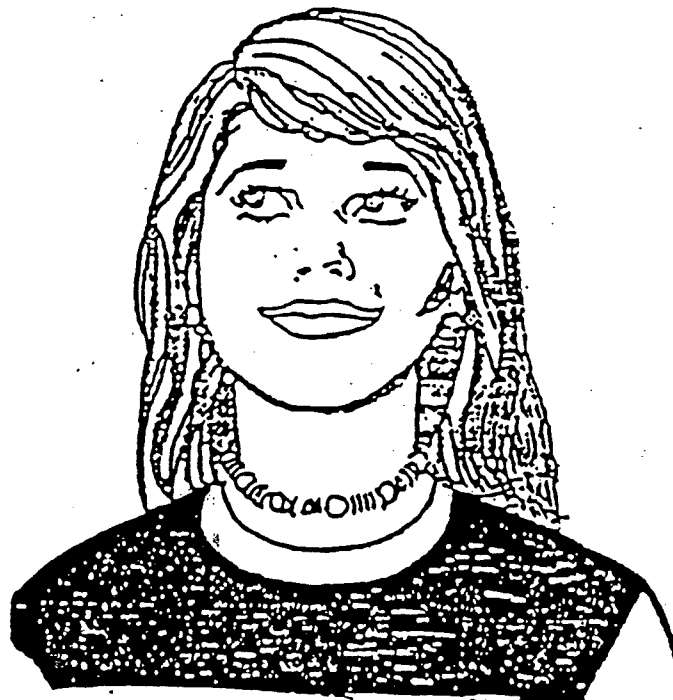
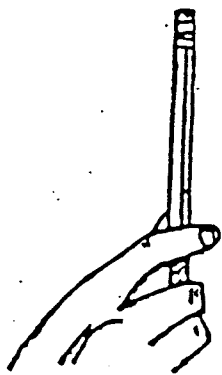
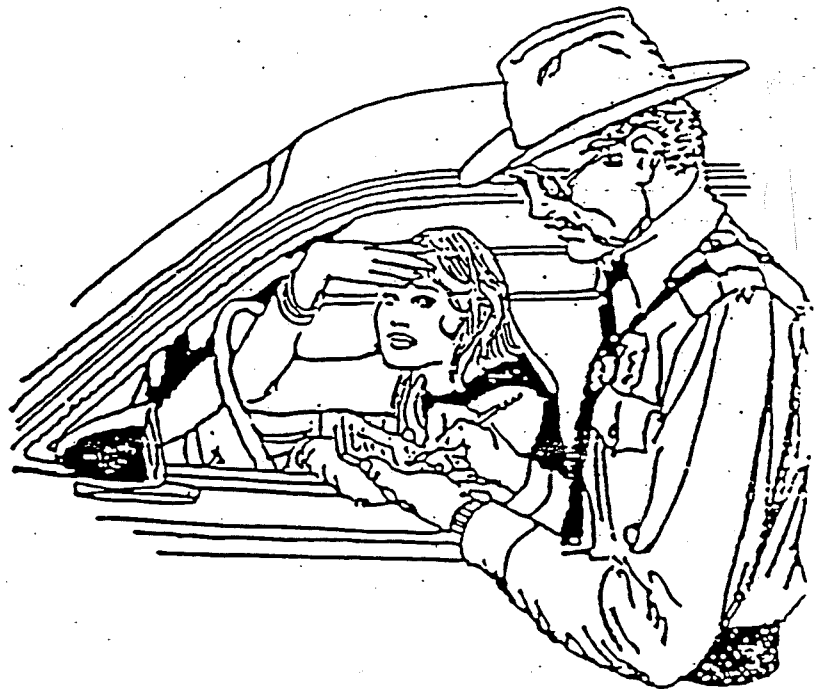


DWI
DETECTION
AND
STANDARDIZED
FIELD
SOBRIETY
TESTING



STUDENT
MANUAL

TRUE COPY ATTEST

LIZABETH CONWAY
RECORDS OFFICER

DETECTION AND GENERAL DETERRENCE

DWI DETECTION AND STANDARDIZED FIELD SOBRIETY TESTING

TRAINING GOALS AND OBJECTIVES

1. Ultimate Goal

To increase deterrence of DWI violations, and thereby reduce the number of accidents, deaths and injuries caused by impaired drivers.

2. Enforcement-Related Goals

- a. Understand enforcement's role in general DWI deterrence.
- b. Understand detection phases, cues and techniques.
- c. Understand requirements for organizing and presenting testimonial and documentary evidence in DWI cases.

3. Job Performance Objectives

As a result of this training, students will become significantly better able to:

- a. Recognize and interpret evidence of DWI violations.
- b. Administer and interpret standardized field sobriety tests.
- c. Describe DWI evidence clearly and convincingly in written reports and verbal testimony.

4. Enabling Objectives

In pursuit of the job performance objectives, students will come to:

- a. Understand the tasks and decisions of DWI detection.
- b. Recognize the magnitude and scope of DWI-related accidents, deaths, injuries, property loss and other social aspects of the DWI problem.
- c. Understand the deterrence effects of DWI enforcement.
- d. Understand the DWI enforcement legal environment.
- e. Know and recognize typical vehicle maneuvers and human indicators symptomatic of DWI that are associated with initial observation of vehicles in operation.
- f. Know and recognize typical reinforcing maneuvers and indicators that come to light during the stopping sequence.

- g. Know and recognize typical sensory and other cues of alcohol and/or drug influence that may be discerned during face-to-face contact with DWI suspects.
- h. Know and recognize typical behavioral cues of alcoholic and/or drug influence that may be discerned during the suspect's exit from the vehicle.
- i. Understand the role and relevance of psychophysical testing in pre-arrest screening of DWI suspects.
- j. Understand the role and relevance of preliminary breath testing in pre-arrest screening of DWI suspects.
- k. Know and carry out appropriate administrative procedures for validated divided attention psychophysical tests.
- l. Know and carry out appropriate administrative procedures for the horizontal gaze nystagmus psychophysical test.
- m. Know and recognize typical cues of alcohol and/or drug influence that may be discerned during administration of psychophysical field sobriety tests.
- n. Understand the factors that may affect the accuracy of alcohol breath testing instruments.
- o. Understand the elements of DWI prosecution and their relevance to DWI arrest reporting.
- p. Choose appropriate descriptive terms to convey relevant observations of DWI evidence.
- q. Write clear, descriptive narrative DWI arrest reports.

GLOSSARY

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

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

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

✓ DWI - Driving While Intoxicated. (Also Driving While Impaired.) Driving a vehicle while under the influence of alcohol or other drugs.

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

- Phase One - Vehicle In Motion
- Phase Two - Personal Contact
- Phase Three - Prearrest Screening

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

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

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

HORIZONTAL GAZE NYSTAGMUS (HGN) - A field sobriety test based on the jerking of the eyeballs as the eyes gaze toward the side.

✓ 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 (BAC).

Implied Cons. / Legal Presumptions

NYSTAGMUS - An involuntary jerking of the eyeballs.

ONE LEG STAND (OLS) - A divided attention field sobriety test.

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.

PREARREST SCREENING - The third phase in the DWI detection process. In this phase the officer administers field sobriety determines 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 prearrest breath test administered during investigation of a possible DWI violator to obtain an indication of the person's blood alcohol concentration.

PSYCHOPHYSICAL - "Mind body." Used to describe field sobriety tests that measure a person's ability to perform both mental and physical tasks.

STANDARDIZED FIELD SOBRIETY TEST BATTERY - A battery of three tests, Horizontal Gaze Nystagmus, Walk and Turn and One Leg Stand, administered and evaluated in a standardized manner so as to obtain validated indicators of impairment...based on NHTSA research.

TIDAL BREATH - Breath from the upper part of the lungs and the mouth.

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.

WALK AND TURN (WAT) - A divided attention field sobriety test.

DWI DETERRENCE: AN OVERVIEW

Each year, tens of thousands of people die in traffic accidents. Throughout the nation, alcohol is the major contributor to traffic fatalities:

- o more than half the drivers who die in crashes have been drinking.
- o most dead drinking drivers are legally "under the influence."

Alcohol related crashes are about nine times more likely to result in death than are similar crashes that do not involve alcohol. Drinking drivers are more likely than other drivers to take excessive risks such as speeding or turning abruptly. Drinking 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. While on the average two percent of drivers on the road at any given time are DWI, DWI violations and accidents are not simply the work of a relatively few "problem drinkers" or "problem drug users." Many people commit DWI, at least occasionally.

- o In a 1981 opinion survey conducted by Psychology Today, 41 percent of respondents reported they occasionally drove while drunk.
- o In a random survey of drivers stopped at all hours during one week, 12 percent had been drinking; two percent had a Blood Alcohol Concentration (BAC) of 0.10 percent or more.
- o In numerous random surveys of drivers stopped during late evening-early morning weekend hours, approximately 10 percent had a BAC of 0.10 percent or more. (See Exhibit 2-1.)
- o In a special study of drivers leaving bars between 9 p.m. and 2 a.m. Friday and Saturday nights, one in seven had a BAC of 0.10 percent or more.

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. (See Exhibit 2-2.)

GENERAL DETERRENCE

One approach to reducing the number of drinking drivers is general deterrence of DWI. General deterrence of DWI is based in the driving public's fear of being arrested. If enough violators come to believe 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 will get caught, sooner or later, if they continue to drive while impaired.

How many DWI violators must be arrested in order to convince the public that there is a real risk of arrest for DWI? 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. (See Exhibit 2-3.) 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 ration (1:2000) so low? There are three noteworthy reasons.

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

SIGNIFICANT FINDINGS

In a study conducted in Fort Lauderdale, Florida, only 22 percent of traffic violators who were stopped with BACs between 0.10 and 0.20 percent were arrested for DWL. The remainder were cited for other violations, even though they were legally "under the influence." 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 percent of the DWI violators they investigated.

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 DWL. (See Exhibit 2-4.) It is clear that significant improvement in the arrest rate could be achieved if officers were more skilled at DWI detection.

Several enforcement programs have succeeded in achieving significant DWI deterrence. Consider, for example, the three year intensive weekend DWI enforcement program in Stockton, California. Under that program:

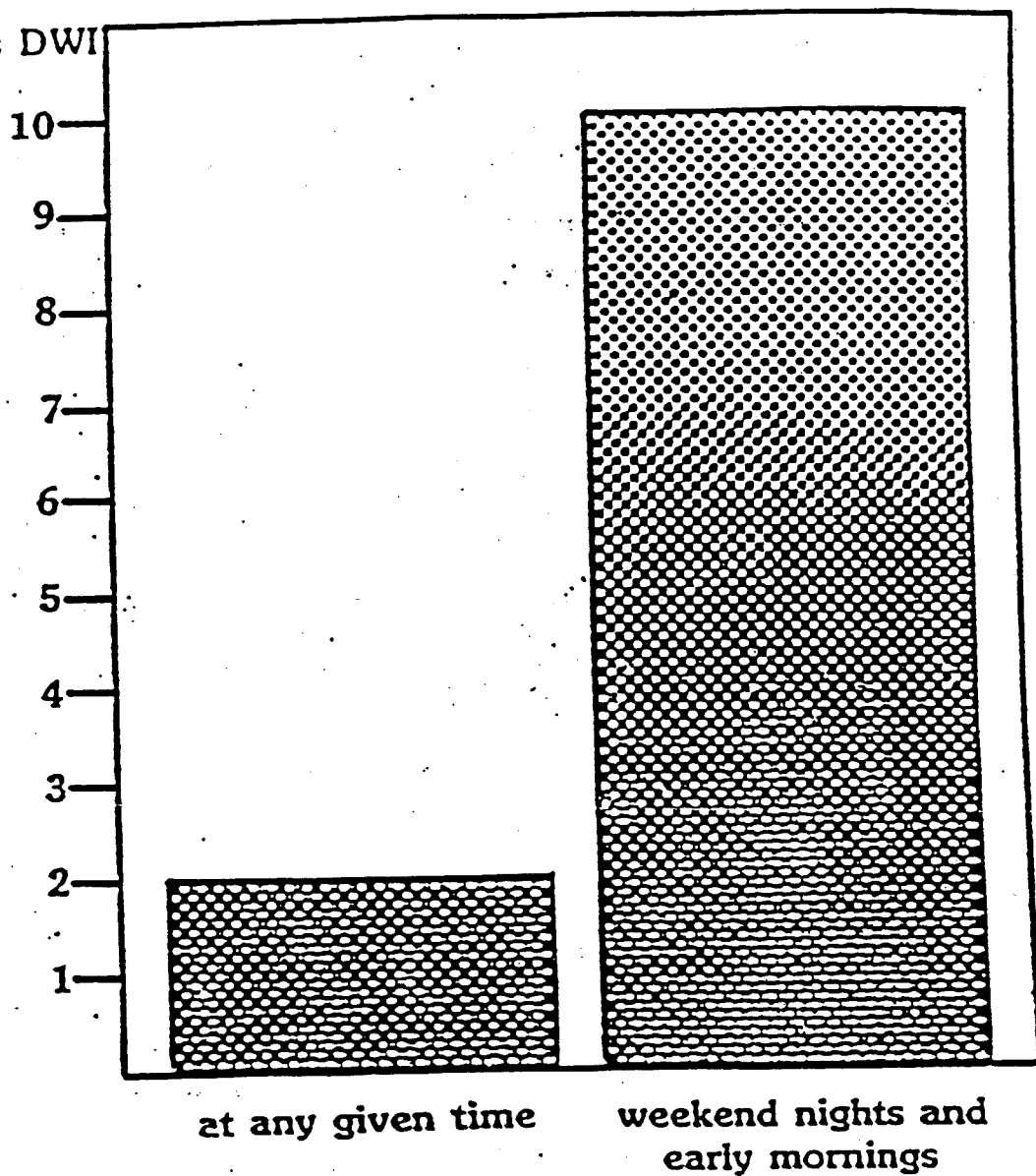
- o arrests increased 500 percent;
- o weekend nighttime accidents decreased 34 percent;
- o the proportion of nighttime weekend drivers legally under the influence dropped from nine percent to six percent.

Improved DWI detection can be achieved in virtually every jurisdiction in the country. The keys to success are police officers who are:

- o skilled at DWI detection;
- o willing to arrest every DWI violator who is detected;
- o supported by their agencies in all aspects of this program, from policy through practical application.

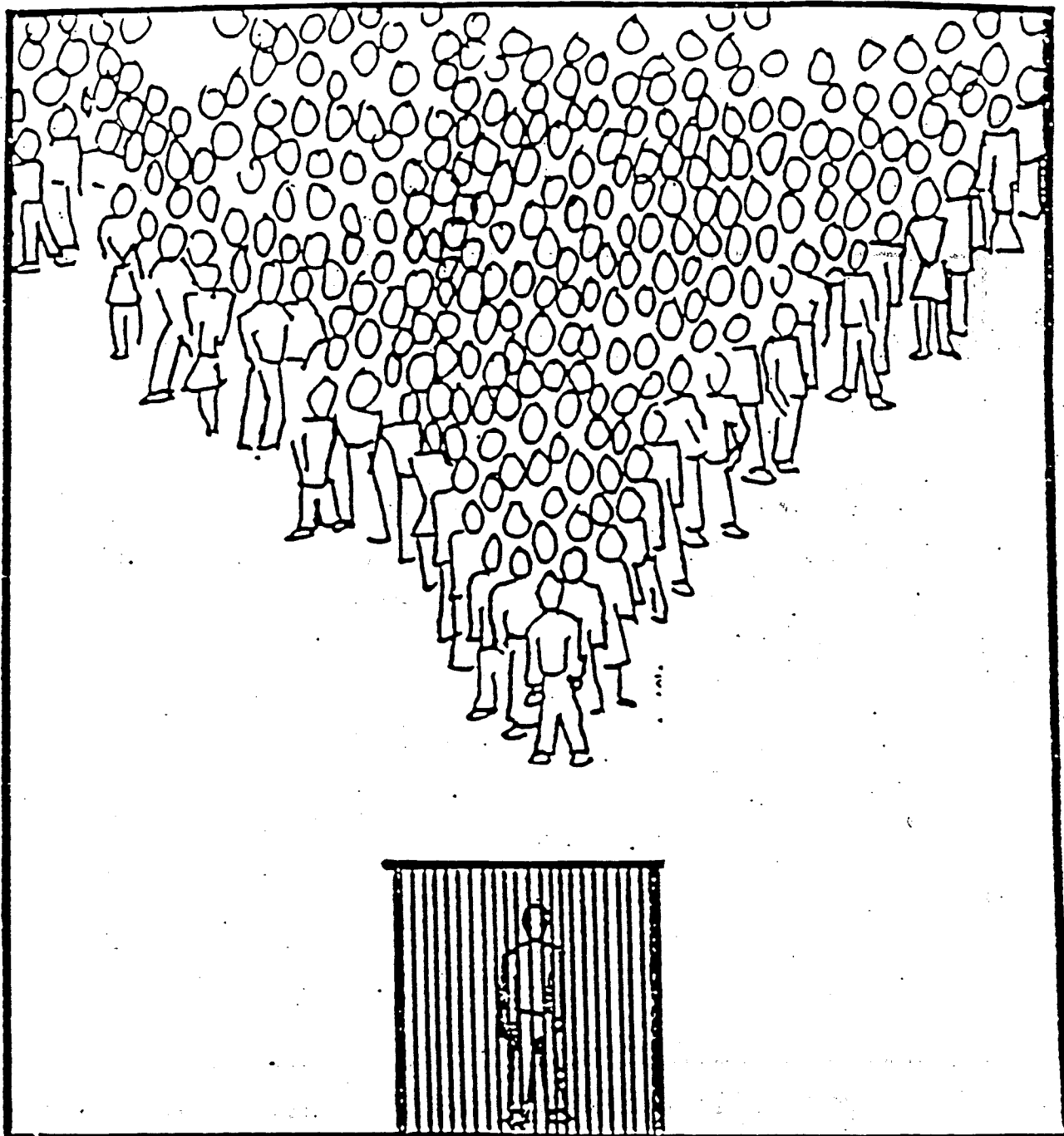
**EXHIBIT
2-1**

% of drivers DWI

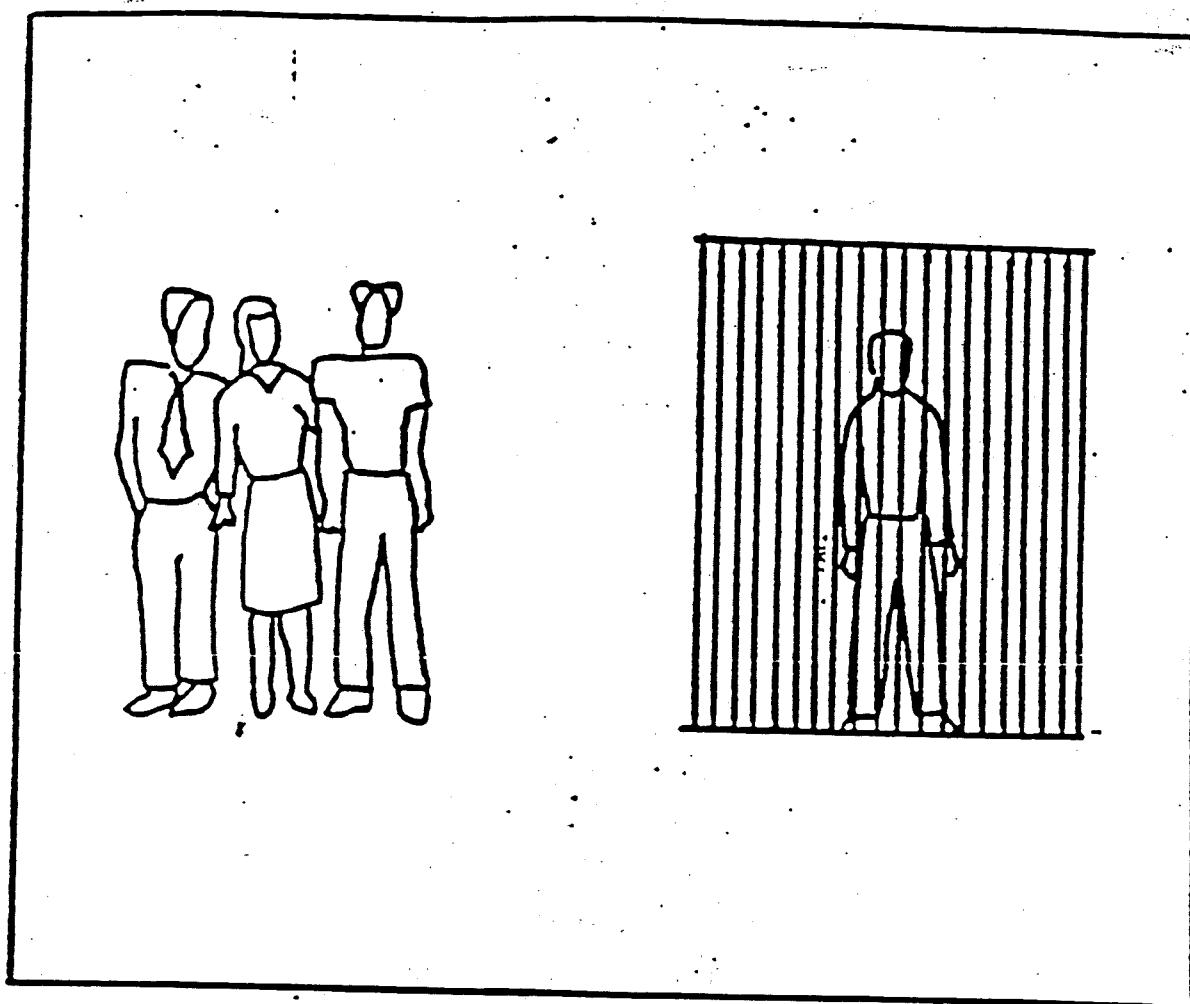


2-2

The average DWI violator commits the offense 80 times per year:



Chances of a DWI violator being arrested are as low as one in 2000.



**For every DWI violator arrested 3 others are contacted
face to face by police, but are not arrested.**

THE LEGAL ENVIRONMENT

Prosecutions commenced under this paragraph shall not be placed on file or continued without a finding. (*Chgd. by L. 1986, chap. 620, eff. 12/18/86.*)

A certificate of the registrar or his authorized agent that a license or right to operate motor vehicles or a certificate of registration of a motor vehicle has not been restored or that the registrar has not issued a new license so to operate to the defendant or a new certificate of registration for a motor vehicle the registration whereof has been revoked, shall be admissible as evidence in any court of the commonwealth to prove the facts certified to therein, in any prosecution hereunder wherein such facts are material. A certificate of a clerk of court that a person's license or right to operate a motor vehicle was suspended for a specified period shall be admissible as prima facie evidence in any court of the commonwealth to prove the facts certified to therein in any prosecution commenced under this section. (*Chgd. by L. 1982, chap. 373(1); L. 1986, chap. 620, eff. 12/18/86.*)

§24. Driving while under the influence of intoxicants.

(a) (1) Whoever, upon any way or in any place to which the public has a right of access, or upon any way or in any place to which members of the public have access as invitees or licensees, operates a motor vehicle while under the influence of intoxicating liquor, or of marijuana, narcotic drugs, depressants or stimulant substances, all as defined in section one of chapter ninety-four C, or the vapors of glue shall be punished by a fine of not less than one hundred nor more than one thousand dollars, or by imprisonment for not more than two years, or both.

If the defendant has been previously convicted or assigned to an alcohol education or rehabilitation program by a court of the commonwealth because of a like violation within six years preceding the date of the commission of the offense for which he has been convicted, the defendant shall be punished by a fine of not less than three hundred nor more than one thousand dollars and by imprisonment for not less than fourteen days nor more than two years, provided that the sentence imposed upon such person shall not be reduced to less than fourteen days, nor suspended, nor shall any such person be eligible for probation, parole, or furlough or receive any deduction from his sentence for good conduct until he shall have served fourteen days of such sentence; provided, however, that the commissioner of correction may, on the recommendation of the warden, superintendent, or other person in charge of a correctional institution, grant to an offender committed under this subdivision a temporary release in the custody of an officer of such institution for the following purposes only: to attend the funeral of a relative; to visit a critically ill relative; to obtain emergency medical or psychiatric services unavailable at said institution; or to engage in employment pursuant to a work release program.

If the defendant has been previously convicted or assigned to

reasonable grounds to believe that the person arrested had been operating a motor vehicle upon any such way or place while under the influence of intoxicating liquor; if such evidence is that such percentage was more than five one-hundredths but less than ten one-hundredths, there shall be no presumption; and if such evidence is that such percentage was ten one-hundredths or more, there shall be a presumption that such defendant was under the influence of intoxicating liquor. A certificate, signed and sworn to, by a chemist of the department of public safety or by a chemist of a laboratory certified by said department, which contains the results of an analysis made by such chemist of the percentage of alcohol in such blood shall be prima facie evidence of the percentage of alcohol in such blood. (*Chgd. by L. 1980, chap. 383(1); L. 1986, chap. 620, eff. 12/18/86.*)

(f) Whoever operates a motor vehicle upon any way or in any place to which the public has right of access, or upon any way or in any place to which the public has access as invitees or licensees, shall be deemed to have consented to submit to a chemical test or analysis of his breath or blood in the event that he is arrested for operating a motor vehicle while under the influence of intoxicating liquor; provided, that no person shall be deemed to have consented to a blood test unless such person has been brought for treatment to a medical facility licensed under the provisions of section fifty-one of chapter ninety C; and provided, further, that no person who is afflicted with hemophilia, diabetes or any other condition requiring the use of anticoagulants shall be deemed to have consented to a withdrawal of blood. Such test shall be administered at the direction of a police officer, as defined in section one of chapter one hundred and twenty, having reasonable grounds to believe that the person arrested has been operating a motor vehicle upon such way or place while under the influence of intoxicating liquor. If the person arrested refuses to submit to such test or analysis, after having been informed that his license or permit to operate motor vehicles or right to operate motor vehicles in the commonwealth shall be suspended for a period of one hundred and twenty days for such refusal, no such test or analysis shall be made, but the police officer before whom such refusal was made shall immediately prepare a written report of such refusal. Such written report of refusal shall be endorsed by a third person who shall have witnessed such refusal. Each such report shall be made on a form approved by the registrar, and shall be sworn to under the penalties of perjury by the police officer before whom such refusal was made. Each such report shall set forth the grounds for the officer's belief that the person arrested had been driving a motor vehicle on any such way or place while under the influence of intoxicating liquor, and shall state that such person had refused to submit to such chemical test or analysis when requested by such officer to do so. Each such report shall be endorsed by the police chief, as defined in section one of chapter ninety C, or by the person authorized by him and shall be

(rev.87)

**OVERVIEW OF DETECTION
NOTE TAKING AND TESTIMONY**

DWI DETECTION

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

The term DWI detection has been used in many different ways. Consequently it does not mean the same thing to all police officers. For the purposes of this training, DWI detection is defined as:

**THE ENTIRE PROCESS OF IDENTIFYING AND GATHERING EVIDENCE
TO DETERMINE WHETHER OR NOT A SUSPECT SHOULD BE ARRESTED
FOR DWI VIOLATION.**

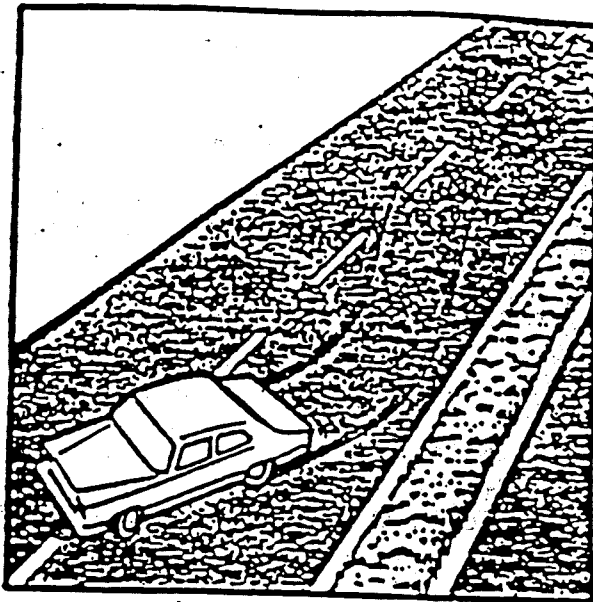
The detection process begins when the police officer first suspects that a DWI violation may be occurring and ends when the officer decides that there is or there is not sufficient probable cause to arrest the suspect for DWI.

Your attention may be called to a particular vehicle or individual for a variety of reasons. The precipitating event may be a loud noise; a cloud of dust; an obvious moving violation; behavior that is unusual, but not necessarily illegal; an equipment defect; or almost anything else. The initial "spark" of detection may carry with it an immediate, strong suspicion that the driver is under the influence; or only a slight, ill-formed suspicion; or even no suspicion at all at that time. In any case, it sets in motion a process wherein you focus on a particular individual and have the opportunity to observe that individual and to accumulate additional evidence.

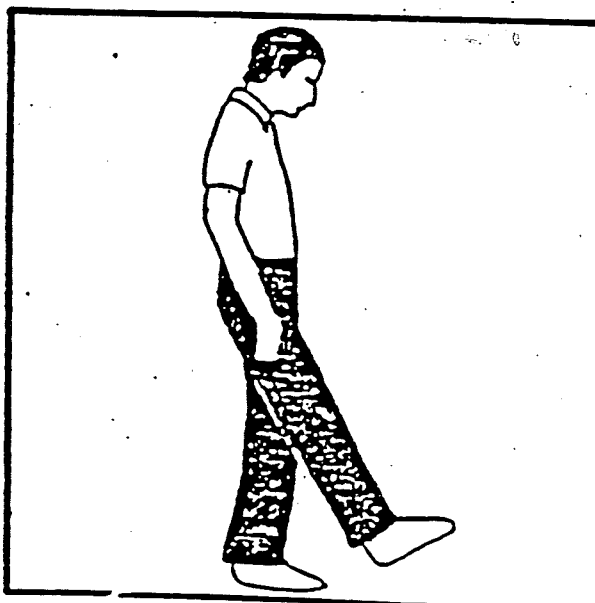
The detection process end when you decide either to arrest or not to arrest the individual for DWI. That decision, ideally, is based on all of the evidence that has come to light since your attention first was drawn to the suspect. Effective DWI enforcers do not simply leap immediately to the arrest/no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

DWI DETECTION PHASES

1. Vehicle in Motion



2. Personal Contact



3. Pre-Arrest Screening

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MAJOR TASKS AND DECISIONS

Each detection phase usually involves two major tasks and one major decision (See Exhibit 4-2.)

In Phase One: Your first task is to observe the vehicle in operation. Based on this observation, you must decide whether there is sufficient cause to command the driver to stop. Your second task is to observe the stopping sequence.

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

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

Each of the major decisions can have any one of three different outcomes:

1. Yes - Do it Now
2. Wait - Look for Additional Evidence
3. No - Don't Do It.

EXHIBIT

4-2

DWI DETECTION PHASES

PHASE ONE:
Vehicle in Motion

INITIAL OBSERVATION
OF VEHICLE IN
OPERATION

?

SHOULD I
STOP THE DRIVER?

OBSERVATION OF THE
STOPPING SEQUENCE

PHASE TWO:
Personal Contact

FACE-TO-FACE
OBSERVATION AND
INTERVIEW OF DRIVER.

?

SHOULD THE
DRIVER EXIT?

OBSERVATION OF THE
EXIT AND WALK

PHASE THREE:
Prearrest
Screening

PSYCHOPHYSICAL
(FIELD) SOBRIETY TESTING

?

IS THERE PROBABLE CAUSE TO
ARREST THE SUSPECT FOR DWI?

PRELIMINARY
BREATH TESTING

Consider the following examples.

1. Yes - Do It Now

Phase One: Yes, there are reasonable grounds to stop the driver.

Phase Two: Yes, there is enough reason to suspect alcohol/drug impairment to justify getting the driver out of the vehicle for further investigation.

Phase Three: Yes, there is probable cause to arrest the driver for DWI right now.

2. Wait - Look for Additional Evidence

Phase One: Don't stop the driver yet; keep following and observing the driver a bit longer.

Phase Two: Don't get the driver out of the car yet; keep talking to and observing the driver a bit longer. (This option may be limited if the officer's personal safety is at risk.)

Phase Three: Don't arrest the driver yet; administer another field sobriety test before deciding.

3. Don't Do It:

Phase One: No, there are no grounds for stopping that driver.

Phase Two: No, there isn't enough evidence of DWI to justify administering field sobriety tests.

Phase Three: No, there is not sufficient probable cause to believe this driver has committed DWI.

OFFICER RESPONSIBILITY

At each phase of detection, you must determine whether there is sufficient evident provide the "reasonable suspicion" necessary to proceed to the next step in the detection process. It is always your duty to carry out whatever tasks are appropriate, to make sure that all relevant evidence of DWI is brought to light. (See Exhibit 4-3).

The most successful DWI detectors are those officers who:

- o know what to look and listen for;
- o have the skills to ask the right kinds of questions;
- o choose and use the right kinds of tests;
- o make the right kinds of observations; and
- o are motivated to apply their knowledge and skill whenever they contact someone who may be under the influence.

Officers like these are likely to make more arrests and to document the clear, convincing evidence needed to secure convictions.

DWI DETECTION

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

Phase One:

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

Phase Two:

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

Phase Three:

- o Should I administer field sobriety tests to the driver?
- o How does the driver perform those tests?
- o What exactly does the driver do wrong when performing the tests?
- o Do I have probable cause to arrest for DWI?
- o Should I administer a preliminary breath test?
- o What are the results of the preliminary breath test?
- o Is the impairment caused by alcohol, or drugs, or both?

DWI INVESTIGATION FIELD NOTES

NAME _____ SEX _____ RACE _____
ADDRESS _____ CITY/STATE _____ OP. LIC. NO. _____
D.O.B. _____ / _____ / _____ SOC. SEC. # _____
VEHICLE MAKE _____ YEAR _____ LIC. _____ STATE _____
DISPOSITION _____ NO. PASSENGERS _____

INCIDENT LOCATION _____

DATE _____ / _____ / _____ TIME _____

ACCIDENT ☐ YES ☐ NO

II VEHICLE IN MOTION

INITIAL OBSERVATIONS _____

OBSERVATION OF STOP _____

IV PRE - ARREST SCREENING

HORIZONTAL GAZE NYSTAGMUS

NOTE: SUSPECT WEARING _____ CONTACTS?

NO ☐ YES ☐ HARD ☐ ☐

- ☐ EYE DOES NOT PURSUE SMOOTHLY
- ☐ DISTINCT NYSTAGMUS AT MAXIMUM DEVIATION
- ☐ NYSTAGMUS ONSET BEFORE 45 DEGREES

	LEFT	RIGHT

OTHER: _____

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IV-13

III PERSONAL CONTACT

OBSERVATION OF DRIVER _____

STATEMENTS _____

PRE-EXIT SOBRIETY TESTS _____

OBSERVATION OF THE EXIT _____

ODORS _____

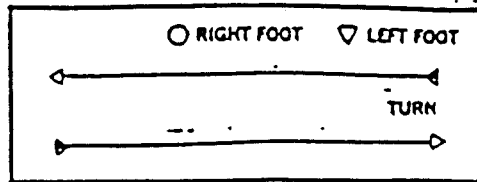
IV PRE-ARREST SCREENING (CONTINUED)

WALK AND TURN

INSTRUCTIONS STAGE

CANNOT KEEP BALANCE ☐

STARTS TOO SOON ☐



WALKING STAGE

FIRST NINE STEPS

SECOND NINE STEPS

STOPS WALKING
MISSES HEEL - TOE
STEPS OFF LINE
RAISES ARMS
ACTUAL STEPS TAKEN

THE TURN (DESCRIBE) _____

CANNOT DO TEST (EXPLAIN) _____

OTHER: _____

NYSTAGMUS

0						
1						
2						
3						
4						
5						
6						
7						
8						
9						

WALK AND TURN

INTERSECTION: ☒ SHADED
☐ UNSHADED

ONE LEG STAND

SWAYS

RAISES ARMS

HOPS

FOOT DOWN

0 TO 10 SEC'S	11 TO 20 SEC'S	21 TO 30 SEC'S

CANNOT DO TEST (EXPLAIN) _____

OTHER: _____

PBT

OTHER FIELD SOBRIETY TESTS

NAME OF TEST _____

DESCRIBE PERFORMANCE _____

NAME OF TEST _____

DESCRIBE PERFORMANCE _____

NAME OF TEST _____

DESCRIBE PERFORMANCE _____

V GENERAL OBSERVATIONS

SPEECH _____

ATTITUDE _____

CLOTHING _____

OTHER _____

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PHYSICAL EVIDENCE _____

PHASE ONE: VEHICLE IN MOTION

DWI DETECTION PHASE ONE: VEHICLE IN MOTION

Phase One Tasks and Decision

PHASE ONE:
Vehicle in Motion

INITIAL OBSERVATION
OF VEHICLE IN
OPERATION.



SHOULD I
STOP THE DRIVER?

OBSERVATION OF THE
STOPPING SEQUENCE

2. INITIAL OBSERVATIONS: VISUAL CUES TO DWI

Drivers who are under the influence of alcohol, drugs or both frequently exhibit certain effects or symptoms of impairment. These include:

- o slowed reactions;
- o impaired judgment as evidenced by a willingness to take risks;
- o impaired vision; and
- o poor coordination

The next page presents common symptoms of alcohol influence. This unit focuses on alcohol impairment because research currently provides more information about the effects of alcohol on driving than it does about the effects of other drugs on driving. Remember that whether the driver is under the influence of alcohol or other drugs, the law enforcement detection process is the same, and the offense is still DWI.

The common effects of alcohol on the driver's mental and physical faculties lead to predictable driving violations and vehicle operating characteristics. The National Highway Traffic Safety Administration (NHTSA) sponsored research to identify the most common and reliable initial indicators of DWI. This research identified 20 cues, each with an associated high probability that the driver exhibiting the cue is under the influence. These cues and their associated probabilities are described in the following Special Section, Initial Visual DWI Detection Cues. They also are discussed in Visual Detection of Driving While Intoxicated, a film sponsored by NHTSA to assist law enforcement officers to recognize DWI detection cues. This film is included in the training videotape.

COMMON SYMPTOMS OF ALCOHOL INFLUENCE

BLOOD ALCOHOL

CONCENTRATION

0.03%
↓
↓
↓
SLOWED
REACTIONS

0.05%
↓
↓
↓
RISK
TAKING

0.08%
↓
↓
↓
↓
↓
IMPAIRED
VISION

0.10%
↓
↓
↓
↓
↓
↓
↓
↓
POOR
COORDINATION

DUI DETECTION GUIDE

Chances in 100 of nighttime drivers with BAC equal or greater than 10

TURNING WITH WIDE RADIUS	65
STRADDLING CENTER OR LANE MARKER.....	65
APPEARING TO BE DRUNK.....	60
ALMOST STRIKING OBJECT OR VEHICLE.....	60
WEAVING	60
DRIVING ON OTHER THAN DESIGNATED ROADWAY.....	55
SWERVING	55
SLOW SPEED (MORE THAN 10 MPH BELOW LIMIT).....	50
STOPPING (WITHOUT CAUSE) IN TRAFFIC LANE	50
FOLLOWING TOO CLOSELY	50
DRIFTING	50
TIRES ON CENTER OR LANE MARKER.....	45
BRAKING ERRATICALLY	45
DRIVING INTO OPPOSING, OR CROSSING TRAFFIC.....	45
SIGNALLING INCONSISTENT WITH DRIVING ACTIONS	40
SLOW RESPONSE TO TRAFFIC SIGNALS.....	40
STOPPING INAPPROPRIATELY (OTHER THAN IN LANE)...	35
TURNING ABRUPTLY OR ILLEGALLY	35
ACCELERATING OR DECELERATING RAPIDLY	30
HEADLIGHTS OFF.....	30

Special adjustment to the cue values

- 2 or more cues observed: add 10 to the larger value

3. DIVIDED ATTENTION

It is important to understand the effects of alcohol are exhibited in driving so that the significance of visual cues will be recognized. Driving is a complex task involving a number of subtasks, many of which occur simultaneously. These include:

- o steering;
- o controlling the accelerator;
- o signaling;
- o controlling the brake pedal
- o operating the clutch;
- o operating to gearshift;
- o observing other traffic;
- o observing signal lights, stop signs and other traffic control devices;
and
- o making decisions (whether to stop, turn, speed up, slow down).

Safe driving demands the ability to divide attention among these various tasks. "Divided attention" simply means the ability to concentrate on two or more things at the same time. Under the influence of alcohol or many drugs, a driver's ability to divide attention is impaired. As a result, the impaired driver tends to concentrate on only the most important or critical parts of driving and to disregard the less important parts, often creating unexpected or dangerous situations for other drivers. Two examples were particularly evident in the videotape segment Visual Detection of Driving While Intoxicated. In one instance the driver signaled for left turn, but actually turned right. In the other, the driver stopped for a green light. In each case the driver was suffering impaired ability to divide attention.

- o The first driver was concentrating on steering, looking for the street where he wished to turn and slowing for the turn. The driver realized that a signal was required and actually operated the signal lever. But the driver didn't have enough attention left to move the lever in the right direction. Therefore he signaled left, but turned right.
- o The second driver was concentrating on controlling the car's speed and direction. He noticed the traffic light, but he did not have enough attention left to react to the specific color of the light. Therefore he stopped for a green light.

Some of the most significant evidence from all three phases of DWI detection can be related directly to the effects of alcohol or drugs on divided attention ability. We will return to the concept of divided attention in Session VI. Personal Contact and Session VII. Prearrest Screening.

4. RECOGNIZING AND DESCRIBING INITIAL CUES

Observing the vehicle in operation is the first task in DWI detection. Proper performance of that task requires two distinct but related abilities:

- o the ability to recognize evidence of alcohol or drug influence;
- o the ability to describe that evidence clearly and convincingly.

It is not enough that you observe and recognize symptoms of impaired driving. You also must be able to describe what happened so that others will have a clear mental picture of what took place. Improving your ability to recognize and clearly describe observational evidence requires practice.

5. THE STOPPING SEQUENCE

Your second task during Phase One of the detection process is to observe the manner in which the driver responds to your signal to stop, and to note any additional evidence of a DWI violation.

Cues reinforcing the suspicion of DWI may be found in the stopping sequence. After the command to stop is given, the alcohol impaired driver may exhibit additional important evidence of DWI. These cues may include:

- o an attempt to flee;
- o no response;
- o slow response;
- o an abrupt swerve;
- o sudden stop; and
- o striking the curb or another object.

Some of these cues come to light because the stop command places additional demands on the driver's ability to divide attention. The signal to stop creates a new situation with which the driver must cope. Flashing emergency lights or a siren demand and divert the driver's attention, requiring that the driver now divide attention between driving and responding to the stop command. Stopping itself requires the driver simultaneously to turn the steering wheel, put on the brakes, use a turn signal, and so on. Thus the driver's task becomes more complex when the stop command is given. If the driver is under the influence, he or she may not be able to handle this more complex task, and additional evidence of impairment may appear.

It is your responsibility to recognize, record and convey the additional evidence of driving impairment that may come to light during the stopping sequence. This task, like Task One, observing the vehicle in operation, requires:

- o the ability to recognize evidence of alcohol or drug influence; and
- o the ability to describe that evidence clearly and convincingly.

Recognizing and describing the reinforcing cues of DWI that appear during the stopping sequence requires practice.

PHASE TWO: PERSONAL CONTACT

TYPICAL INVESTIGATION CUES: THE DRIVER INTERVIEW

Face to face observation and interview of the driver allow you to use three senses to gather evidence of alcohol or drug influence:

- o the sense of sight;
- o the sense of hearing; and
- o the sense of smell.

SIGHT

There are a number of things you might see during the interview that would be describable cues or evidence of alcohol or drug influence. Among them are:

- o bloodshot eyes;
- o soiled clothing;
- o fumbling fingers;
- o alcohol containers;
- o drugs or drug paraphernalia;
- o bruises, bumps or scratches;
- o unusual actions.

HEARING

Among the things you might hear during the interview that would be describable cues or evidence of alcohol or drug influence are these:

- o slurred speech;
- o admission of drinking;
- o inconsistent responses;
- o abusive language;
- o unusual statements.

SMELL

There are things you might smell during the interview that would be describable cues or evidence of alcohol or drug influence. Typically these include:

- o alcoholic beverages;
- o marijuana;
- o "cover up" odors like breath sprays;
- o unusual odors.

REQUIRED ABILITIES

Proper face to face observation and interview of the driver demands two distinct but related abilities:

- o the ability to recognize the sensory evidence of alcohol or drug influence;
- o the ability to describe that evidence clearly and convincingly.

Developing these abilities requires practice.

PRE-EXIT SOBRIETY TESTS

A basic purpose of the face to face observation and interview of the driver is to identify and gather evidence of alcohol or drug influence. This is the purpose of each task in each phase of DWI detection.

During the face to face observation and interview stage, it is not necessary to gather sufficient evidence to arrest the driver immediately for DWI. It is necessary only to gather enough evidence to justify requesting the driver to step from the vehicle for further investigation.

TESTS

There are a number of simple tests of impairment you can administer to a driver while the driver is still behind the wheel. Most of these simple tests apply the concept of divided attention: they require the driver to concentrate on two or more things at the same time. The tests include both question and answer tests and psychophysical (mind-body) tests.

While these simple tests generally are not so reliable as the more structured formal roadside sobriety tests when it comes to indicating alcohol or drug influence, they can be very helpful in determining whether there is sufficient cause to request the driver to step from the vehicle.

Question and Answer Tests

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

- o asking for two things simultaneously;
- o asking interrupting or distracting questions;
- o asking unusual questions.

An example of the first technique, asking for two things simultaneously, is requesting that the driver produce both the driver's license and the vehicle registration. Possible evidence of impairment may come to light as the driver responds to this dual request. Be alert for the driver who:

- o forgets to produce both documents;
- o produces documents other than the ones requested;
- o fails to see the license, registration or both while searching through wallet or purse;
- o fumbles or drops wallet, purse, license or registration;
- o is unable to retrieve documents using fingertips.

The second technique, asking interrupting or distracting questions, forces the driver to divide attention between searching for the license or registration and answering a new question. While the driver is responding to the request for license, registration or both, you ask an unrelated question like, "Without looking at your watch, can you tell me what time it is right now?" Possible evidence of impairment may be disclosed by the interrupting or distracting question. Be alert for the driver who:

- o ignores the question and concentrates only on the license or registration search;
- o forgets to resume the search after answering the question;
- o supplies a grossly incorrect answer to the question.

The third technique, asking unusual questions, is employed after you have obtained the driver's license and registration. Using this technique, you seek verifying information through unusual questions. For example, while holding the driver's license, you might ask the driver, "What is your middle name?" You might then ask, "In what year did you have your fifth birthday?"

There are many such questions which the driver normally would be able to answer easily, but which might prove difficult if the driver is impaired, simply because they are unusual questions. Unusual questions require the driver to process information; this can be especially difficult when the driver does not expect to have to process information. For example, a driver may respond to the question about the middle name by giving her first name. Similarly, a driver may respond to the question about the fifth birthday year by giving his birth year. In each case the driver ignores the unusual question and responds instead to a usual — but unasked — question.

BEHIND THE WHEEL PSYCHOPHYSICAL TESTS

Pre-exit sobriety tests also include psychophysical tests. Psychophysical tests are divided attention tests. They measure a subject's ability to handle both physical and mental tasks simultaneously.

Behind the wheel psychophysical tests may include the Alphabet, Count Down and Finger Count tests. These field tests of a driver's mental and physical impairment are often administered outside the vehicle. However, they also can be given while the driver is still inside the vehicle. Whenever these tests are given, you should provide clear instructions and, if possible demonstrate what the driver should do. You must verify that the driver has the mental capacity and education to perform the tests. This can be done by asking the driver to repeat the instructions and whether he or she understands what is required.

ALPHABET TEST

The Alphabet Test requires the subject to recite a part of the alphabet. You instruct the subject to recite the alphabet beginning with a letter other than A and stopping at a letter other than Z. For example, you might say to a driver, "Recite the alphabet, beginning with the letter E as in Edward and stopping with the letter P as in Paul." This divides the driver's attention because the driver must concentrate to begin at an unusual starting point and recall where to stop.

COUNT DOWN TEST

The Count Down Test requires the subject to count out loud 15 or more numbers in reverse sequence. For example, you might request a driver to, "Count out loud backwards, starting with the number 68 and ending with the number 53." This, too, divides attention because the driver must continuously concentrate to count backwards while trying to recall where to stop. NOTE: This test should never be given using starting and stopping points that end in 0 or 5 because these numbers are too easy to recall. For example, do not request that the driver count backwards from 65 to 50. Instead, ask the driver to count backwards from 64 to 49.

FINGER COUNT TEST

In this test, the subject is asked to touch the tip of the right thumb in turn to the tip of each finger on the right hand while simultaneously counting up one, two, three, four; then to reverse direction on the fingers while simultaneously counting down four, three, two, one.

In each instance, note whether and how well the subject is able to perform the divided attention task.

THE EXIT SEQUENCE

Your decision to instruct the driver to step from the vehicle usually is made only after you have developed a definite suspicion that the driver is under the influence.* Even though that suspicion may be very strong, usually the suspect is not yet under arrest when you give the instruction.

How the driver steps and walks from the vehicle and his or her actions and behavior during the exit sequence may provide important evidence of alcohol or drug influence. Be alert to the driver who:

- o shows angry or unusual reactions;
- o cannot follow instructions;
- o cannot open the door;
- o leaves the vehicle in gear;
- o "climbs" out of vehicle;
- o leans against vehicle;
- o keeps hands on vehicle for balance.

Proper face to face observation and interview of a driver requires the ability to recognize the sensory evidence of alcohol or drug influence and the ability to describe that evidence clearly and convincingly. Developing these abilities takes practice.

PHASE THREE: PRE-ARREST SCREENING

Two divided attention field sobriety tests that have proven accurate and effective in DWI detection are the Walk and Turn and the One Leg Stand. These tests are described briefly below.

WALK AND TURN

Walk and Turn is a test that has been validated through extensive research sponsored by the National Highway Traffic Safety Administration (NHTSA). It is a divided attention test consisting of two stages:

- o Instructions Stage;
- o Walking Stage.

In the Instructions Stage the subject must stand on a line with feet in heel-to-toe position, keep arms at sides, and listen to instructions. The Instructions Stage divides the subject's attention between a balancing task (standing on the line while maintaining the heel-to-toe position) and an information processing task (listening to and remembering instructions).

In the Walking Stage the subject must take nine heel-to-toe steps down the line, turn in a prescribed way, and take nine heel-to-toe steps up the line, while counting the steps out loud. During the turn, the subject must keep one foot on the line, pivot on that foot, and use the other to take several small steps to complete the turn. The Walking Stage divides the subject's attention among a balancing task (walking heel-to-toe and turning on the line); a small muscle control task (counting out loud); and a short-term memory task (recalling the number of steps and the turning instructions).

The Walk and Turn test is administered in a standardized fashion, i.e., the same way every time. It is also interpreted in a standardized fashion. Specifically, officers administering Walk and Turn carefully observe the suspect's performance for eight clues:

- o can't balance during instructions;
- o starts too soon;
- o stops while walking;
- o doesn't touch heel-to-toe;
- o steps off line;
- o uses arms to balance;
- o loses balance on turn or turns incorrectly;
- o takes the wrong number of steps.

Sometimes, suspects cannot complete the test. Inability to complete the test occurs when the suspect:

- o steps off the line three or more times;
- o is in danger of falling;
- o otherwise demonstrates that he or she cannot do the test.

Research shows that if a suspect exhibits two or more of the clues, or cannot complete the test, the suspect's BAC is likely to be 0.10% or more. This criterion has been shown to be reliable 68 percent of the time.

ONE LEG STAND

The One Leg Stand test also has been validated through NHTSA's research program. It is a divided attention test consisting of two stages:

- o Instructions Stage;
- o Balancing and Counting Stage.

In the Instruction Stage, the subject must stand with heels together and toes slightly apart, keep arms at sides, and listen to instructions. This divides the subject's attention between a balancing task (maintaining a stance) and an information processing task (listening to and remembering instructions.)

In the Balancing and Counting Stage, the subject must stand on one foot and hold the other foot straight out and approximately six inches off the ground while simultaneously counting aloud from "one thousand and one" to one thousand and thirty". This divides the subject's attention between balancing (standing on one foot) and small muscle control (counting out loud).

The count to "one thousand and thirty" is an important part of the One Leg Stand test. Research has shown that many impaired subjects are able to maintain one leg balance for up to 25 seconds, but that relatively few can do so for 30 seconds.

One Leg Stand is also administered and interpreted in a standardized fashion. Officers carefully observe suspects' performance and look for four specific clues:

- o sways while balancing;
- o uses arms to balance;
- o hops;
- o puts foot down.

Sometimes suspects cannot complete the test. Inability to complete One Leg Stand occurs when the suspect.

- o puts the foot down three or more times, during the 30 second count;
- o otherwise demonstrates that he or she cannot do the test.

Research shows that, when the suspect produces two or more clues or is unable to complete the test, it is likely that his or her BAC is 0.10% or more. This criterion has been shown to be reliable 65 percent of the time.

HORIZONTAL GAZE NYSTAGMUS TEST

"Nystagmus" means an involuntary jerking of the eyeballs. Horizontal gaze nystagmus (HGN) refers to an involuntary jerking that occurs as the eyes gaze toward the side. In addition to being involuntary, the jerking is also unconscious. The person experiencing the nystagmus ordinarily is unaware that the jerking is happening, and is powerless to stop or control it.

Under the influence of alcohol or certain other drugs, the involuntary jerking of the eyeballs becomes much more distinct, and readily noticeable. And, as a person's blood alcohol concentration increases, the eyeballs will begin to jerk sooner as they move to the side.

Horizontal gaze nystagmus is a very reliable field sobriety test. Especially when used in combination with the divided attention tests, it will help police officers correctly distinguish suspects who are under the influence of alcohol from those who are not.

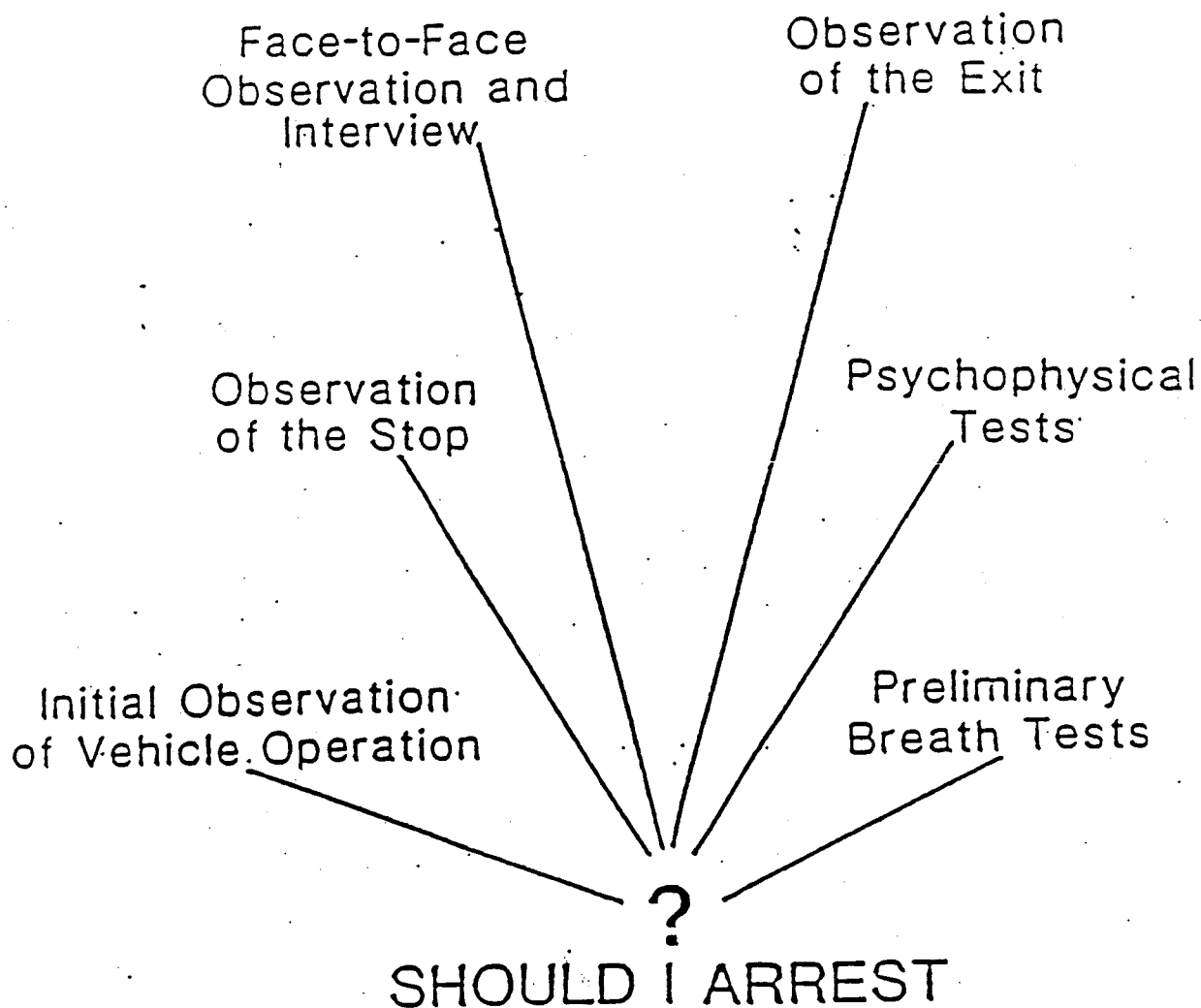
When the HGN test is administered, each eye is checked separately. And, each eye is examined for three specific clues.

- o As the eyeball is moved from side to side, does it move smoothly or does it jerk noticeably? (As people become under the influence of alcohol, their eyeballs exhibit a lack of smooth movement as they move from side to side).
- o When the eyeball is moved as far to the side as possible and is kept at that position for several seconds, does it jerk distinctly? (Distinct jerkiness at maximum lateral deviation of the eyeball is another clue of alcoholic influence).
- o As the eyeball is drawn toward the side, does it start to jerk before it has move through a 45-degree arc? (On-set of jerkiness prior to 45-degrees is another clue of alcoholic influence).

As a person's blood alcohol concentration increases, the more likely it is that these clues will appear.

The maximum number of clues that may appear in one eye is three. The maximum number for any suspect is therefore six. Research shows that if four or more clues are evident, it is likely that the suspect's blood alcohol concentration is 0.10%. The reliability of this four-or-more clues criterion is 77%.

THE ARREST DECISION IS BASED ON
ALL EVIDENCE
ACCUMULATED DURING
ALL THREE DETECTION PHASES



**CONCEPTS AND PRINCIPLES OF THE
STANDARDIZED FIELD SOBRIETY TESTS**

Procedures of Horizontal Gaze Nystagmus Testing

A. General Procedures: The Three Clues

As explained earlier, nystagmus means a jerking of the eyes. There are a number of different kinds of nystagmus, all of them influenced by alcohol. The test you will use at roadside is a test of "horizontal gaze nystagmus" — the nystagmus that occurs when the eyes gaze to the side. Many people will show some jerking if the eyes move far enough to the side. Under the influence of alcohol, three signs often will be observed:

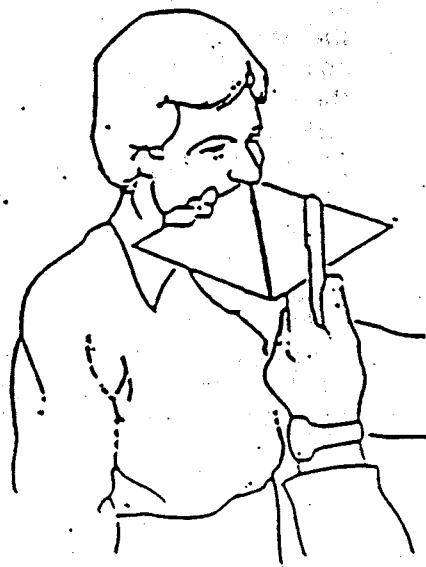
1. The suspect cannot follow a slowly moving object smoothly with the eyes; instead, the eyeballs can be observed to jerk or "bounce" as they move left and right in pursuit of a smoothly moving object, such as a pencil or penlight.
2. When you have the suspect move his or her eyes as far to the side as possible, distinct jerking will be evident when the eyeball is held at maximum deviation; some people exhibit slight jerking of the eyeballs at maximum deviation, even when sober; but when under the influence of alcohol, the jerking is likely to be very pronounced, and easily observable.
3. The more intoxicated a person becomes, the less the eyes have to move toward the side before jerking begins. Usually when a person's BAC is 0.10% or more, the jerking will begin before the eyeball has moved 45 degrees to the side.

B. Estimating a 45-Degree Angle to Gaze

Because the 45-degree angle is a key factor in assessing a suspect's degree of alcoholic influence, it is important to know how to estimate that angle.

For practice, a 45-degree template can be prepared by making a 15"-square cardboard and connecting its opposite corners with a diagonal line.

To use this device, hold it up so that the person's nose is above the diagonal line. Be certain that one edge of the template is centered on the nose and perpendicular to (or, at right angles to) the face. Have the person you are examining follow a penlight or some other object until he or she is looking down the 45-degree diagonal. Note the position of the eye. With practice, you should be able to recognize this angle without using the template.



C. Specific Procedures

Begin by asking the suspect whether he or she is wearing contact lenses. There is only a very slight chance that contact lenses might interfere with the HGN test. But, it is wise to make a note of the fact that the suspect has contacts on before starting the test.

If the suspect is wearing eyeglasses, instruct him or her to remove the glasses.

Give the suspect the following instructions from a position of interrogation (that is, with your weapon away from the suspect):

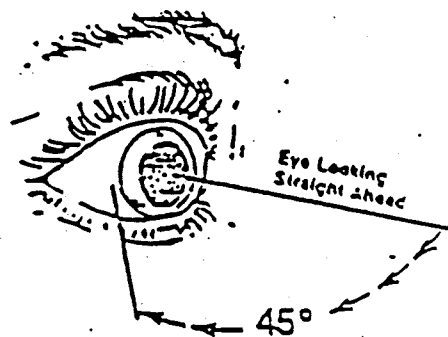
- o I am going to check your eyes.
- o Keep your head and follow this (indicate the object) with your eyes only.
- o Keep focusing on this until I tell you to stop.

Check the suspect's left eye by moving the object to your right. Move the object smoothly, at a speed that requires about two seconds to bring the suspect's eye as far to the side as it can go. While moving the object, look at the suspect's eyeball and determine whether it is unable to pursue smoothly. Don't hesitate to make two or more "passes" in front of the eye to be absolutely sure about this clue.

After you have checked the first eye for the smooth pursuit clue, check the same eye for distinct jerkiness at maximum deviation. Simply move the object to the side until the eye has gone as far to the side as possible. As maximum deviation, no white usually will be showing in the corner to the eyeball. Hold the eyeball at that position for two or three seconds, and observe the eyeball for distinct jerkiness.

After checking the eye at maximum deviation, check the nystagmus onset angle for the same eye.

Move the object a second time to the 45-degree angle or gaze, taking about 4 seconds. As the eye follows the object, watch for it to start jerking back and forth. If you think you see nystagmus, stop the movement to see if the jerking continues. If it does, this point is the angle of onset. If it does not, keep moving the object until the jerking does occur or until you reach the 45-degree point. Note whether or not the onset occurs before the 45-degree angle of gaze.



If the suspect's eyes start jerking before they reach 45 degrees, check to see that some white of the eye is still showing on the side closest to the ear. If no white of the eye is showing, you either have taken the eye too far to the side (that is more than 45 degrees) or the person has unusual eyes that will not deviate very far to the side.

After checking for all three clues in the first eye, repeat the entire procedure for the other eye.

NOTE: Nystagmus may be due to causes other than alcohol. These other causes include seizure medications, phencyclidine (PCP), barbiturates and other depressants. A large disparity between the performance of the right and left eye may indicate brain damage.

D. Test Interpretation

You should look for three clues of intoxication in each eye.

1. The eye cannot follow a moving object smoothly.
2. Jerking is distinct when the eye is at maximum deviation.
3. The angle of onset of jerking for the eye is within 45 degrees.

If, between the two eyes, four or more clues appear, it is likely that the suspect's BAC is 0.10% or more. Using this criterion you will be able to classify correctly about 77 % of your suspects with respect to whether they are drunk or sober. That probability was determined during limited laboratory and field testing and is given simply to help you weigh the various sobriety tests in this battery as you make your arrest decision.

E. Test Conditions

Very few test conditions will affect gaze nystagmus. Most of the test requirements given in this manual are designed to make the observation of nystagmus as easy as possible for the officer doing the testing.

Nystagmus can be observed directly and requires no special equipment. You will need something for the suspect to follow with the eyes, but this can be as simple as the tip of your index finger. Officers who use this test frequently have the suspect follow a penlight. The object used should be held above eye level, so that the eyes are wide open when they look directly at it. It should be held about 12 to 15 inches in front of the eyes for ease of focus.

ADMINISTRATIVE PROCEDURES

LEYEGLASSES/CONTACTS

2.VERBAL INSTRUCTIONS

3.POSITION OBJECT (12-15 INCHES.

TEST FIRST EYE

4.CHECK PURSUIT ("high speed" pass)

5.CHECK MAX. DEVIATION

6.CHECK ONSET ("low speed" pass)

TEST SECOND EYE

7.TOTAL THE SCORE

Procedures for Walk and Turn Testing

A. Instructions Stage: Initial Positioning and Verbal Instructions

Have the suspect assume the heel-to-toe stance by giving the following verbal instructions, accompanied by demonstrations:

- o Place your left foot on the line (place your own left foot on the line to demonstrate).
- o Place your right foot on the line ahead of the left foot, with heel of right foot against toe of left foot (demonstrate).
- o Keep this position until I tell you to start walking. Do not start to walk until I tell you to do so.
- o Do you understand the instructions so far? (Make sure suspect indicates he or she understands.)

B. Demonstrations and Instructions for the Walking Stage

Explain the test requirements, using the following verbal instructions, accompanied by demonstrations:

- o When I tell you to start, you will take nine heel-to-toe steps down the line, turn around, and take nine heel-to-toe steps back up the line. (Demonstrate two or three heel-to-toe steps.)
- o When you turn, keep the front foot on the line, and turn by taking a series of small steps with the other foot, like this (demonstrate).



- o While you are walking, keep your arms at your sides, watch your feet at all times, and count your steps out loud.
- o Once you start walking, don't stop until you have completed the test.
- o Do you understand the instructions? (Make sure suspect indicates he or she understands.)
- o Begin, and count your first step from the heel-to-toe position as "One."

C. Test Interpretation

You may observe a number of different behaviors when a suspect performs this test. Research, however, has demonstrated that the behaviors listed below are the most likely to be observed in someone with a BAC of 0.10 % or more. Look for the following clues each time this test is given:

1. Cannot keep balance while listening to the instructions. Two tasks are required at the beginning of this test. The suspect must balance heel-to-toe on the line, and at the same time, listen carefully to the instructions. Typically, the person who is intoxicated can do only one of these things. He or she may listen to the instructions, but not keep balance. Record this clue if the suspect does not maintain the heel-to-toe position throughout the instructions. Do not record this clue if the suspect sways or uses the arms to balance but maintains the heel-to-toe position.
2. Starts before the instructions are finished. The intoxicated person may also keep balance, but not listen to the instructions. Since you specifically instructed the suspect not to start walking "until I tell you to begin," record this clue if the suspect does not wait.
3. Stops while walking to steady self. The suspect pauses for several seconds after one step. Do not record this clue if the suspect is merely walking slowly.
4. Does not touch heel-to-toe. The suspect leaves a space of one-half inch or more between the heel and toe on any step. Also record this clue if the suspect does not walk straight along the line.
5. Steps off the line. The suspect steps so that one foot is entirely off the line.
6. Uses arms to balance. The suspect raises one or both arms more than 6 inches from the sides in order to maintain balance.
7. Loses balance while turning. The suspect removes the pivot foot from the line while turning. That is, record this clue if both feet are removed from the line. Also record this clue if the suspect clearly has not followed directions in turning; for example, he or she pivots in one movement instead of the several small steps movement that he or she was instructed to perform.

8. Incorrect number of steps. Record this clue if the suspect takes more or fewer than nine steps in either direction.
9. Cannot do the test. Record a failure to complete the test if the suspect steps off the line three or more times, is in danger of falling, or otherwise demonstrates that he or she cannot do the test.

Should the suspect have difficulty with this test (for example, steps off the line), have him or her repeat the test from the point of difficulty, not from the beginning. This test tends to lose its sensitivity if it is repeated several times.

Observe the suspect from 3 or 4 feet away and remain motionless while he or she performs the test. Being too close or excessive motion on your part will make it more difficult for the suspect to perform, even if sober.

If the suspect exhibits two or more distinct clues on this test or fails to complete it, classify the BAC as above 0.10%. Using this criterion, you will be able to classify correctly about 68% of your suspects' BAC's. So your decision point on the Walk and Turn test is two.

D. Test Conditions

Walk and Turn requires a high, dry, level, nonslipping surface with sufficient room for the suspect to complete nine heel-to-toe steps. A straight line must be clearly visible on the surface. If no line is available, it is possible to conduct the test by directing the suspect to walk in a straight line parallel with a curb, guardrail, etc. Conditions must be such that the suspect would be in no danger if he or she were to fall.

Some people have difficulty with balance even when sober. People more than 60 years of age, over 50 pounds overweight, or with physical impairments that affect their ability to balance should not be given this test. Individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes. Individuals who cannot see out of one eye may also have trouble with this test because of poor depth perception.

E. Combined Interpretation of Gaze Nystagmus Walk and Turn Tests

The Decision Table below is designed to help you classify those suspects with a potential BAC of 0.10% or more. You will recall that the decision point on the Gaze Nystagmus Test was four clues, while on the Walk and Turn Test is was two. However, a suspect may score higher on one test and lower on the other. How do you make your decision? Find the box on the Decision Table where the two test results intersect and see if it falls in the shaded area. (For example, suppose a suspect produced only three clues on the Gaze Nystagmus but two clues on the Walk and Turn. Is he intoxicated? The Decision Table says yes. But if he scored three on the Gaze Nystagmus and only one on the Walk and Turn, the Table says his or her BAC is probably below 0.10%.)

Using this method, your chances of correctly classifying your suspects as to whether their BAC's are above or below about 80%.

DECISION TABLE

Nystagmus-Gaze Test Clues

	0	1	2	3	4	5	6
Walk-and-Turn Test Clues							
0							
1							
2							
3							
4							
5							
6							
7							
8							
9							

NOTE: If a suspect fails to complete the Walk and Turn Test, that can be treated as if he or she produced nine clues on that test.

Procedures for One Leg Stand Testing

A. Instructions Stage: Initial Positioning and Verbal Instructions

Initiate the test by giving the following verbal instructions, accompanied by demonstrations.

- o Please stand with your heels together and your arms down at the sides, like this (demonstrate).
- o Do not start to perform the test until I tell you to do so.
- o Do you understand the instructions so far? (Make sure suspect indicates he or she understands.)

B. Demonstrations and Instructions for the Balancing and Counting Stage

Explain the test requirements, using the following verbal instructions, accompanied by demonstrations:

- o When I tell you to start, you will stand on one leg, holding the other foot out in front, like this (demonstrate one leg stance).
- o You may stand on either leg that you wish.
- o Keep the raised foot about 6 inches off the ground, like this (demonstrate).
- o While you are standing, you will count out loud for 30 seconds, like this (demonstrate a count, as follows: "one—one thousand, two—one thousand, and so on, all the way to thirty—one thousand").
- o Throughout the entire test, keep your arms at the sides at all times, and keep watching the raised foot.
- o Do not hop or wobble while you are standing.
- o Do you understand? (Make sure suspect indicates he or she understands.)
- o Go ahead and perform the test.

C. Test Interpretation

You may observe a number of different behaviors when a suspect performs this test. Researchers, however, have found that those behaviors listed below are the most likely to be observed in someone with a BAC of 0.10 % or higher. Look for the following clues each time the One Leg Stand test is given.

1. The suspect sways while balancing.
This refers to side-to-side or back-and forth motion while the suspect maintains the one-leg-stand position.
2. Uses arms for balance. He or she moves the arms 6 or more inches from the side of the body in order to keep balance.
3. Hopping. He or she is able to keep one foot off the ground, but resorts to hopping on the anchor foot in order to maintain balance.
4. Puts foot down. The suspect is not able to maintain the one-leg-stand position, putting the foot down one or more times during the 30-second count.
5. Cannot do test. Record a failure to complete the test if the suspect puts the foot down three or more times during the 30-second count or otherwise demonstrates that he or she cannot to the test.



Remember that time is critical in this test. Research has shown that a person with a BAC of 0.10% can maintain his balance for up to 25 seconds, but seldom as long as 30.

If an individual produces two or more clues of fails to complete the One Leg Stand, there is a good chance the BAC is 0.10% or higher. So your decision point on this test is two. Using that criterion, you will correctly classify about 65% of the people you test as to whether their BAC's are above or below 0.10%.

Observe the suspect from at least 3 feet away, and remain as motionless as possible while he or she is performing the test, so as not to interfere with the test. If the suspect puts the foot down, instruct him or her to pick the foot up again and continue counting from the point at which the foot touched the ground. If the suspect counts very slowly, terminate the test after 30 seconds actually have elapsed.

D. Test Conditions

One Leg Stand requires a hard, dry, level, nonslippery surface. There should be adequate lighting for the suspect to have some visual frame of reference; in total darkness, One Leg Stand is difficult even for sober people. Conditions must be such that the suspect would be in no danger if he or she were to fall.

Some people have difficulty with One Leg Stand even when sober. People more than 60 years of age, more than 50 pounds overweight, or with physical impairments that interfere with balance should not be given this test. Individuals wearing heels more than 2 inches high would be given the opportunity to remove the shoes.

Taking Field Notes on Suspects' Performance of Field Sobriety Tests

For purposes of the arrest report and courtroom testimony, it is not enough simply to report the suspect's "score" (total number of clues) on the three tests. The number of clues is important to the police officer in the field because it helps him or her determine whether there is probable cause to arrest. But to secure a conviction, much more descriptive evidence is needed.

The officer must be able to describe how the suspect performed on the tests, and exactly what the suspect did when he or she performed the tests.

The standard note taking guide provided in this Manual is designed to help you develop a clear description of the suspect's performance on the tests.

Taking Field Notes on Horizontal Gaze Nystagmus Testing

The section on the horizontal gaze nystagmus test appears on the bottom of the guide's front side.

First, make sure that you inquire whether the suspect is wearing contact lenses. Check the "No" or "Yes" box to record the suspect's response.

Complete the entire test for the first eye, writing or otherwise indicating "yes" or "no" for each nystagmus clue.

- o Write "yes" if the clue is present;
- o Write "no" if the clue is present.

In the section labeled "other," record any facts, circumstances, conditions or observations that may be relevant to this test.

- o Examples of additional evidence of alcohol impairment emerging during nystagmus test:
 - suspect unable to keep head still;
 - suspect swaying noticeably;
 - suspect utters incriminating statements.
- o Examples of conditions that may interfere with suspect's performance of the nystagmus test:
 - Suspect has one artificial eye, or very weak vision in one eye (indicate which eye);
 - Wind, dust, etc. (irritating suspect's eyes);
 - numerous visual or other distractions impeding the test.

HORIZONTAL GAZE NYSTAGMUS

Note: suspect - contacts? ☐ NO ☐ YES

	LEFT	RIGHT
★ EYE DOES NOT PURSUE SMOOTHLY		
★ DISTINCT NYSTAGMUS AT MAX. DEVIATION		
★ NYSTAGMUS ONSET BEFORE 45 DEGREES		

OTHER _____

Taking Field Notes on Walk and Turn Testing

The section on the walk and turn test appears at the top of the guide's back side.

The first two clues, "cannot keep balance" and "starts too soon" apply only during the instructions stage of the test. Record the number of times each of those clues appear.

For example, if the suspect's feet "break apart" from the heel-to-toe stance twice during the instructions stage, write "2" in the box alongside the "cannot keep balance" clue. Similarly, if the suspect never "starts too soon," write "0" in that box.

<u>WALK AND TURN</u>		
<u>INSTRUCTIONS STAGE</u>		
CANNOT KEEP BALANCE	<input type="text"/>	
STARTS TOO SOON	<input type="text"/>	
<u>WALKING STAGE</u>		
	<u>FIRST NINE STEPS</u>	<u>SECOND NINE STEPS</u>
STOPS WALKING	<input type="text"/>	<input type="text"/>
MISSSES HEEL-TOE	<input type="text"/>	<input type="text"/>
STEPS OFF LINE	<input type="text"/>	<input type="text"/>
RAISES ARMS	<input type="text"/>	<input type="text"/>
ACTUAL STEPS TAKEN	<input type="text"/>	<input type="text"/>
THE TURN (DESCRIBE)		
CANNOT DO TEST (EXPLAIN)		
OTHER:		

Don't simply leave boxes blank. If a particular clue never shows up, write "0" in the corresponding box.

Record the next five clues separately for the walk up the line, and then down the line.

1. If a suspect stops walking, record how many times he or she does so.
 - o how many times during the first nine steps;
 - o how many times during second nine steps.
2. If suspect fails to touch heel-to-toe, record how many times this happens.
3. If suspect steps off the line while walking, record how many times this happens.
4. If suspect uses arms to balance, give some indication of how often or how long this happens.
 - o Example: suspect raised arms from sides three times; write "3" in box.
 - o Example: suspect held arms away from sides during 3 through 7; write "steps 3-7" in the box.
 - o Example: suspect "flapped" arms continuously; write "const. flaps" in the box.