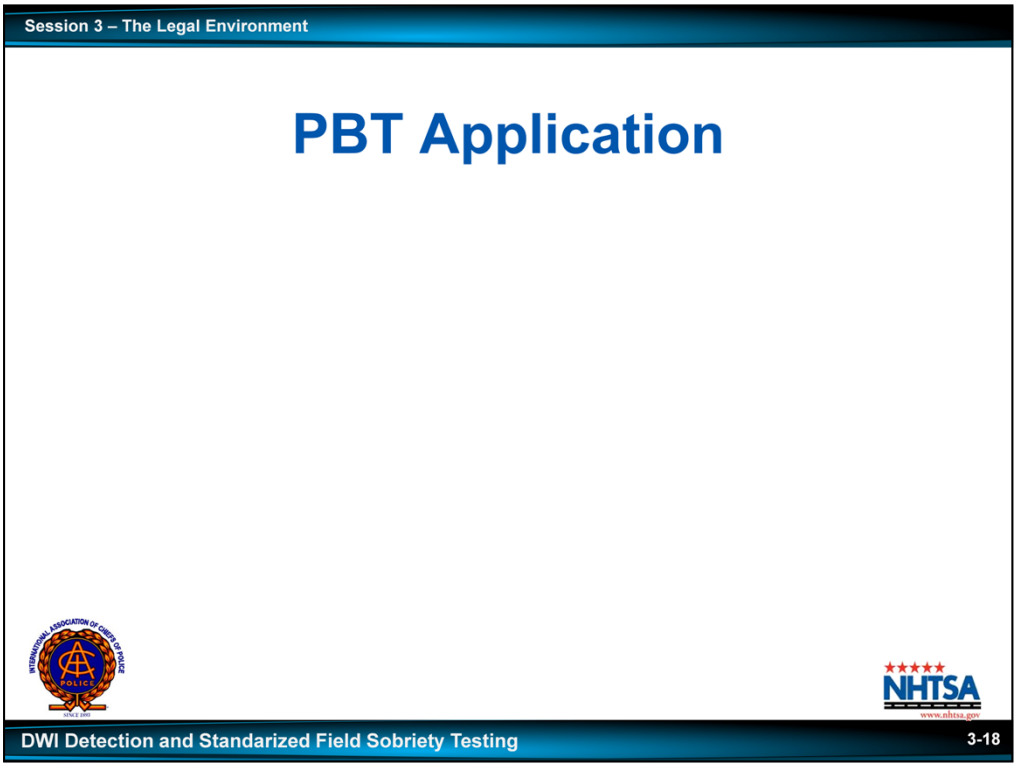


D. <u>Preliminary Breath Testing</u>

Description

Many states have enacted preliminary breath testing (PBT) laws. These laws permit a police 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. A typical statute reads as follows:

"When an officer has reason to believe from the manner in which a person is operating or has operated a motor vehicle that the person has or may have committed the offense of operating while under the influence, the officer may request that person to provide a sample of breath for a preliminary test of the alcohol content of the blood using a device approved for this purpose."



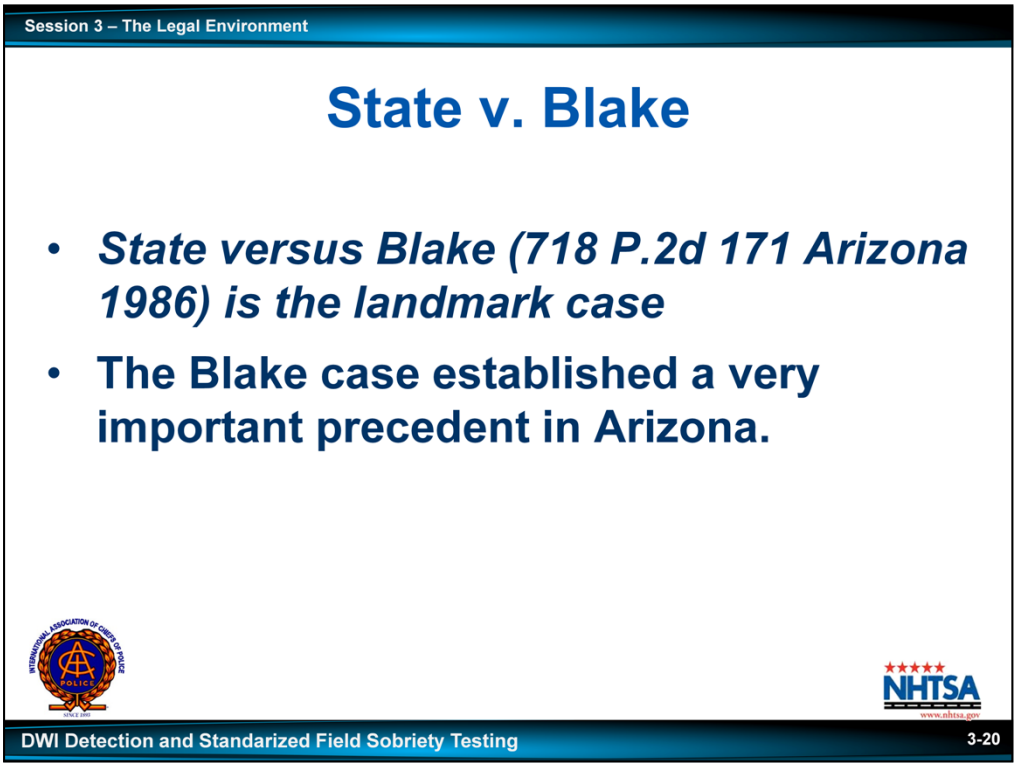
Application

PBT results are used to assist in determining whether an arrest should be made. The results usually are not admissible as substantive evidence against the defendant in court. 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. <u>Case Law Reviews</u>

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.



Emphasize that Blake is the landmark case.

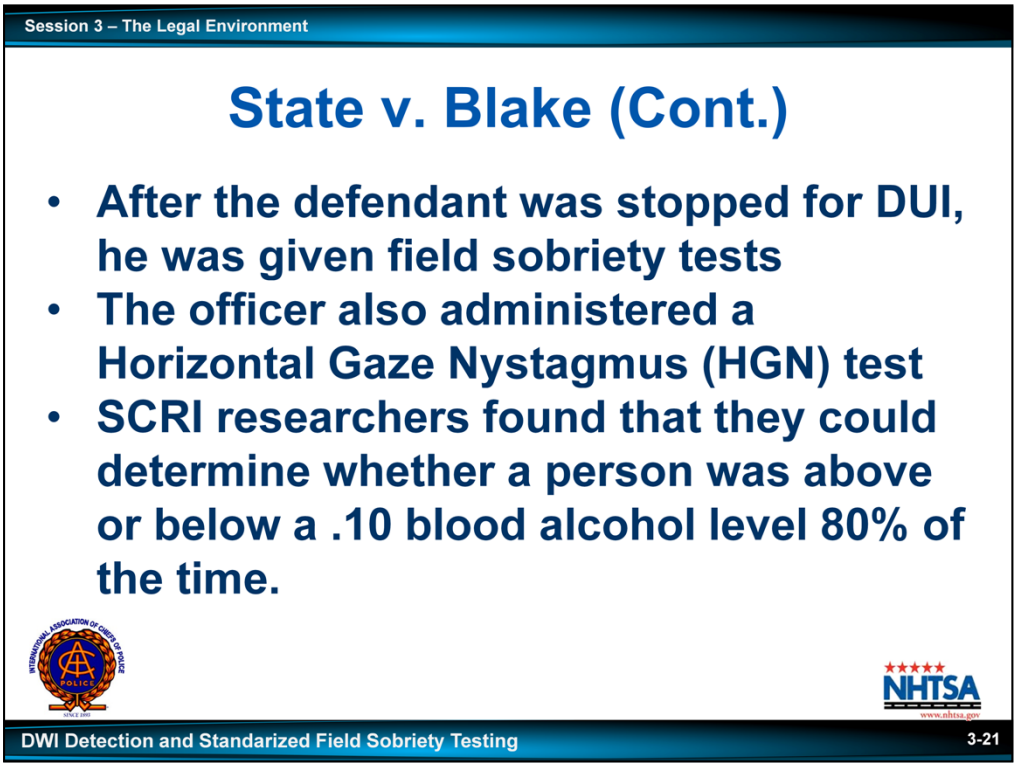
State versus Blake (718 P.2d 171 Arizona 1986)

The State of Arizona (Petitioner) vs. The Superior Court of the State of Arizona, in and for the county of Cochise, and the Hon. James L. Riles, Division III (Respondent) and Frederick Andrew Blake (Real Party in Interest) No. 18343-PR Court of Appeals No. 2 CA-SA 0254 Cochise Co. No. 11684 April 7, 1986.

The Blake case established a very important precedent in Arizona. The trial court ruled that the HGN test was not reliable under Frye v. United States, 293 F.2d 1013 (DC Cir. 1923) and thus could not be used as part of probable cause. The case was dismissed by the trial court. This ruling was appealed by the state and the order of dismissal was reversed by the court of appeals and the case was remanded for further proceedings (7/25/85).

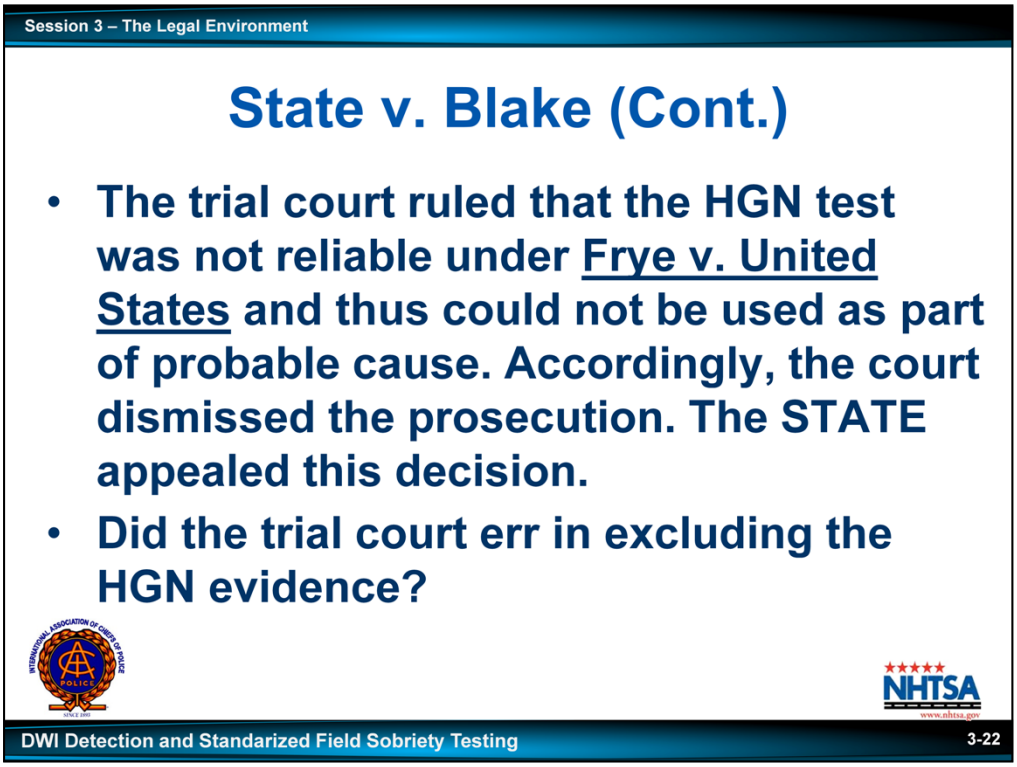
The appellate court decision was reviewed by the State Supreme Court. The State Supreme Court approved the court of appeal's opinion, as modified, and vacated the trial court's dismissal of the Blake prosecution for DWI and remanded the case for proceedings not inconsistent with its opinion.

Following is a summary of the facts of the case and a brief overview of the appellate court and Supreme Court opinions.



FACTS: After the defendant was stopped for DUI, he was given field sobriety tests on which he did fair. The officer also administered a Horizontal Gaze Nystagmus (HGN) test and estimated that defendant's blood alcohol content was .17. The intoxilyzer showed a .163 reading. At the motion to suppress, the state presented testimony from the SCRI project director which originally researched the HGN test.

SCRI researchers found that they could determine whether a person was above or below a .10 blood alcohol level 80% of the time. Finnish researchers had reached the same results. The project director testified that HGN has been accepted by various researchers, various police agencies and the National Highway Traffic Safety Administration. The police officer who helped develop and standardize HGN testified about his field experience with HGN and his work in the research on HGN. The officer testified that HGN was particularly useful in detecting drivers who had over .10 alcohol in their blood who would otherwise pass the field sobriety tests. The Arizona officer who administers HGN training testified that experienced drinkers with .13 or .14 reading could pass the other field sobriety tests and evade arrest. He testified that to be certified for HGN the officer had to perform 35 practice tests and then had to pass an exam where they must determine the blood alcohol level of subjects within .02 four out of five times.

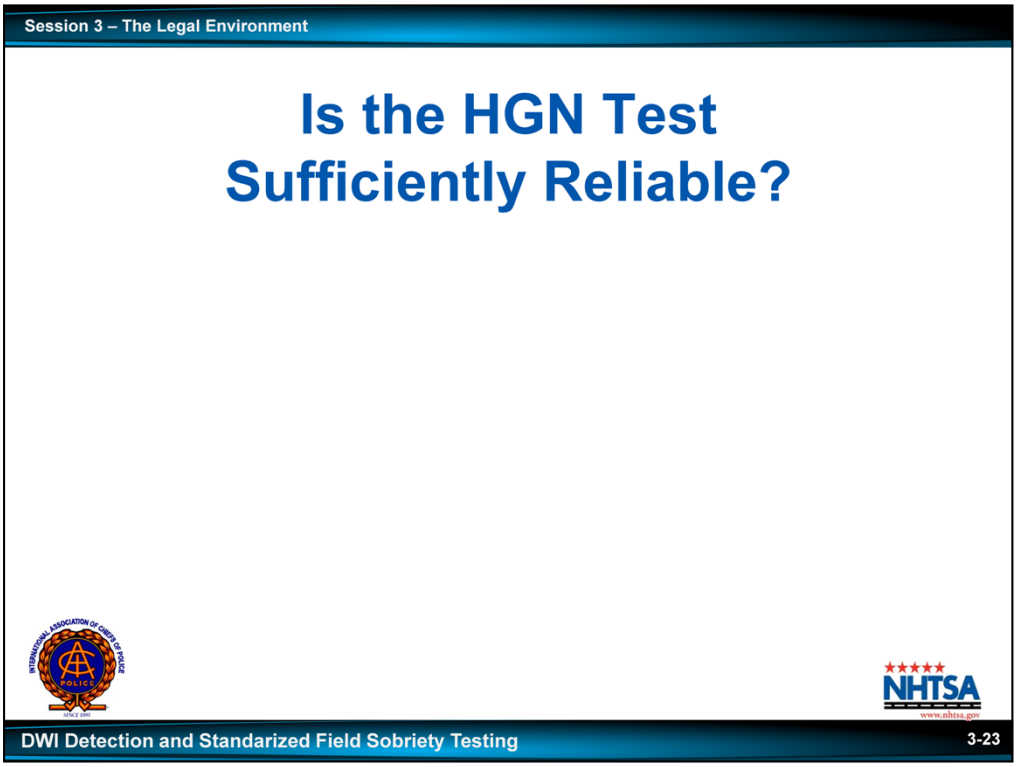


The training officer also testified that the officer must continue to use the test regularly in the field and should be evaluated to make sure the officer maintains his proficiency. The arresting officer testified that he was certified as an HGN specialist. The arresting officer testified without HGN results, he did not think he had probable cause to arrest the defendant. The trial court ruled that the HGN test was not reliable under Frye v. United States and thus could not be used as part of probable cause. Accordingly, the court dismissed the prosecution. The STATE appealed this decision.

ISSUE: Did the trial court err in excluding the HGN evidence?

RULING: Yes, "We conclude that the record shows not only that the HGN is sufficiently reliable to provide probable cause for arrest, but that with the proper foundation as to the expertise of the officer administering it, testimony concerning the administration of the test and its results is admissible at trial. The record shows that the HGN test has gained general acceptance in the field in which it belongs." The court went on to say that they were unable to rule on whether the results of this particular HGN test would be admissible because the only evidence about the officer's proficiency was his testimony that he was certified. The court of appeals noted that the officer kept a log of when he administered the test and said, "This log would be useful if it demonstrated that (the arresting officer) was as proficient in the field as he was on the examination." The order of dismissal is reversed and the case is remanded for further proceedings.

Mr. Blake sought review of the court of appeals opinion and it was granted by the Arizona Supreme Court.

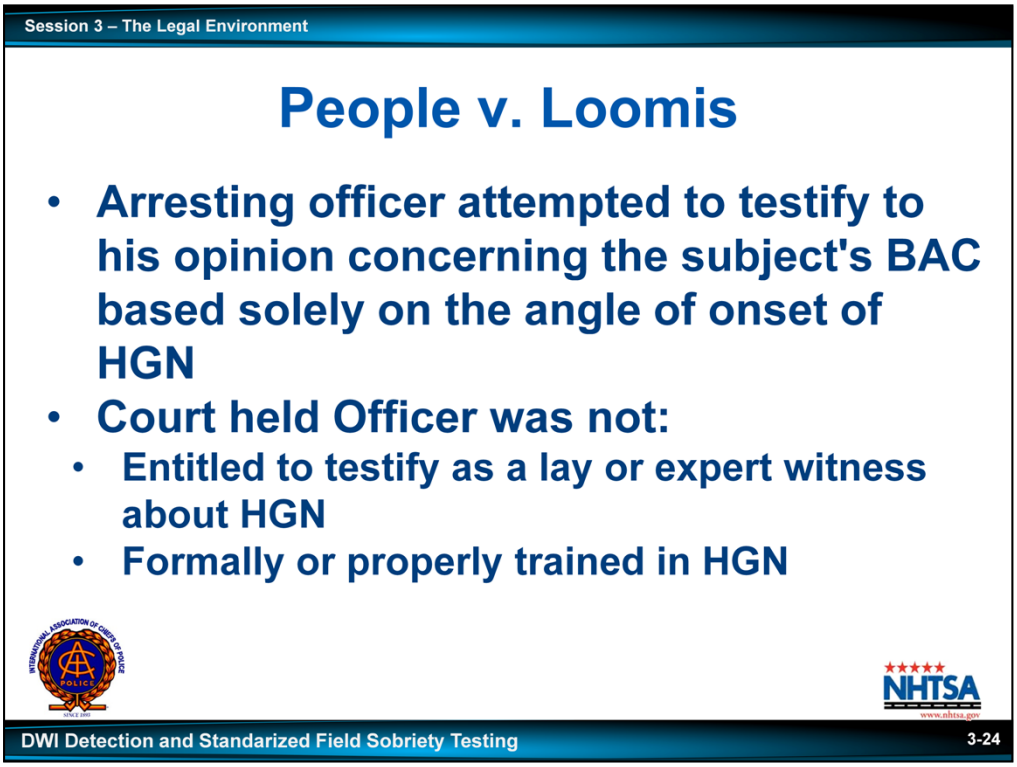


ISSUES: Whether the HGN test is sufficiently reliable to establish probable cause to arrest for DWI

Whether HGN test results are sufficiently reliable to be introduced in evidence at trial.

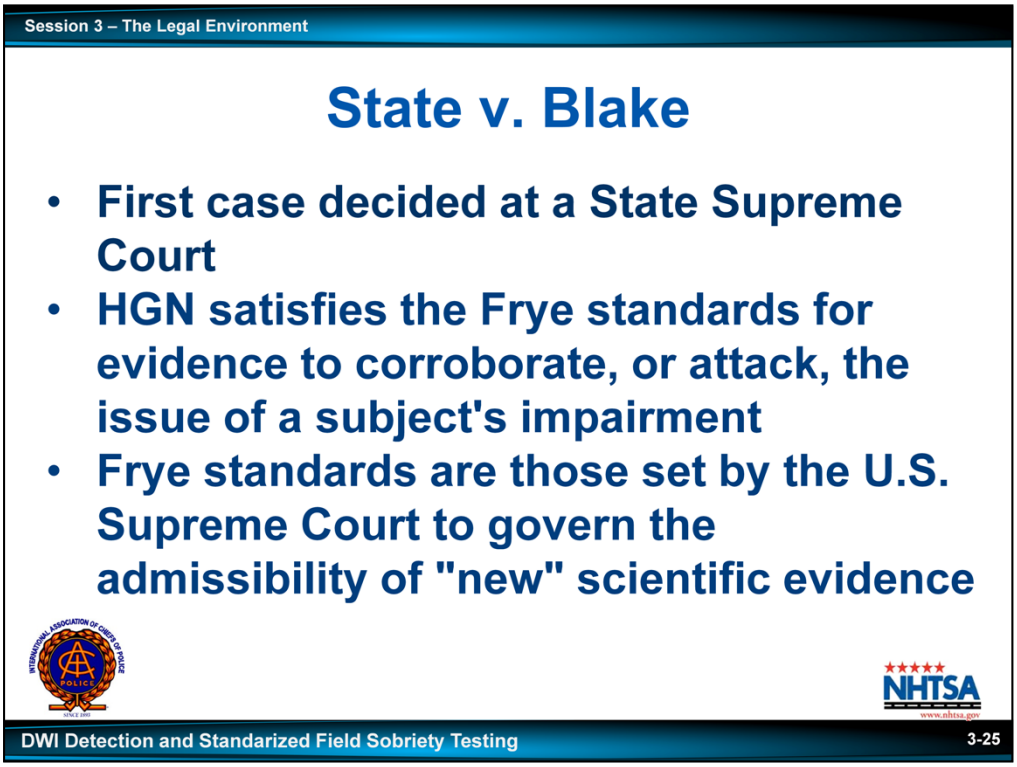
CONCLUSION: "We find that the Horizontal Gaze Nystagmus test properly administered by a trained police officer is sufficiently reliable to be a factor in establishing probable cause to arrest a driver for violating A.R.S.28-692(B). We further find that the Horizontal Gaze Nystagmus test satisfies the Frye test for reliability and may be admitted in evidence to corroborate or attack, but not to quantify, the chemical analysis of the accused's blood alcohol content. It may not be used to establish the accused's level of blood alcohol in the absence of a chemical analysis showing the proscribed level in the accused's blood, breath or urine. In subsection (A) prosecutions it is admissible, as is other evidence of defendant's behavior, to prove that he was under the influence."

We approve the court of appeals' opinion, as modified, vacate the trial court's dismissal of the Blake prosecution for violation of A.R.S.28-792(B), and remand for proceedings not inconsistent with this opinion.



A detailed analysis of the facts reviewed by the Supreme Court is contained in the opinion PEOPLE vs. LOOMIS (California, 1984) 156 Cal. App. 3d 1, 203 Cal. Rptr. 767 (Cal. Super. 1984).

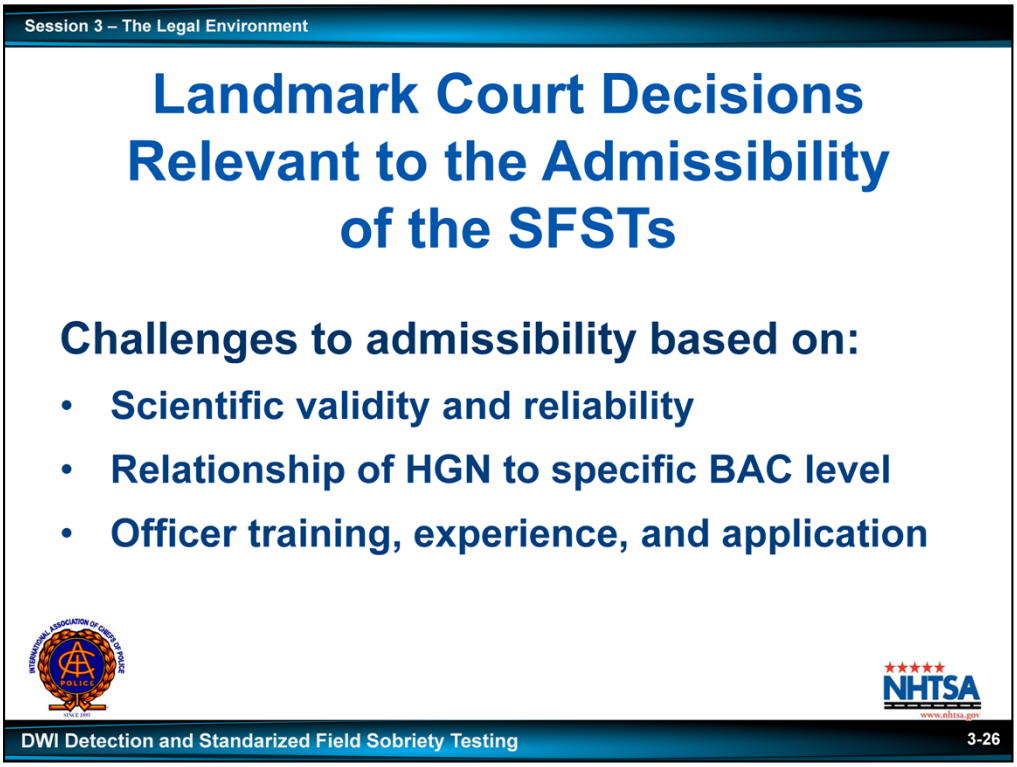
The arresting officer attempted to testify to his opinion concerning the subject's BAC, in quantitative terms, based solely on the angle of onset of HGN. The subject had refused to submit to a chemical test. The court held that the officer was not entitled to testify as either a lay or expert witness about HGN, or to give his opinion about the defendant's BAC. The court held that HGN is a new form of scientific evidence that will be allowed only when there is a preliminary showing of its general acceptance in the scientific community. Moreover, it was clear from the officer's testimony that he had not been formally or properly trained in HGN, and didn't really understand how the test is to be given.



STATE vs. BLAKE (Arizona, 1986) 718 P.2d 171 (Arizona, 1986); see also State vs. Superior Court of County of Cochise, 149 Ariz 269, 718 P.2d 171, 60 ALR 4th, 1103.

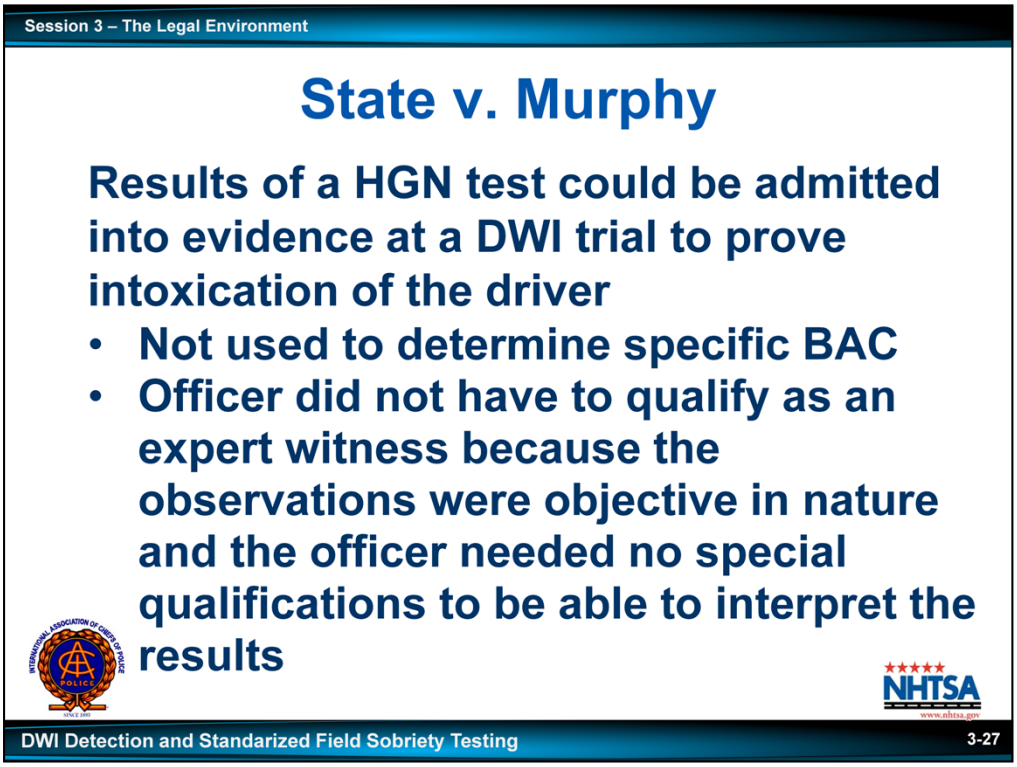
This is the landmark ruling on HGN because it was the first case decided at a State Supreme Court. The Arizona Supreme Court found that HGN satisfies the Frye standards for evidence to corroborate, or attack, the issue of a subject's impairment.

The Frye standards are those set by the U.S. Supreme Court to govern the admissibility of "new" scientific evidence. In effect, the Arizona Supreme Court took judicial notice of HGN, so that it is no longer necessary, in Arizona, to introduce expert scientific testimony to secure the admissibility of HGN. However, the court did set standards governing the training of officers who would be qualified to testify about HGN, and the court explicitly ruled that HGN cannot be used to establish BAC quantitatively in the absence of a chemical test.



The following cases are landmark court decisions relevant to the admissibility of the SFSTs including Horizontal Gaze Nystagmus.

- Challenges to the admissibility have been based on:
- Scientific validity and reliability. (See Blake case)
- Relationship of HGN to specific BAC level. (See Loomis case)
- Officer training, experience, and application. (See Murphy case, See Homan case, See Smith case)



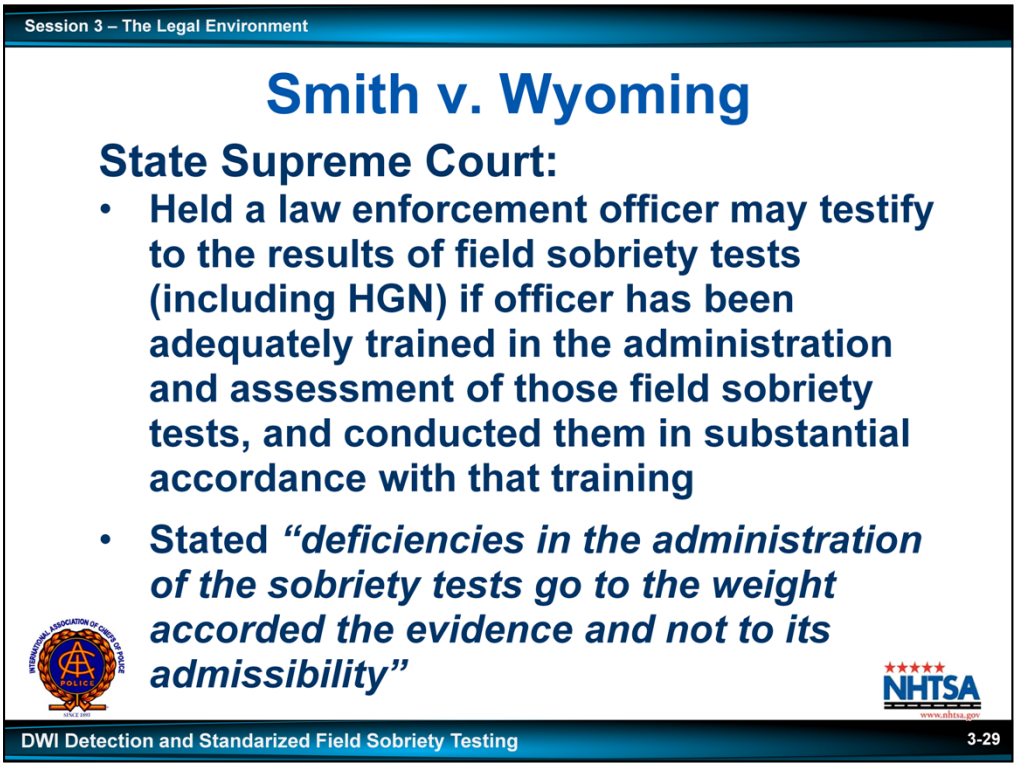
STATE vs. MURPHY (451 N.W.2d 154 Iowa, 1990)

The court held that the results of a HGN test could be admitted into evidence at a DWI trial to prove the intoxication of the driver. (Not to be used to determine specific BAC level.) The court considered HGN to be one of the SFST's officers administer and in this case the officer was properly trained to administer the test. The court felt that the officer did not have to qualify as an expert witness because the observations were objective in nature and the officer needed no special qualifications to be able to interpret the results.

STATE v. HOMAN (732 N.E.2d 952, OHIO 2000)

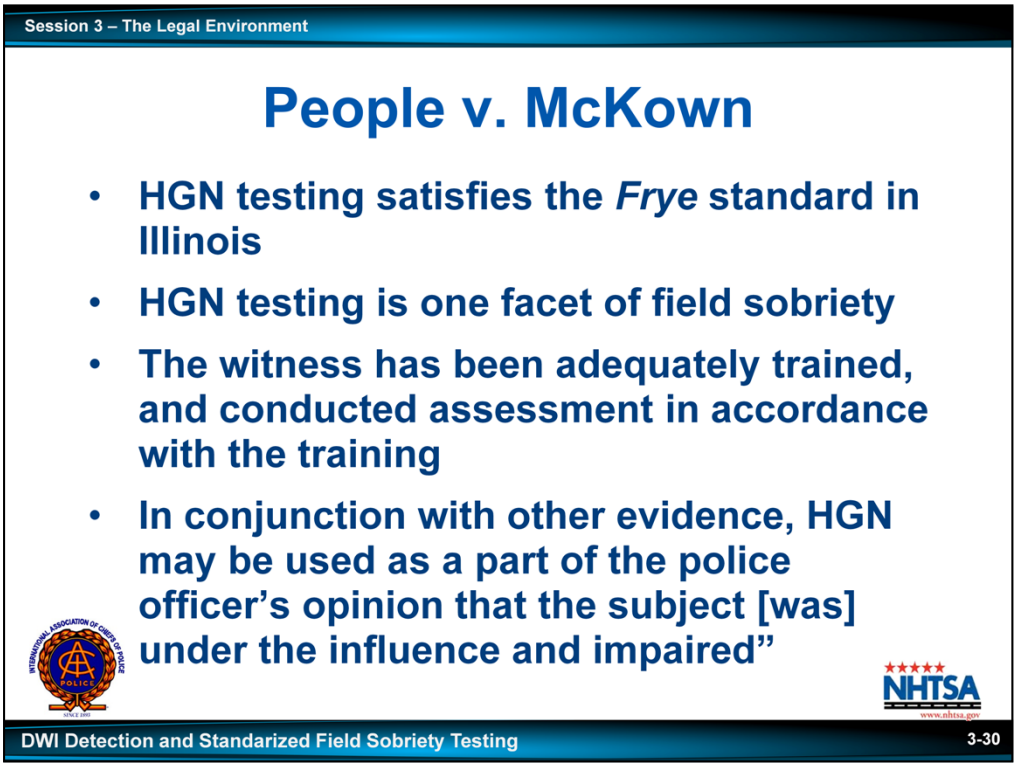
This significant State Supreme Court case held that Standardized Field Sobriety Tests (SFSTs) conducted in a manner that departs from the methods established by the National Highway Traffic Safety Administration (NHTSA) “are inherently unreliable”. The court determined that the administration of the SFSTs, including the One leg Stand and Walk and Turn tests, must be performed in strict compliance with the directives issued by NHTSA.

The court concluded that because the arresting officer admitted to not having strictly complied with established police procedure during the administration of the HGN and Walk and Turn tests, the results of the SFSTs must be excluded. In contrast with other court rulings, the *HOMAN* court found *“it is well established that in field sobriety testing even minor deviations from the standardized procedures can severely bias the results.”* This decision was based upon an older edition of this manual where an ambiguous phrase was strictly interpreted by the court. The phrase in question only applied to the use of SFSTs for training purposes.



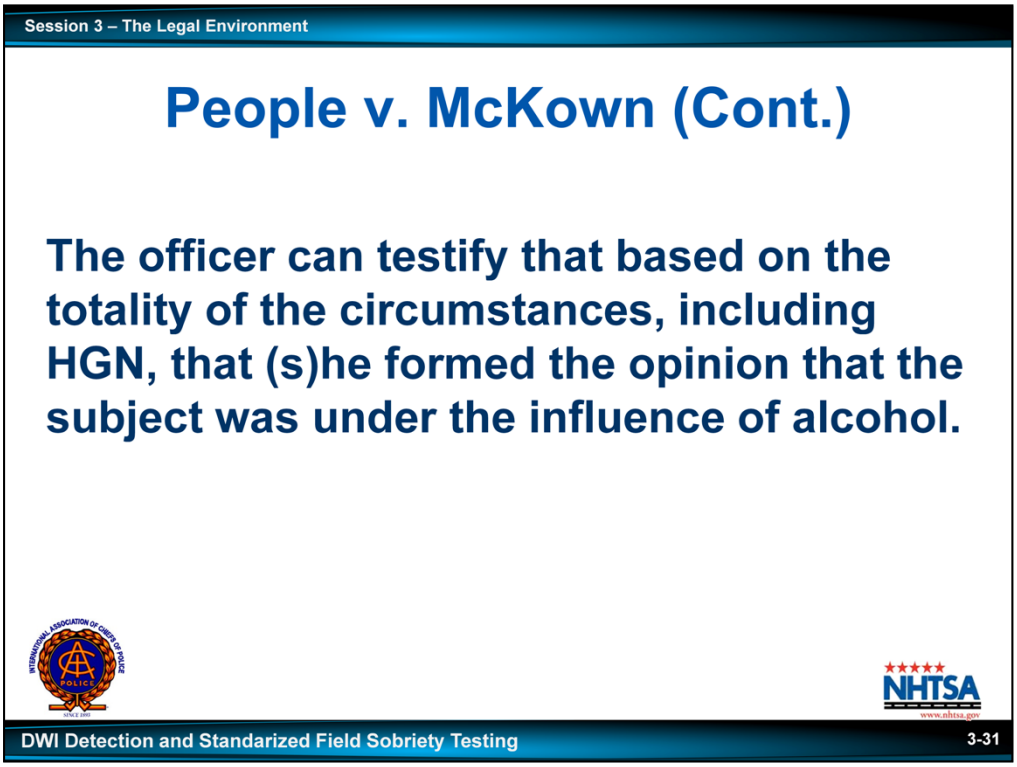
SMITH vs. WYOMING (11 P.3d 931 Wyoming, 2000)

The State Supreme Court held a law enforcement officer may testify to the results of field sobriety tests (including HGN) if it is shown that the officer has been adequately trained in the administration and assessment of those field sobriety tests, and conducted them in substantial accordance with that training. The court further stated *"deficiencies in the administration of the sobriety tests go to the weight accorded the evidence and not to its admissibility."*

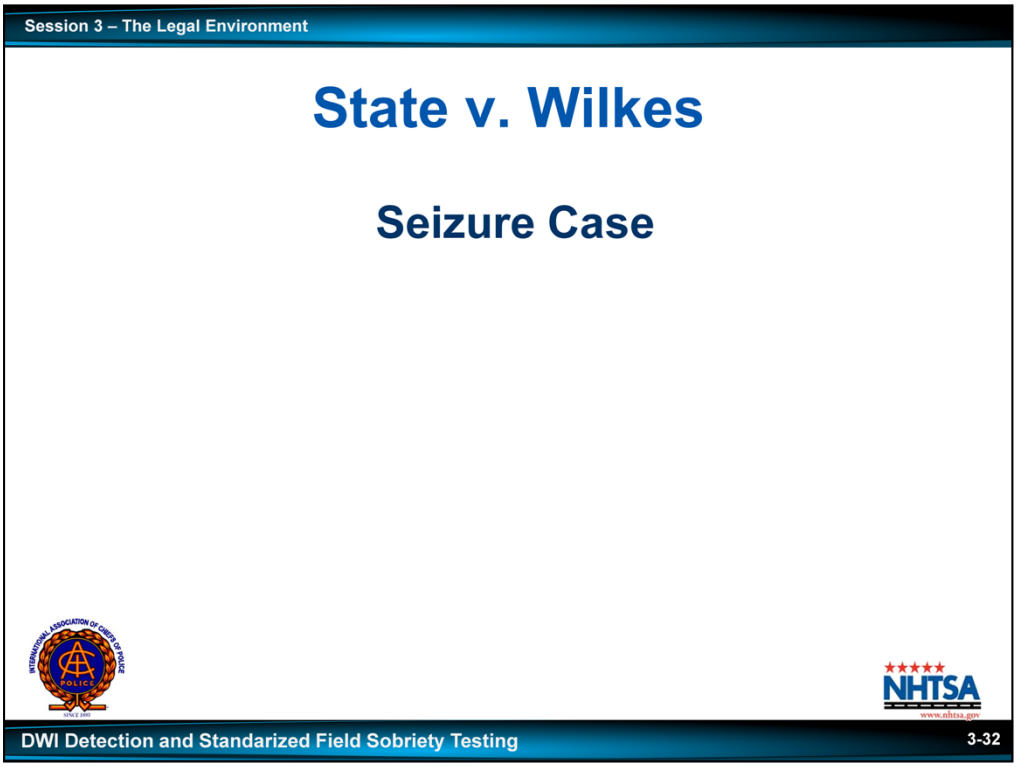


PEOPLE v. MCKOWN, (226 Ill. 2d 245 ILLINOIS 2007).

In February 2010, the Illinois Supreme Court issued an opinion indicating that HGN satisfies the Frye standard. This decision came upon a review of a fully litigated Frye hearing on HGN at the trial court level. The Supreme Court upheld and adopted the findings of the trial court, which are as follows: "(1) HGN testing satisfies the *Frye* standard in Illinois; (2) HGN testing is but one facet of field sobriety testing and is admissible as a factor to be considered by the trier of fact on the issue of alcohol or drug impairment; (3) A proper foundation must include that the witness has been adequately trained, has conducted testing and assessment in accordance with the training, and that he administered the particular test in accordance with his training and proper procedures; (4)[Testimony regarding] HGN testing results should be limited to the conclusion that a "failed" test suggests that the subject may have consumed alcohol and *may [have] be[en]* under the influence. There should be no attempt to correlate the test results with any particular blood-alcohol level or range or level of intoxication; (5) In conjunction with other evidence, HGN may be used as a part of the police officer's opinion that the subject [was] under the influence and impaired." (Emphasis in original.)

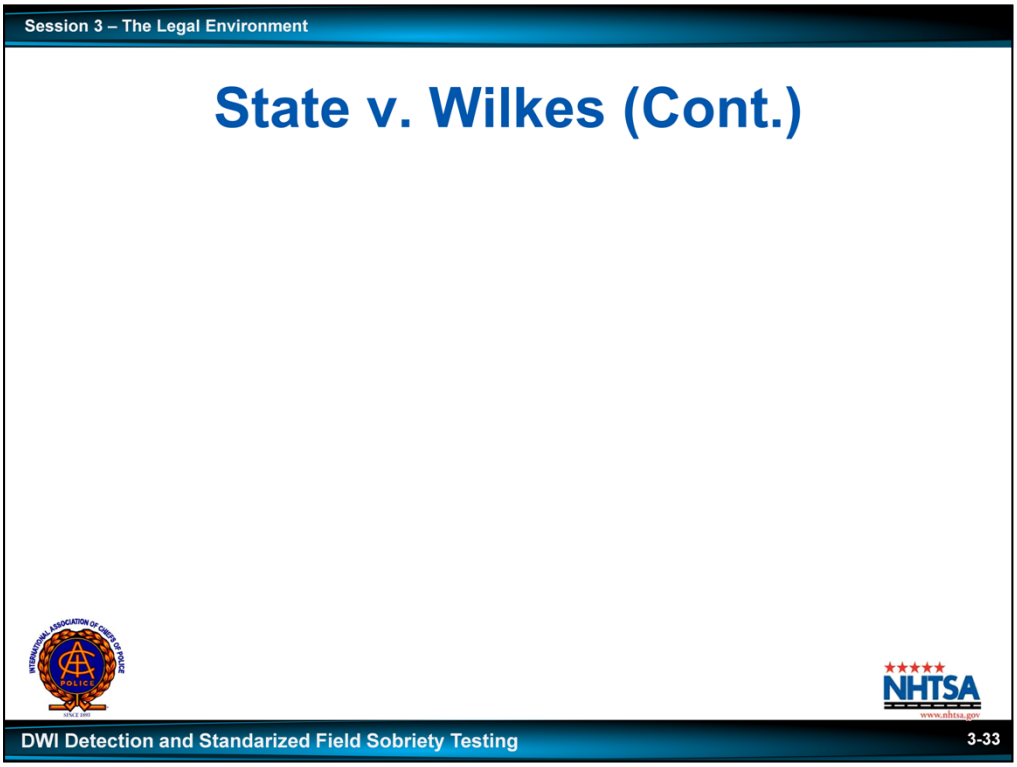


While HGN is admissible at a trial for DUI, the officer will be required to testify to the proper foundation. First, (s)he will have to testify regarding training and experience. That training will have to comply with the NHTSA standards, although whether that compliance is strict or substantial is unknown at this point. Second, the officer will have to testify as to how (s)he conducted the test on that particular occasion and will have had to have conducted the test in accordance with NHTSA training and standards. Once the proper foundation is met, the officer will be able to testify as to his or her observations and that the results of the test indicated that the subject had been drinking and may be impaired. Finally, the officer can testify that based on the totality of the circumstances, including HGN, that (s)he formed the opinion that the subject was under the influence of alcohol.



State v. Wilkes, (756 N.W.2d 838 Iowa 2008)

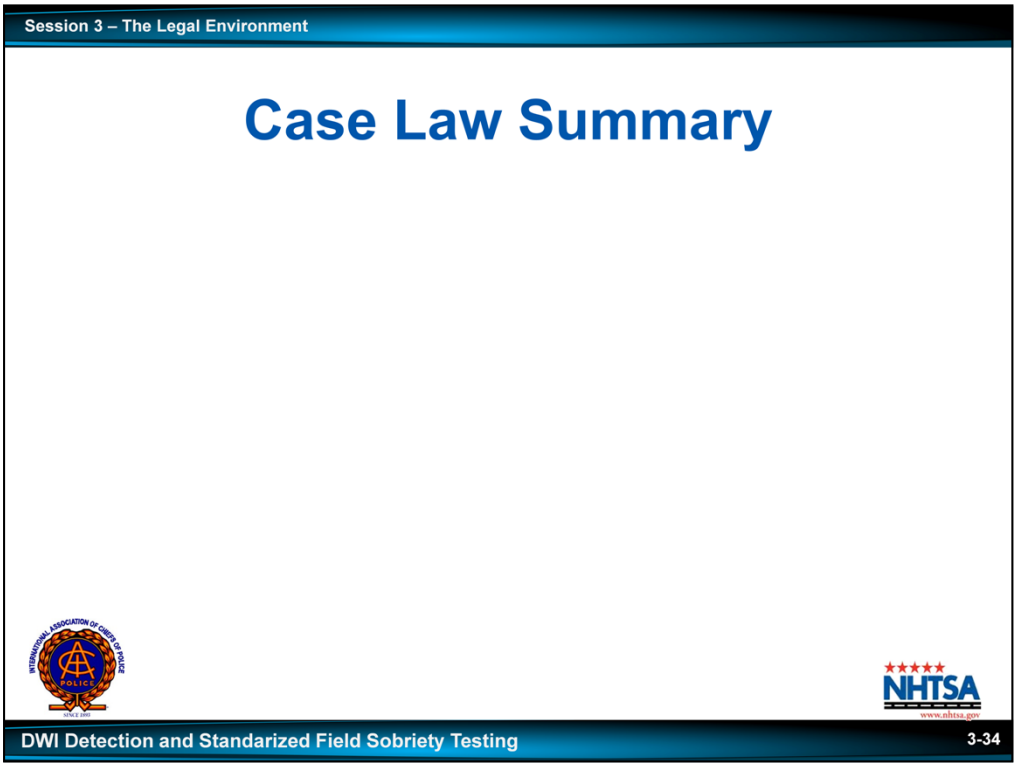
Wilkes was not originally looked at as a SFST case but rather a seizure case. However, at the urging of the Iowa TSRP the court closely looked at the issue of SFSTs. Wilkes claimed the State lacked probable cause to invoke implied consent pursuant to Iowa Code section 32 1J.6. To support his argument, Wilkes argued that the officer improperly administered the walk and turn and one leg stand tests. Even if true, any irregularity with respect to the walk and turn and one leg stand tests has no legal significance. The officer smelled the strong odor of alcohol on Wilkes' breath, obtained a concession that he had been drinking, and performed the horizontal gaze nystagmus (HGN) test. Based on this information, the officer had an articulable suspicion to administer a preliminary breath test (PBT) pursuant to Iowa Code section 321J.5(1)(a). The results of the PBT constituted probable cause to invoke implied consent. Iowa Code § 321J.6(1)(d); State v. Horton, 625 N.W.2d 362, 364 (Iowa 2001).



In determining grounds to arrest and/or invoke implied consent, the Court reviewed and considered the evidentiary value of all circumstances, including the defendant's statements, officer's observations of smell of alcohol, and SFST results even where two tests of the three SFSTs may not have been administered with textbook precision.

Remind students that additional case law can be obtained through your state's Traffic Safety Resource Prosecutor (TSRP). For the contact information of your TSRP go to: www.ndaa.org/apri/programs/traffic/legal_issues_resources.html

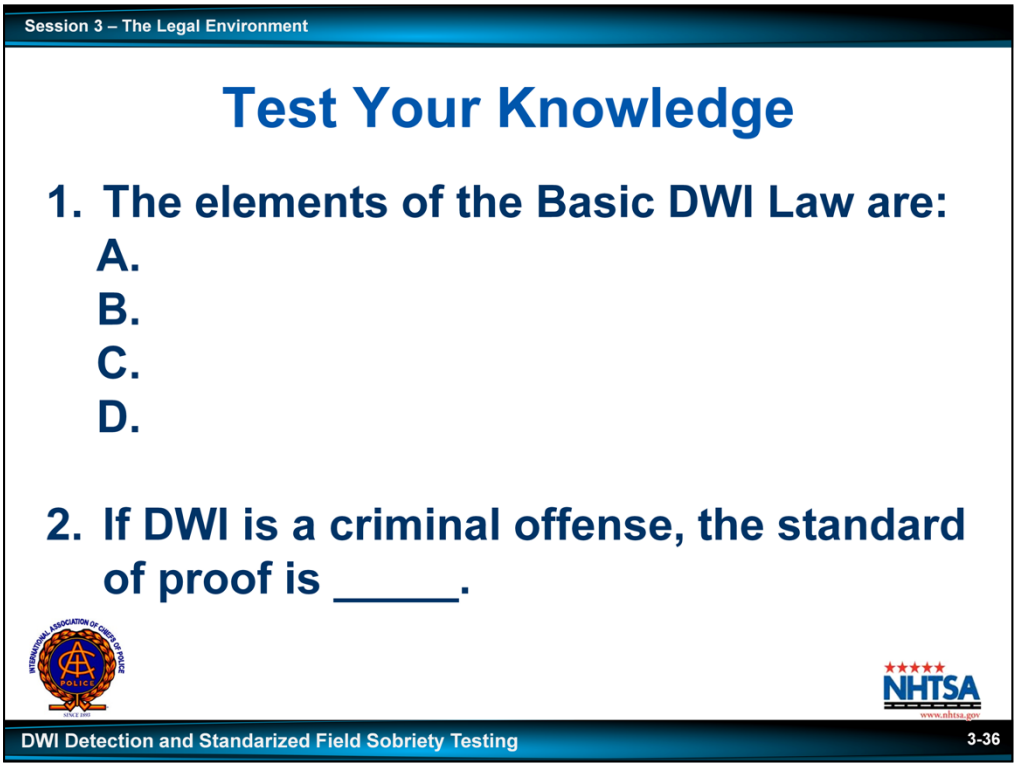
The National Traffic Law Center (NTLC) has a list of every state's Appellate Court/ Supreme Court case addressing HGN and SFST issues. The materials are available to law enforcement at www.ndaa.org/apri/NTLC or by phone (703) 549-4253.



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 Standardized Field Sobriety Tests in accordance with the NHTSA/IACP guidelines and not significantly deviate from the established administrative procedures.

QUESTIONS?



INSTRUCTIONS: Complete the following sentences.

1. ***The elements of the Basic DWI Law are:***

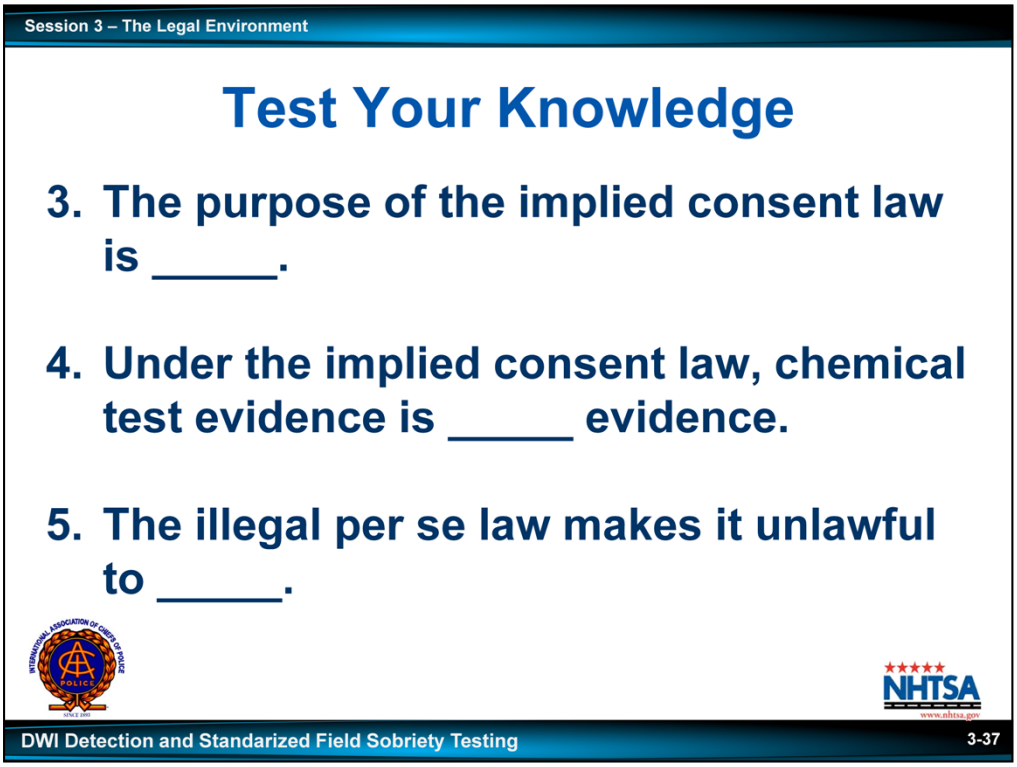
A. <u>a person</u>

B. <u>operation or actual physical control</u>

C. <u>a vehicle or motor vehicle</u>

D. <u>under the influence</u>

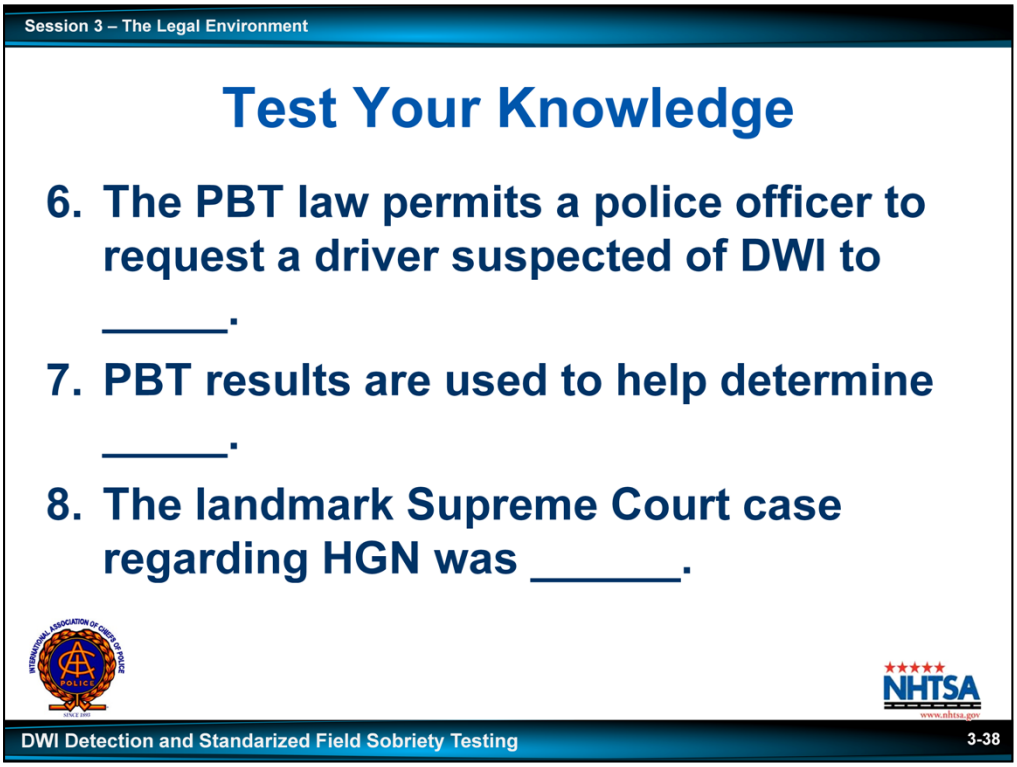
2. ***If DWI is a criminal offense, the standard of proof is <u>beyond a reasonable doubt</u>.***



3. ***The purpose of the implied consent law is <u>encourage a driver arrested for DWI to provide a chemical test for evidence</u>.***

4. ***Under the implied consent law, chemical test evidence is <u>presumptive</u> evidence.***

5. ***The illegal per se law makes it unlawful to <u>drive with a prescribed BAC level</u> .***



6. ***The PBT law permits a police officer to request a driver suspected of DWI to <u>submit to a roadside breath test</u>.***

7. ***PBT results are used to assist in determining <u>whether a driver should be</u> <u>arrested for DWI</u>.***

8. ***The landmark Supreme Court case regarding HGN was _____.***

A. O'Leary
B. Paquette
C. <u>Blake</u>
D. Overton