



# Drug Information Training for Educational Professionals (DITEP)

## Day Two

### Instructor Guide 2017 Edition



INTERNATIONAL ASSOCIATION of CHIEFS OF POLICE  
Serving the Leaders of Today,  
Developing the Leaders of Tomorrow®

## Session VII

## EYE EXAMINATIONS

<b>Overview</b>
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**Objectives**

Upon successfully completing this session, participants will be better able to:

1. Understand the different types of nystagmus.
2. Conduct horizontal gaze nystagmus, vertical nystagmus, and lack of convergence eye tests.
3. Understand pupil size and pupil size assessments using a pupilometer.
4. Interpret eye examination results in relation to drug impairment.

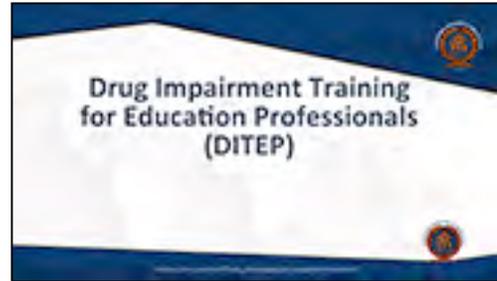
**CONTENT SEGMENTS****LEARNING ACTIVITIES**

A. The Eyes - Windows to the Brain	Instructor Led Presentations
B. How the Seven Drug Categories Affect the Eyes	Instructor Led Demonstrations
C. Horizontal Gaze Nystagmus (HGN)	Hands-On Practice
D. Categories of Nystagmus	
E. Medical Impairment	
F. Administrative Procedures for HGN	
G. Vertical Gaze Nystagmus (VGN)	
H. Results of HGN and VGN	
I. HGN and VGN Demonstrations	
J. Lack of Convergence	
K. Practice Test for Lack of Convergence	
L. Estimation of Pupil Size	
M. Dark Room Examination of Pupil Size	
N. Relationship of Drug Categories to the Eye Examinations	

## DAY TWO of the DITEP Training

**Welcome the participants to Day 2 of the DITEP training.**

**Cover the objectives for this session and the remaining sessions.**

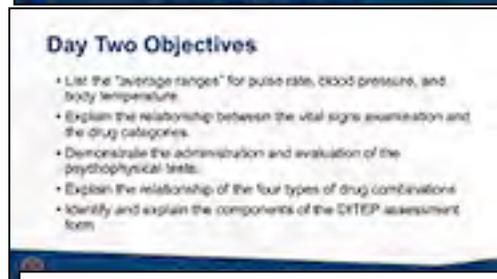
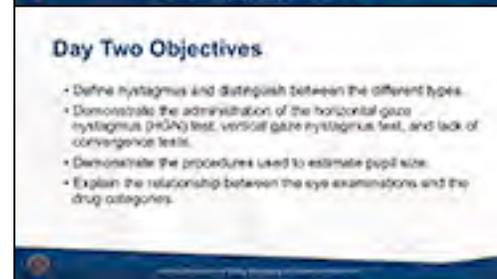
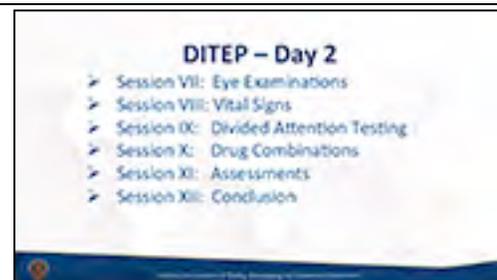


**NOTE: Since this Session is the beginning of DAY TWO, the following slides need to be covered before the start of this Session. They cover the objectives for this and the remaining Sessions of the training.**

### Day Two Agenda:

- Session VII – Eye Examinations
- Session VIII – Vital Signs
- Session IX – Divided Attention Testing
- Session X – Drug Combinations
- Session XI – Assessments
- Session XII – Conclusion and Testing

### Day Two Objectives:



## SESSION SEVEN: EYE EXAMINATIONS

### A. The Eyes – Windows to the Brain

People often call eyes “the windows to the soul.” Even many researchers agree, the eyes do provide a lot of useful information about another person’s emotional state.



It has also been said that the eyes are the “windows to the brain.” “The eye is the window into the brain and by measuring how healthy the eye is, we can determine how healthy the rest of the brain is.” *Source: Peter A. Calabresi, M.D., Professor of Neurology, Johns Hopkins University School of Medicine.*

We also can gather considerable information about a person’s drug use and condition from looking at his/her eyes.

### B. How the Seven Drug Categories Affect the Eyes

- Some indicators are immediately visible
- Some indicators need to be tested for

Two things we check for when trying to identify drug impairment and certain drug categories are:

- Nystagmus (An involuntary jerking of the eyes)
- Pupil Size

### C. Horizontal Gaze Nystagmus

Horizontal Gaze Nystagmus (HGN) is defined as: Involuntary jerking of the eyes occurring as the eyes gaze toward the side. (*Source: Drug Evaluation and Classification Program*)



In addition to being involuntary,

- a person is usually unaware it is happening, and
- the person is powerless to stop or control it

Key summary points of HGN include:

- It is a natural, normal phenomenon
- Alcohol and certain other drug categories cause this phenomenon

## D. Categories of Nystagmus

HGN is not the only type of nystagmus. There are numerous circumstances under which the eyes will jerk involuntarily.

It is important to know some of the other common types of nystagmus, to be aware of their potential impact on our observations.

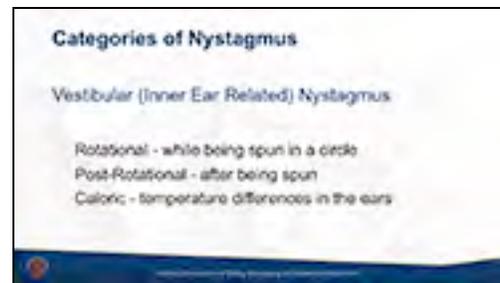
Nystagmus of several different origins may be seen. There are three general categories of nystagmus.

**Note: Go over the categories quickly to show there are other causes for nystagmus that are natural. Selectively reveal the categories of nystagmus and the examples.**

**Vestibular Nystagmus** is caused by movement or action to the vestibular system.

Types of vestibular nystagmus include:

- **Rotational Nystagmus** occurs when the person is spun around or rotated rapidly, causing the fluid in the inner ear to be disturbed. If it were possible to observe the eyes of a rotating person, they would be seen to jerk noticeably.



**Point out: The vestibular system is located in the inner ear. It provides information to the brain and consequently to the eyes about position and movement of the head to maintain orientation and balance of the body.**

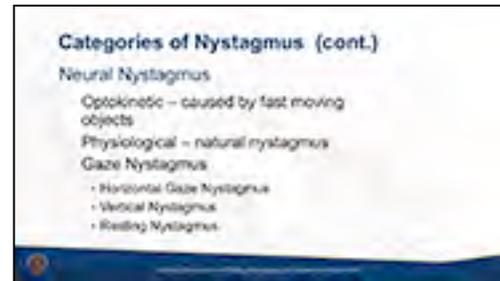
- **Post Rotational Nystagmus** is closely related to rotational nystagmus. When the person stops spinning, the fluid in the inner ear remains disturbed for a period of time and the eyes continue to jerk.

**Point out: These types of nystagmus will not interfere with the Horizontal Gaze Nystagmus test due to the conditions under which they occur.**

- **Caloric Nystagmus** occurs when fluid motion in the canals of the vestibular system is stimulated by temperature. For example: putting warm water in one ear and cold in the other.

Nystagmus can also result from neural activity.

- **Optokinetic Nystagmus** occurs when the eyes fixate on an object that suddenly moves out of sight, or when the eyes focus on sharply contrasting moving images. An example would be looking at a rapidly spinning wheel that has alternating black and white spokes.



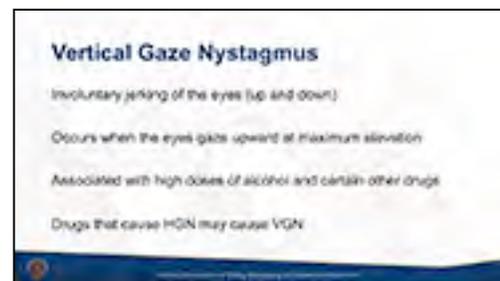
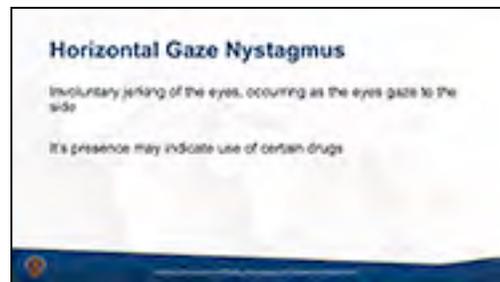
**Point out: The HGN test will not be influenced by Optokinetic nystagmus because the subject is required to focus the eyes on a stimulus that moves smoothly and relatively slowly across the field of view.**

- **Physiological Nystagmus** is the natural nystagmus that keeps the sensory cells of the eye from tiring. This happens to us all the time. This type of nystagmus produces extremely minor tremors or jerks of the eyes. These tremors are generally too small to be seen with the naked eye. Physiological nystagmus without added influence does not affect the HGN test.

**Emphasize that physiological nystagmus will have no impact on our standardized field sobriety tests, because its tremors are generally invisible.**

- **Gaze Nystagmus** occurs as the eyes move from the center position. It is separated into three types:

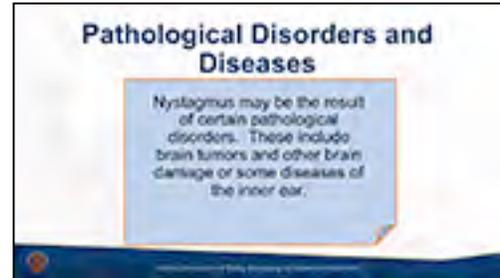
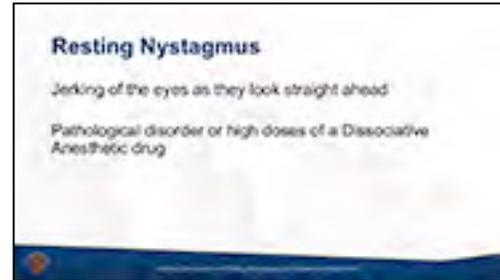
- **Horizontal Gaze Nystagmus** occurs as the eyes gaze to the side. This examination provides the first and most valid test in the standardized field sobriety testing battery used by police officers. This test is most accurate for determining alcohol influence. Its presence may also indicate use of Dissociative Anesthetics, Inhalants and CNS Depressants.
- **Vertical Gaze Nystagmus** occurs as the eyes gaze up. It is defined as an involuntary jerking of the eyes occurring as the eyes are held at maximum elevation. The presence of this type of nystagmus is associated with the use of Dissociative Anesthetics, and high doses of CNS Depressants (including alcohol) or Inhalants for that individual.



**Point out: That since the discussion is about young people, a relatively low amount of alcohol could cause vertical gaze nystagmus.**

- **Resting Nystagmus** is referred to as jerking as the eyes look straight ahead. This condition is not frequently seen

Nystagmus may also be caused by certain pathological disorders. These include brain tumors, other brain damage and some disorders of the inner ear.



## E. Medical Impairment

There are examinations you will conduct to assess possible medical impairment. They include:

- Equal tracking ability
- Estimation of pupil size

Equal tracking ability can be affected by certain medical conditions or injuries involving the brain.

By passing the stimulus across both eyes, you can see if both eyes are tracking equally.

***Demonstrate how to check for equal tracking ability. Move the stimulus from center to the subject's far left, to far right and back to center, taking approximately two seconds to complete the movement. Point out that both eyes should be tracking the stimulus together.***

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

***Note: Even if alcohol or drug impairment exists, there are medical conditions with symptoms commonly associated with alcohol influence.***

If the two eyes do not track together, there is a possibility that the person may be suffering from a neurological disorder.

If a subject's eyes do not track together, *they can not perform the HGN test.*

***Point out: If a subject has an obvious abnormal eye disorder or an artificial eye, it is recommended that HGN not be administered.***

**Pupil size** will be affected by some medical conditions or injuries.

If the two pupils are distinctly different in size, it is possible that the subject may have an artificial eye (glass or plastic prosthesis inserted in the eye socket to replace the eyeball), or may be suffering from a recent head injury or neurological disorder.

***Point out: If the subject has an obvious abnormal eye disorder or an artificial eye, it is recommended that HGN not be administered. If a subject has distinctly different pupil sizes caused from an old head injury that normally will not affect the HGN test.***

If there is an indication the person may be suffering from a recent head injury, medical attention should be considered.

***Example: Subject's clothing or physical appearance indicate he/she has recently been involved in a fight or accident (bleeding, bruises, dazed appearance, etc.)***

## F. Administrative Procedures for Horizontal Gaze Nystagmus

***Note: It is important that the instructors keep referring to the assessment form to show how to score the various tests being conducted. Refer the participants to the assessment form in their manual.***

To properly conduct the HGN test, begin by instructing the subject to remove any eye glasses if worn.

It doesn't matter whether the subject can see the stimulus with perfect clarity, as long as they can see it.



***Point out: HGN is not a vision test. If the subject can focus on the stimulus and the eyes track together, they should be able to perform the test.***

Give the subject the appropriate verbal instructions, which include:

- Put your feet together with your arms at your sides
- Keep head still

***Note: Demonstrate what to do if subject will not keep their head still.***

- Keep your eyes focused on my (stimulus)

***Point out: The person should be asked to focus is on a specific point of the stimulus (tip of pen, finger, etc.) and not on the entire object.***

- Follow movement of the stimulus with your eyes only

- Keep focusing on stimulus until told the test is over

**Point out: These instructions are major points that must be conveyed during the verbal instructions. It is important that the subject understand and follow the instructions.**

Position the stimulus approximately 12-15 inches in front of the subject's nose, and slightly above eye level to commence the test.

**Explain why the distance is important and that slightly above eye level opens the subject's eyes so the administrator may better observe them.**

Check for equal pupil size and resting nystagmus.

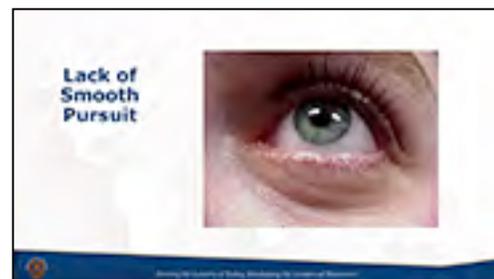
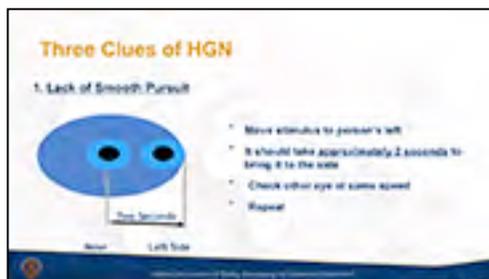
Check for equal tracking.

Check the left eye for the **Lack of Smooth Pursuit**.

If the eye is observed to be jerking while moving, *this is a clue*.

Check the right eye for the lack of smooth pursuit.

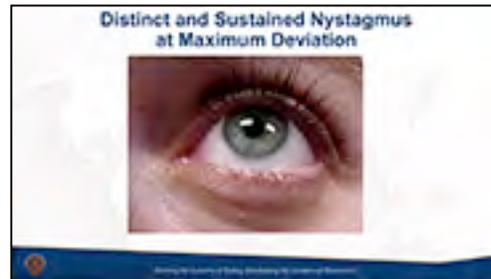
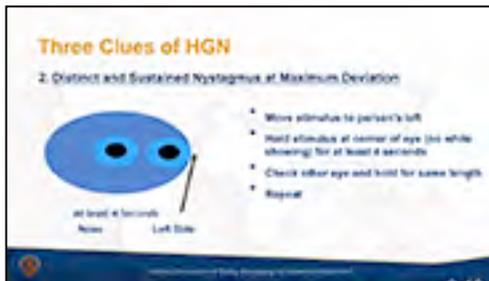
**Point out: For administrative purposes, we always start off with the subject's left eye to ensure that the procedure is systematic and standardized. Remind participants to make at least two complete passes in front of both eyes to check for this clue. Each pass should take approximately 2 seconds from center to the side.**



Next, check the left eye for the **Distinct and Sustained Nystagmus at Maximum Deviation** clue.

Check the right eye for the distinct and sustained nystagmus at maximum deviation clue.

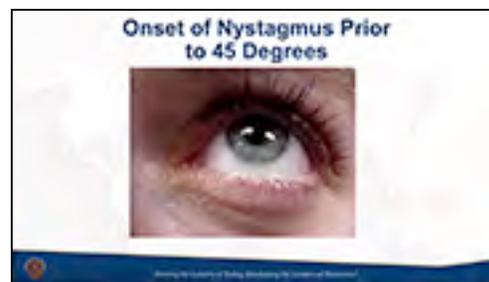
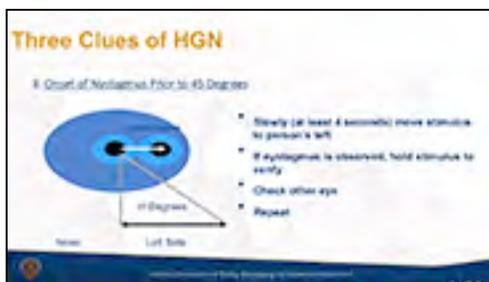
**Emphasize the jerking must be definite, distinct and last at least four seconds for this clue to be scored. Explain in most cases no white should be showing in the corner of the eye when scoring this clue.**



Check the left eye for the **Onset of Nystagmus Prior to 45 Degrees** clue.

Check the right eye for the onset of nystagmus prior to 45 degrees clue.

**Point out: The jerking must begin prior to reaching the 45 degree point. The movement of the stimulus should take approximately 4 seconds from center to 45 degrees.**



**Note: Demonstrate how to estimate 45 degrees:**

It is not difficult to determine when the eye has reached the 45-degree point, but it does require some practice. By starting with the stimulus approximately 12-15 inches directly in front of the nose, 45-degrees will be reached when the stimulus has been moved an equal distance to the side.

Two other important indicators can be used to determine if the eye is within 45 degrees. They are:

- At 45 degrees, some white usually will still be visible in the corner of the eye (for most people).

By starting the stimulus approximately 12-15 inches in front of the subject's nose,

45 degrees will usually be lined up with, or slightly beyond, the edge of the subject's shoulder.

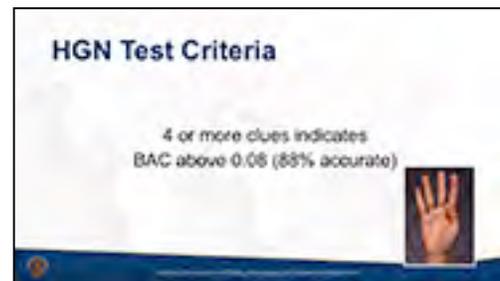
***Point out: This latter indicator may not be valid if the subject is either a very large or a very small person.***

***Remind participants to check each eye twice for each clue.***

***Note: Demonstrate the horizontal gaze nystagmus test on a participant or another instructor to the class.***

Total the clues.

- Maximum number of clues possible for each eye is three (3)
- Total maximum number of clues for both eyes
- Four out of six clues is consistent with *impairment* by CNS Depressants, Dissociative Anesthetics, or Inhalants.



For most subjects nystagmus clues will appear in the sequence listed.\*

Most subjects will exhibit identical clues in both eyes.

***Point out: It is possible that a clue could be seen in one eye and not the other. For example: three clues could be observed in one eye and only two in the other. Explain the importance of testing both eyes independently.***

***Remind participants to check each eye twice for each clue.***

It is unlikely the eyes of someone under the influence of alcohol or drugs will react totally different.

***Point out: If one eye shows all three clues and the other gives no evidence of nystagmus, the person may be suffering from one of the pathological disorders previously covered or may have an artificial eye.***

## G. Vertical Gaze Nystagmus:

The **Vertical Gaze Nystagmus** test is very simple to administer and includes the following:

- Position the stimulus horizontally, about 12-15 inches in front of the subject's nose
- Instruct the subject to hold the head still and follow the stimulus with their eyes only

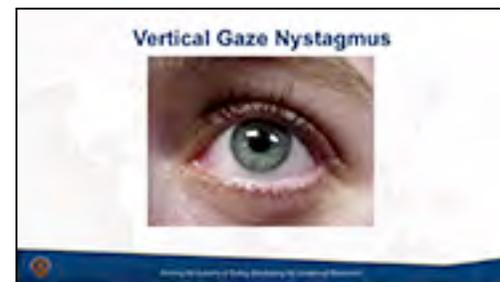


**Point out: Vertical gaze nystagmus was not examined in the original research that validated the SFST battery (HGN, walk and turn, one leg stand).**

- Raise the stimulus until the subject's eyes are elevated as far as possible. Hold the elevated position for approximately four seconds

**Point out: Do not to take stimulus out of subject's range of vision.**

- Watch closely for clear evidence of the eye jerking up and down



**Demonstrate the vertical gaze nystagmus test on a participant or another instructor to the class.**

Vertical Nystagmus is often present in subjects under the influence of some Dissociative Anesthetics, such as PCP or PCP analogs.

Vertical Gaze Nystagmus may also be present in subjects under the influence of high doses (for that person) of CNS Depressants or Inhalants.

**Point out: A high dose is defined as a high dose for any particular individual. For example: A non-tolerant drinker may exhibit vertical nystagmus at a 0.06% BAC, while an alcoholic may not exhibit vertical nystagmus at a 0.25% BAC.**

## H. Results of HGN and VGN

If horizontal gaze nystagmus is observed it is likely the subject may have taken a CNS Depressant, Dissociative Anesthetic, an Inhalant, or a combination of drugs including one of these drug categories.

If vertical gaze nystagmus is observed it may be the subject took a Dissociative Anesthetic or a high dose of CNS Depressants or Inhalants for that individual.

## I. HGN and VGN Demonstrations

Demonstration of Horizontal Gaze Nystagmus (HGN) test. The three steps of the HGN test are:

- Check for lack of smooth pursuit
- Check for distinct and sustained nystagmus at maximum deviation
- Estimation of the angle of onset

**Select two participants to demonstrate HGN in front of the class. Have one administer the test on the other. Coach and critique the participant's performance.**

**When the participant has completed the HGN test, have the participant check the angle of onset to estimate 45 degrees. Check their estimation with a template.**

Demonstration of Vertical Gaze Nystagmus

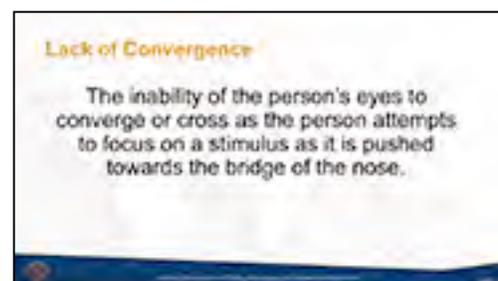
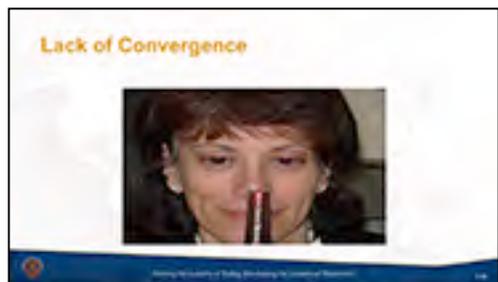
**Choose two new participants to demonstrate this procedure.**

Practice HGN and VGN.

**Have participants work in pairs administering HGN and VGN. Monitor, coach and critique the participants practice.**

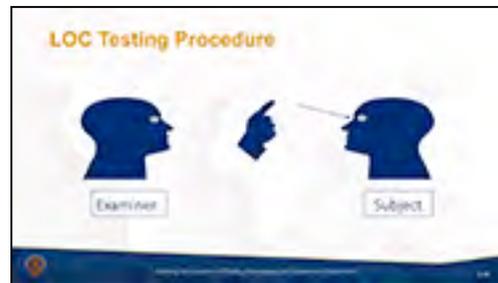
## J. Lack of Convergence

In simple terms, Lack of Convergence (LOC) is the inability of an individual to cross the eyes when focusing on a stimulus as it is moved towards inward towards the nose.



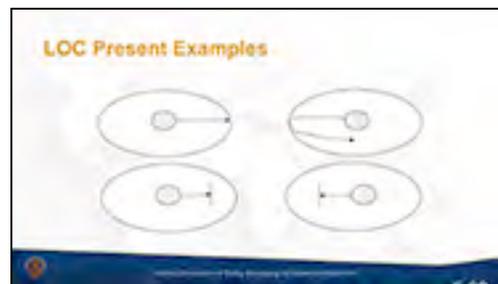
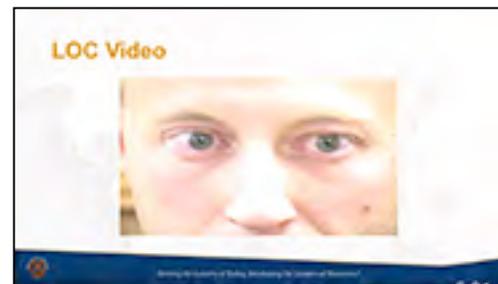
Administering the LOC test includes the following steps:

- Instruct the person to keep his head steady, and follow the stimulus with their eyes only
- Position the stimulus approximately 12 to 15 inches from the eyes (if the subject wears glasses for near vision, they should put them on for the test)
- Begin moving the stimulus in a slow circle in front of the subject's face (several passes may be needed to observe the person's ability to track the stimulus)



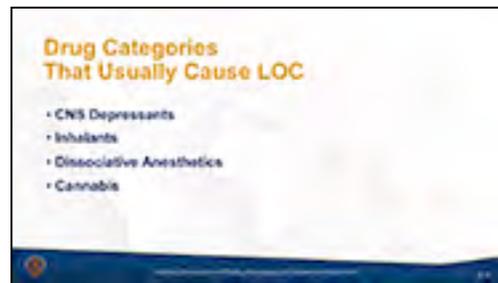
**Point out: The initial circular motion helps to verify that the subject has focused on the stimulus and is able to track it. Emphasize that it doesn't matter whether the circular motion is clockwise or counter-clockwise.**

- Pause after completing the slow circle movement and then slowly move (push) the stimulus towards the bridge of the subject's nose
- Stop and hold the stimulus approximately 2" – 3" from the subject's bridge of the nose, holding it there for approximately 1 second
- Closely observe the eyes and record the eyes' movement
- If the eyes follow the stimulus to the center (eyes cross) then lack of convergence is not present
- If one eye drifts away from the center towards the side, or one or both eyes do not move inward, then lack of convergence is present.
- Record the results of this test showing the movement of both eyes with an arrow



**Show how to record the movement of the eyes on the assessment form.**

The check for lack of convergence can provide another clue as to the possible presence of CNS Depressants, Dissociative Anesthetics, Inhalant and Cannabis impairment.



**Point out: You might begin to suspect the presence of Cannabis if LOC was observed but no nystagmus was observed.**

## **K. Lack of Convergence Demonstration and Practice**

**Select a participant and demonstrate the LOC test on the participant.**

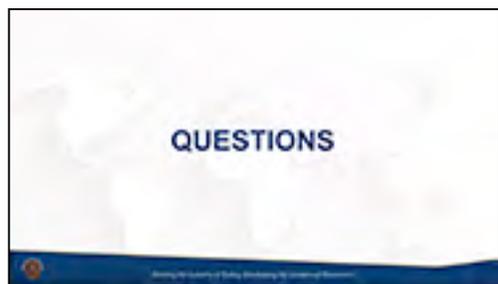
**Excuse the participant volunteer and thank him/her for participating. After conducting the demonstration, have the participants practice using another participant.**

Participants' initial practice of the test for lack of convergence.

**Instruct participants to work in pairs, taking turns testing each other's eyes for lack of convergence.**

**Monitor, coach and critique the participants' practice.**

**Allow this practice to continue for approximately 5 minutes.**



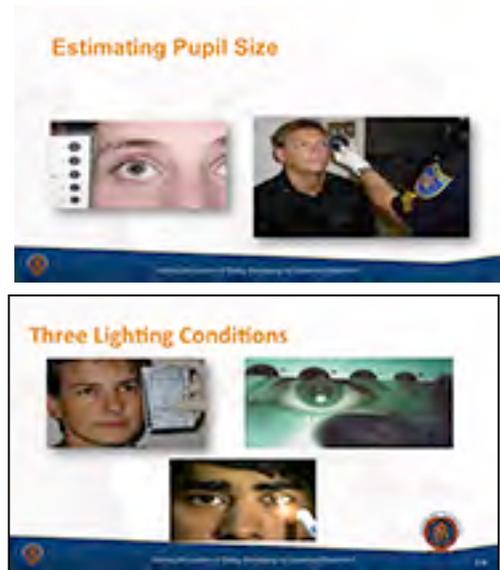
## L. Estimation of Pupil Size

A person's pupil size can provide important information about the category of drugs an individual may be using.

Pupil size is estimated in three different lighting conditions.

Within the DEC Program, there are "normal ranges" for each lighting condition.

Pupils that appear outside these normal ranges can help in assessing drug impairment and the possible drug category causing that impairment.



Estimation of pupil size requires the use of a **pupilometer**.

***Exhibit a pupilometer and explain its use. If pupilometers are available for distribution to the class, hand those out.***

The estimation of pupil size is conducted using the following steps:

- Hold the pupilometer alongside the subject's eye. (The pupilometer should be positioned even with the subject's eyeball)
- Move the pupilometer up or down until you find the darkened circle (or half circle) that appears to be approximately the same size as the subject's pupil

For DEC Program purposes, normal pupil size in Room Light is **2.5 - 5.0 mm**.

***Have participants work in pairs taking turns estimating each other's pupil size. Monitor, coach and critique the participants' practice. Allow the exercise to continue for approximately 5 minutes.***

***Have them record their partner's pupil size.***

***Ask participants how many found their partners had different-sized pupils.***

***Explain it is not uncommon for people to have pupils that differ by as much as one-half millimeter. Larger differences are more unusual.***

***Tabulate the participants' estimates on a dry-erase board or a flip chart using the following ranges:***

7.0 or larger  
6.5  
6.0  
5.5  
5.0  
4.5  
4.0  
3.5

3.0  
2.5 or smaller

### M. Dark Room Examination of Pupil Size

A low-intensity penlight and a pupilometer are needed for this examination. Additionally, a room capable of being completely dark (*as near total darkness as possible*) will be needed.

It is highly recommended that at least two people are in the dark room with the individual under the influence of drugs.

***Point out: Due to the close and vulnerable proximity to the subject during the dark room examination, having another person in the room is recommended.***

***If possible, use a real dark room. Make sure there are enough instructors in the dark room to assist participants and discourage conversation.***

***Practice with penlights and pupilometers prior to dark room exercise.***

The procedures for checking for Room Light are:

- Have the subject look straight ahead and fixate their eyes on something in the distance
- Bring the pupilometer up alongside the subject's left eye
- Using the pupilometer, find the circle or semi-circle closest in size to the subject's pupil and record the size
- Repeat the procedure for the right eye



The procedures for the checking Near Total Darkness are:

- Explain the procedures to the subject prior to darkening the room
- Completely darken the room or to near total darkness
- Wait approximately 90 seconds to allow everyone's eyes to adjust to the darkness
- Completely cover the tip of the penlight with a finger or thumb, so that only a reddish glow and no white light emerges (demonstrate)
- Position the pupilometer alongside the subject's face at eye level
- Bring the glowing tip of the penlight up toward the subject's left eye until close enough to distinguish the pupil from the colored portion of the eye (iris)



- Continue to hold the glowing red tip in that position and alongside the subject's left eye and locate the circle or semicircle that is closest in size to the pupil
- Repeat this procedure for the subject's right eye

**Select a participant and demonstrate.**

The DEC Program normal range for Near Total Darkness is **5.0 - 8.5 mm**

The procedures for checking for Direct Light are:

- Position the pupilometer alongside the subject's left eye
- Bring the penlight from the side of the subject's face, directly into the left eye
- Position the penlight so that it illuminates and approximately fills the subject's eye socket

**Emphasize that the penlight should be positioned so that the beam just fits the eye socket.**

- Hold the penlight in that position for approximately 15 seconds and locate the circle or semi-circle that is closest in size to the subject's pupil
- Record the estimate and repeat the procedure for the subject's right eye

**Select a participant and demonstrate.**

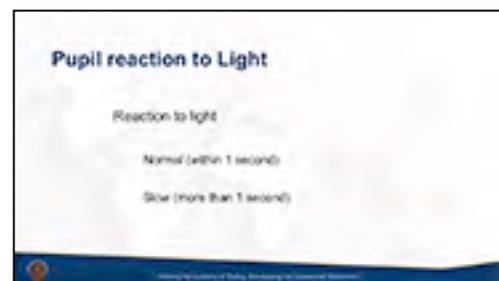
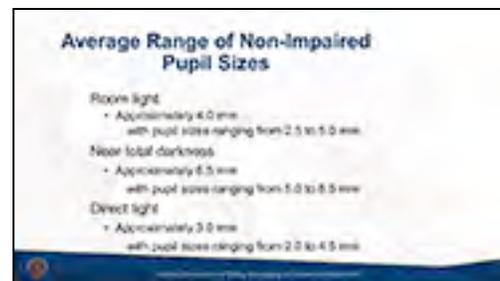
The DEC Program normal range for Direct Light is **2.0 - 4.5 mm.**

Assessment of the subject's pupil reaction to light takes place immediately before the check of pupil size under direct light.

It is done when the penlight beam is directed into the subject's eye and noting how the pupil reacts.

Under ordinary conditions, the pupil should react very quickly, and constrict noticeably when the light beam strikes the eye.

Under the influence of certain categories of drugs, the pupil's reaction may be very sluggish, or there may be no visible constriction at all.



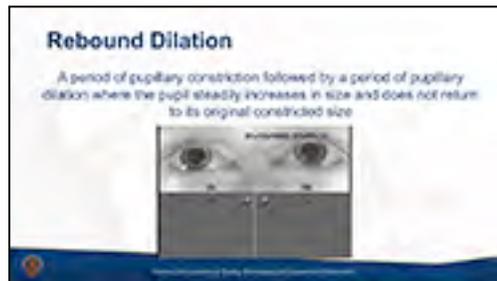
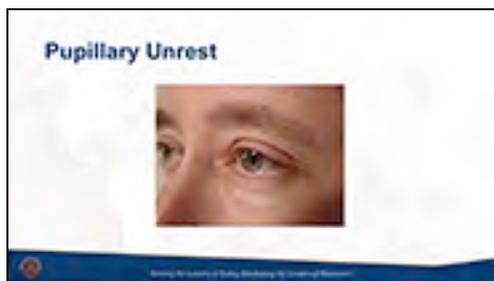
**Point out: The pupil's reaction is considered slow if it takes more than one second to reach full constriction.**

When determining pupil reaction to light, the light should be positioned into the subject's eye for approximately 15 seconds to assess.

The check for Rebound Dilation is conducted during this 15 second period.

**Point out: Rebound Dilation is 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. Remind the participants that Rebound Dilation is consistent with Cannabis use.**

After completing the procedure for the left eye, repeat the procedure for the right eye.



Participants' initial practice in assessing the pupil's reaction to light.

**Instruct the participants to work in pairs, taking turns shining the penlight into each other's eye and observing pupil reaction.**

**Remind participants to position the penlight so that the beam exactly fits the eye socket when the beam is brought directly into the eye. Monitor, coach and critique the participants' practice.**

**Allow the practice to continue for only approximately 5 minutes.**

**Solicit participants' comments and questions concerning the eye examinations.**



## N. Relationship of Drug Categories to the Eye Examination

Three of the seven drug categories cause horizontal gaze nystagmus (HGN) and four do not. The three that cause HGN are:

- CNS Depressants, Inhalants and Dissociative Anesthetics

Any drug that will cause HGN will induce Vertical Gaze Nystagmus (VGN) if the dose is high for that individual.



Dissociative Anesthetics induce VGN, as do CNS Depressants and Inhalants at a high dose for that individual.

An important and interesting fact is drugs that cause HGN and VGN usually do not affect pupil size. Drugs that do not cause HGN and VGN will usually affect pupil size.

CNS Stimulants and Hallucinogens usually cause the pupils to dilate.

Cannabis usually causes the pupils to dilate, but may leave them normal in size.

Cannabis also causes red, bloodshot eyes.

Narcotic Analgesics usually cause the pupils to be smaller in size (constricted).

CNS Depressants, Dissociative Anesthetics and Inhalants usually leave the pupils normal in size.

**Footnote: For CNS Depressants: Soma, Quaaludes, and some anti-depressants will dilate.**

**Footnote: For Inhalants: normal, but may be dilated.**

**Footnote: For Cannabis: dilated, but may be normal.**

Certain drug categories cause the pupils to have a different reaction to light.

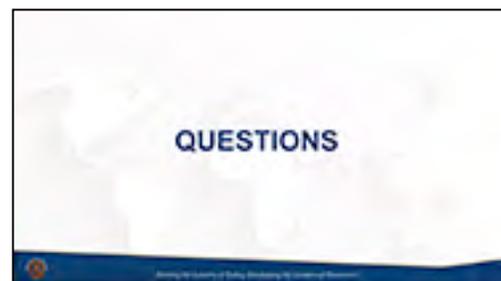
CNS Depressants, Stimulants, and Inhalants cause the eyes to have a slow reaction to light.

Hallucinogens, Dissociative Anesthetics, and Cannabis usually have a normal (within one second) reaction to light.

**Footnote: For Hallucinogens: Certain psychedelic amphetamines cause slowing.**

Narcotic Analgesics cause a little or none visible reaction to light.

**Solicit questions from the participants regarding HGN, VGN and the other eye tests covered in this session.**





## Session VIII

# EXAMINATION OF VITAL SIGNS

### Overview

#### Objective

Upon successfully completing this session, participants will be better able to relate the expected results for the vital signs examinations to the various drug categories.

#### Content Segments

#### Learning Activities

A. Purpose of the Examinations

Instructor Led Presentations

B. Procedures for Conducting Vital Signs Examinations

C. Relationship of Drug Categories to the Vital Signs Examinations



## SESSION EIGHT: EXAMINATION OF VITAL SIGNS

### A. Purpose of the Examinations:

The examination of a person's vital signs can provide useful information concerning the possible presence or absence of various categories of drugs. The Drug Evaluation and Classification (DEC) Program has established average vital signs, which are also relevant to the DITEP evaluation process. They include:

- Pulse rate: 60 to 90 beats per minute.
- Blood pressure: Systolic of 120-140 mm/Hg and Diastolic of 70-90 mm/Hg
- Body Temperature: 98.6 +/- 1 degree Fahrenheit



***Point out: These are ranges for the Drug Evaluation and Classification Program and may differ slightly from what the participants are accustomed to seeing.***

Different categories of drugs affect these vital signs in different ways. Such as:

- Certain categories speed up the body and elevate the vital signs

***Point out: Pulse, blood pressure and temperature may be elevated.***

- Some categories slow down the body and lower the vital signs

***Point out: Pulse, blood pressure and temperature may slow or go down.***

### B. Procedures for Conducting Vital Signs Examinations

Systematic examination of the vital signs gives us useful information concerning the possible presence or absence of various drug categories.

***Point out: For standardization purposes, pulse and blood pressure readings will be obtained using the left arm whenever possible.***

#### Measurement of Pulse Rate

Pulse is the expansion and contraction of an artery generated by the pumping action of the heart. Pulse rate is the number of pulsations in an artery per minute.

The process for measuring pulse rate is:

- Locate the pulse using the subject's radial artery (in or near the natural crease of the wrist)
- Place the tips of the index finger and middle finger into the crease of the subject's wrist
- Once the pulse is located, count the pulses for 30 seconds and multiply by two

Do's and Don'ts of Measuring Pulse Rate:

- Don't use the thumb to apply pressure while measuring a subject's pulse
- Generally, the Radial Artery will be the only pulse point checked

***Demonstrate this procedure and if time allows, have the participants practice finding their own pulse.***

Measurement of Blood Pressure

Measuring a subject's blood pressure is not as easy as measuring pulse. Measuring blood pressure requires specialized equipment.

***Point out: Participants may want to rely on a school nurse or EMT for measuring blood pressure.***

The device used for measuring blood pressure is called a sphygmomanometer. It has a special cuff that is wrapped around the subject's arm and inflated with air pressure.

***Exhibit a sphygmomanometer and demonstrate how blood pressure is taken. Point out that these instructions are for using a standard sphygmomanometer and could be different if using an electronic version.***

The blood pressure measurement is taken by:

- Positioning the cuff on the subject's bicep so that the tubes extend down the middle of the arm
- Wrap the cuff snugly around the bicep
- Clip the manometer to the subject's sleeve
- Twist the pressure control valve all the way to the right
- Put the stethoscope earpieces in your ears
- Place the stethoscope diaphragm or bell over the brachial artery

- Inflate the bladder (cuff) with enough air pressure to cut the flow of blood (Typically inflate to about 180 - 200 mmHg)
- Slowly release the air pressure (about 2 mmHg per second) and keep your eyes on the gauge and listen for the tapping sounds (Korotkoff sounds)
- Slowly release the air pressure
- Continue to release slowly until the first tapping is heard - that level will be the Systolic blood pressure
- Continue to release the air pressure until the blood flows continuously through the artery and the tapping is no longer heard – that level will be the Diastolic blood pressure
- Record the measurements

Do's and Don'ts of Measuring Blood Pressure:

- If you inflate the bladder and then need to repeat the measurement, wait at least three minutes to allow the subject's artery to return to normal
- Wait for 3 minutes to repeat the measurement if needed
- Don't re-inflate the cuff once you start releasing the pressure

***Note: If blood pressure testing equipment is available and if time allows, have the participants practice taking blood pressure on each other. If not, demonstrate the procedure using either a participant or another instructor.***

The body temperature measurement is taken by:

- Placing the oral thermometer covered with a plastic sleeve under the subject's tongue
- Waiting until the thermometer beeps and recording the result

Do's and Don'ts of Measuring Body Temperature:

- Ensure the thermometer remains under the subject's tongue
- Refrain from letting the subject eat or drink anything immediately prior to measure temperature
- Ensure a fresh disposable mouthpiece (sleeve) is used each time

***Exhibit an oral thermometer and sleeve and demonstrate how temperature is taken. Point out that these instructions are for using a standard oral thermometer and could be different if using an electronic version.***

## C. Relationship of Drug Categories to the Vital Signs Examinations

**Note: Ask participants to continue to fill out the matrix with blood pressure, pulse and temperature information.**

All seven drug categories will ordinarily affect pulse rate and blood pressure.

Two categories will usually lower pulse and blood pressure.

**Note: Ask the participants which categories would most likely lower the pulse rate and blood pressure.**



The image shows a matrix titled "Vital Sign Relationship to the Seven Drug Categories". The matrix has seven columns representing drug categories: CNS Stimulants, CNS Depressants, Narcotic Analgesics, Dissociative Anesthetics, Inhalants, Alcohol, and Cannabis. The rows represent vital signs: Pulse, Blood Pressure, and Body Temperature. Red bars indicate an elevation, blue bars indicate a decrease, and white bars indicate no effect.

	CNS Stimulants	CNS Depressants	Narcotic Analgesics	Dissociative Anesthetics	Inhalants	Alcohol	Cannabis
Pulse	Blue	Red	Red	Red	Red	Red	Red
Blood Pressure	Blue	Red	Red	Red	Red	Red	Red
Body Temperature	Red	Red	Red	Red	White	White	White

CNS Depressants usually lower pulse and blood pressure, although alcohol, Quaaludes and possibly some anti-depressants may elevate the pulse.

Narcotic Analgesics usually lower pulse and blood pressure.

The other five drug categories all tend to elevate pulse.

Most drugs that elevate the pulse also elevate blood pressure.

CNS Stimulants, Hallucinogens, Dissociative Anesthetics and Cannabis usually elevate blood pressure.

Inhalants, such as volatile solvents and aerosols elevate blood pressure. Anesthetic gases typically lower blood pressure. Anesthetic gases include nitrous oxide, amyl nitrite and ether.

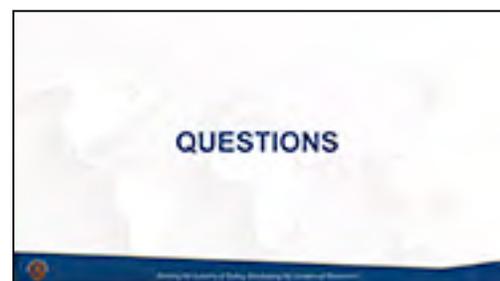
There are three drug categories that typically elevate the body temperature; CNS Stimulants, Hallucinogens and Dissociative Anesthetics.

Depending on the substance used, Inhalants can cause the temperature to be elevated (up), lowered (down) or normal.

Narcotic Analgesics usually lower body temperature.

The remaining two drug categories do not usually affect body temperature.

**Solicit participant questions and comments regarding the vital signs.**





## Session IX

## DIVIDED ATTENTION TESTS

### Overview

#### Objectives

Upon successfully completing this session, participants will be better able to:

1. Conduct the four divided attention tests.
2. Record the individual's performance of these tests on the assessment form.

#### Content Segments

- A. Modified Romberg Balance Test
- B. Walk and Turn Test
- C. One Leg Stand Test
- D. Finger to Nose Test

#### Learning Activities

- Instructor Led Presentations
- Instructor Led Demonstration
- Hands-On Practice

## SESSION NINE: DIVIDED ATTENTION TESTS



***Due to the limited amount of time available to practice and become proficient during this training, it is advisable that the instructions for these tests be read to the individual.***

### A. Modified Romberg Balance

The Modified Romberg Balance test is the first divided attention test administered during the DITEP drug assessment. The test requires the individual to stand with their feet together, their head tilted back slightly, and their eyes closed.



The test also requires that the subject attempt to estimate the passage of thirty seconds. To do this, the subject must be instructed to open his/her eyes, tilt the head forward, and say "stop" when he or she thinks that thirty seconds have elapsed.

***Point out: The subject should not be instructed as to how he or she is supposed to estimate the passage of 30 seconds.***

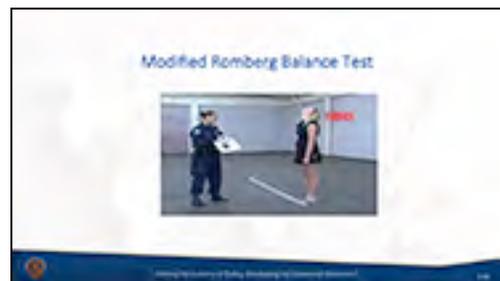
This test requires recording how much time elapsed from the start of the test until the subject opened his/her eyes.

***Point out: Some drugs tend to speed up the subject's internal timing, so that the subject may open the eyes after only 10 or 15 seconds have gone by. Other drugs may slow down the internal timing ability so that the subject keeps his/her eyes closed for 60 or more seconds. Sometimes the drugs confuse the subject to the point where he/she won't remember to open the eyes until instructed to do so.***

If the subject continues to keep the eyes closed for 90 seconds, the evaluator should stop the test and record the fact that it was terminated at 90 seconds.

#### Procedures for the Modified Romberg Test

- Have the subject stand with his/her feet together and arms at the sides
- Instruct the subject to watch you and listen to the instructions, and to not start the test until told to start
- When told to start the test, have the subject tilt his/her head back slightly (demonstrate) and close his/her eyes



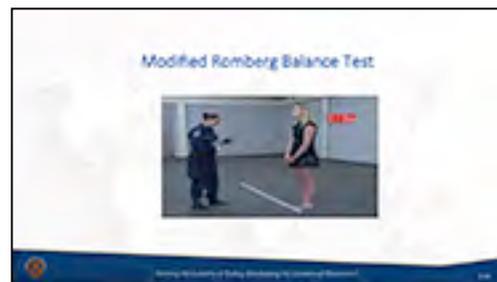
***Point out: To make sure the subject understands the instructions. If the subject fails to maintain the starting position during the instructions, discontinue the instructions and direct the subject back to the starting position before continuing.***

***Point out: The evaluator should not close his/her own eyes, for safety reasons.***

- Instruct the subject that once he/she has closed their eyes with the head slightly tilted back, have them estimate the passage of 30 seconds
- Instruct the subject that as soon as he/she thinks 30 seconds have elapsed to open their eyes and tilt their head forward and say “Stop”

***Ask the individual if he or she understands the instructions.***

- Record the observations and the time that the subject estimated



***Point out: Evaluators should look at a watch or other timing device as soon as the subject starts the test and record the actual amount of time that passes by until the individual opens the eyes.***

***Point out: Evaluators should not only be observant of the time the subject estimates, but also any other possible indicators of impairment, such as body tremors, eyelid tremors, swaying, falling, laughing, etc.***

### Demonstrations of the Modified Romberg Balance Test

***Select two participants to conduct the test. Coach the participants as necessary. Have one participant administer the test to the other participant.***

***Offer constructive criticism, as appropriate, about the demonstration. Have the second participant administer the test to the first, and offer appropriate constructive criticism.***

***Thank the participants for the participation and solicit questions.***

## Recording the Results of the Modified Romberg Balance Test

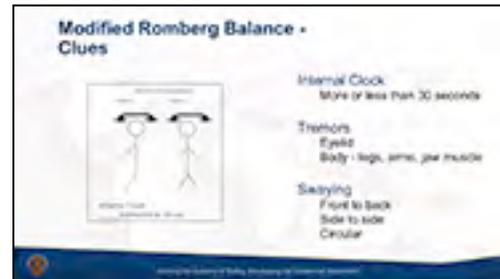
Some of the impairment indicators that may be observed and should be recorded during this test include:

- Amount that the subject sways
- Eyelid or body tremors
- Actual amount of time that the subject keeps the eyes closed

To record swaying, the evaluator must estimate how many inches the subject swayed, either front-to-back, left-to-right, or both.

To record the time estimation, simply record the number of seconds that the subject kept his/her eyes closed.

## Hands on Practice



***If time permits, instruct the participants to work in pairs and practice administering the Modified Romberg Balance test to each other.***

## **B. Walk and Turn Test**

The Walk and Turn test is the second divided attention test administered during the DITEP drug assessment.

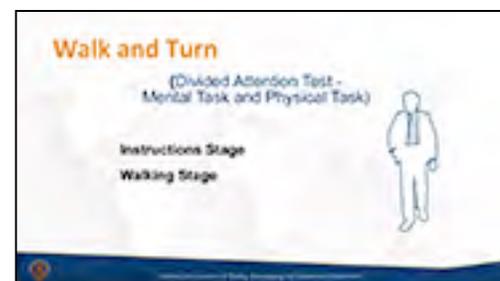
***If possible, have a visible line available on the floor for use during this portion of the training.***

The test is administered in the same way as used for field sobriety testing purposes.

## Review of Walk and Turn test administrative procedures

The test has two stages:

- Instructions stage
- Walking stage



## Procedures for the Walk and Turn Test

- Instruct the subject to stand on the line heel to toe, with the right foot ahead of the left foot, and keeping the arms at the sides



***Demonstrate the stance that the subject must maintain during the instructions stage.***

***Point out: If the subject fails to maintain the starting position during the instructions, discontinue the instructions and direct the subject back to the starting position before continuing.***

- Make sure the subject does not begin the test until told to begin
- Tell the subject that when told to begin, to take nine heel to toe steps on the line, to turn, and to return nine heel to toe steps back down the line
- Tell the subject that at the ninth step to leave his/her front (or lead) foot on the line, then turn on the front foot taking a series of small steps
- The evaluator must demonstrate walking heel to toe and also demonstrate the turn taking a series of small steps



***Demonstrate the heel to toe steps and demonstrate the turn.***

- Tell the subject to watch his/her feet while walking, and to count the steps out loud
- Remind the subject to keep his/her arms at their sides throughout the test
- Tell the subject to not stop walking until the test is completed
- Ensure that the subject understands the instructions. If so, advise the subject to begin the test

***Point out: If the subject stops, or fails to count out loud, or watch his/her feet, remind the subject to perform these tasks. This interruption will not affect the test and is essential for evaluating divided attention.***

## Demonstrations of the Walk and Turn Test

**Conduct an instructor to participant demonstration. Select a participant to serve as the test subject. Administer a complete Walk and Turn test to the participant.**

**Thank the participant for his/her participation and solicit questions about the administrative procedures.**

## Recording the Results of the Walk and Turn Test

Possible clues of impairment that may be observed during the Walk and Turn test include:

Instructions Stage Clues:

- Can't balance during instructions (breaks from the heel/toe stance)
- Starts too soon

Walking Stage Clues:

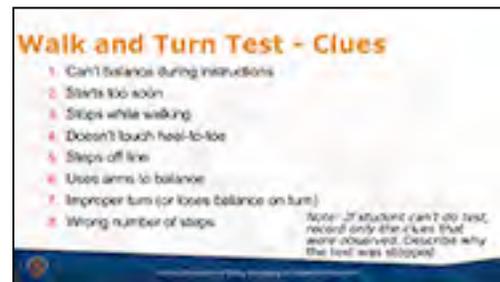
- Stops while walking
- Misses heel-to-toe
- Steps off the line
- Raises arms for balance
- Takes the wrong number of steps
- Improper turn (spins around, loses balance, etc.)

Two out of eight possible clues are consistent with impairment.

## Standards for Test Performance

- Arms greater than six inches from the body
- Misses heel/toe greater than ½ inch
- Offer to remove the shoes before performing the test if heels are 2" or higher.

## Hands on Practice



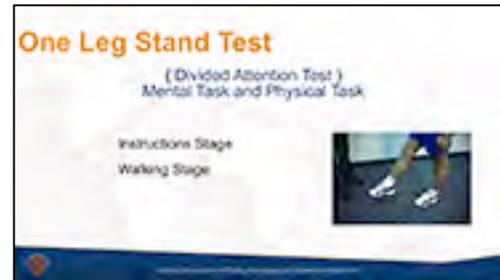
**Assign participants to work in pairs and instruct them to take turns administering the Walk and Turn test to each other. Monitor the practice and offer coaching and constructive criticism, as appropriate.**

**Solicit questions regarding the Walk and Turn test.**

### **C. One Leg Stand**

The One Leg Stand is the third divided attention test administered during the DITEP drug assessment.

#### Administrative Procedures for the One Leg Stand Test



This test requires the subject to balance while standing on one leg. The procedures for the test are:

- Instruct the subject to stand with his/her feet together, arms at the side, facing the examiner

**Demonstrate the stance that the individual is required to maintain.**

- Instruct the subject that he/she will stand on the left foot, and raise the right foot approximately 6 inches off the ground, with the right leg held straight and the raised foot parallel to the floor
- Instruct the subject that he/she must look at the elevated foot during the test
- Instruct the subject that he/she will count out in the following manner: "One thousand one, one thousand two, one thousand three, and so on until told to stop"
- Remind the subject to keep his/her legs straight and keep looking at the elevated foot, while keeping the arms at his/her sides
- Ensure the subject understands the instructions

**Point out: The examiner must demonstrate the one leg stand test to the subject.**

**Emphasize that the individual must maintain the foot elevation throughout the test. If the individual lowers the foot, he/she should be instructed to raise it.**

**Emphasize that the examiner should not look at his/her own foot while giving the instructions for safety purposes. The examiner should keep his/her eyes on the individual during the test.**

**Solicit students' questions about the administrative procedures for One Leg Stand test.**

**Point out: The validation of the One Leg Stand test was based on a 30 second period. Therefore, the examiner must keep track of the actual time the individual stands on each foot.**

**When thirty seconds have passed, stop the individual.**

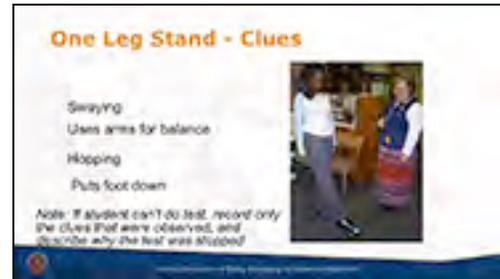
After the subject completes the test on the left foot, he/she must be told to repeat the test on the right foot.

### Recording the Results of the One Leg Stand Test

The clues for the One Leg Stand test are:

- Sways while balancing
- Uses arms to balance
- Hopping
- Puts foot down

Two out of four clues are consistent with impairment



### Hands on Practice



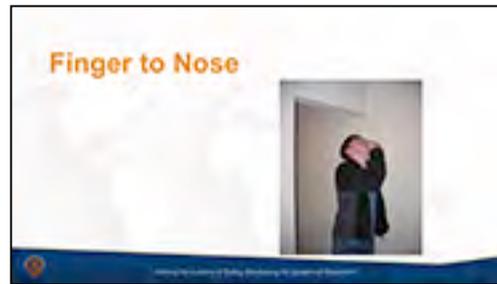
***Assign the participants to work in pairs. Instruct the participants to take turns administering the One Leg Stand test to each other. Monitor the practice and offer appropriate coaching and constructive criticism.***

***Solicit questions regarding the One Leg Stand test.***

## D. Finger to Nose Test

The Finger to Nose test is the final divided attention test used in the DITEP drug assessment.

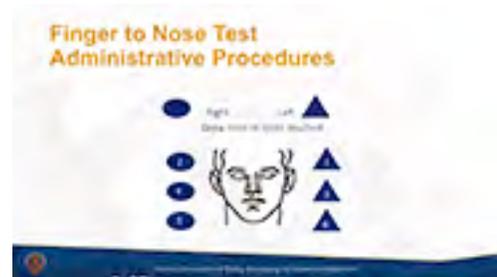
The Finger to Nose test differs from the other three tests in that the examiner must continue to give instructions to the subject throughout the test.



### Administrative Procedures for the Finger to Nose Test

The subject should be instructed to stand with their feet together, arms down at the sides, facing the examiner.

Instruct the subject to rotate the palms forward and then to extend the index fingers from the closed hands. (The examiner should demonstrate the correct hand position).



Then the subject is instructed to touch the tip of the index finger to the tip of the nose.

The examiner should demonstrate to the subject exactly how he/she is expected to touch the fingertip to the nose.

***Point out: It is best to demonstrate the fingertip to tip of nose touch by standing at an angle to the subject so that he/she can see the proper method for touching the nose.***

The examiner then gives a series of commands, i.e., left, right, etc. to indicate which fingertip is to be brought to the nose.

***Demonstrate: When I say right, touch the tip of your right index finger to the tip of your nose, like this.***

Instruct the subject that he/she is expected to return the arm to the side immediately after touching the fingertip to the nose.

The subject is also instructed to tilt the head back slightly and to close their eyes, and keep them closed until the examiner says to open them.

***Point out: The individual's head should be tilted back in the same fashion as in the Modified Romberg Balance test and that the subject should assume the stance with the head tilted back, eyes closed, arms at sides with index fingers extended.***

For the Finger to Nose test, the subject is given the following sequence of commands: left, right, left, right, left.

### Instructor Led Demonstrations

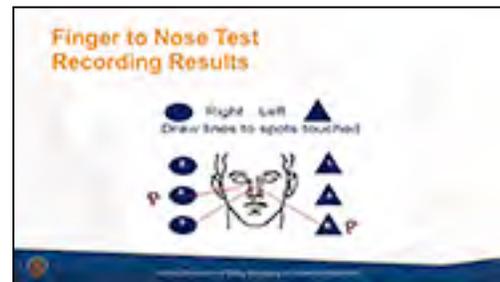
**Select a participant to serve as the test subject and administer a complete Finger to Nose test to that person.**

**Thank the participant for his/her assistance and solicit questions about the demonstration.**

### Recording the Results of the Finger to Nose Test

The Finger-to-Nose results are recorded by drawing a map showing exactly where the fingertips landed on each attempt.

A line should be drawn to the appropriate triangle to indicate where the subject touched their nose.



**Suggestion: If the evaluator draws the line from the place where the individual touches to the triangle it enables them to draw a straighter line.**

### Hands on Practice

**Assign the participants to work in pairs. Instruct the participants teams to take turns administering the Finger to Nose test to each other.**

**Solicit questions regarding the Finger to Nose test and the other divided attention tests covered in this session.**



**Overview**

**Objectives**

Upon successfully completing this session, participants will be better able to:

1. Identify the four specific effects of drug category combinations.
2. Identify the signs and symptoms of the combinations of various drug categories.

**Content Segments**

- A. The Four Effects of Poly Drug Use
- B. Common Drug Combinations
- C. Specific Effects:
  - Null Effect
  - Overlapping Effect
  - Additive Effect
  - Antagonistic Effect

**Learning Activities**

Instructor Led Presentations

## SESSION TEN: POLY DRUGS

The practice of taking more than one drug to achieve desirable effects is very common.

Drugs taken in combination will produce one of four combining effects.

These combination effects are referred to as:

- Null Effect
- Overlapping Effect
- Additive Effect
- Antagonistic Effect.



Each of these effects will be covered in this training session. They are not covered to assist the participants in being able to determine the exact drug categories of combination, but to provide a basic understanding of what is occurring when a subject is displaying conflicting signs, symptoms and indicators of impairment.

***Point out: Poly drugs can be confusing, even for a highly skilled DRE. Point out that things might not always be nice and neat. If signs, symptoms and indicators of more than one drug are observed, it is very likely that there is more than one drug affecting the subject.***

### Common Drug Combinations

There are literally hundreds of drug combinations. Some have been around for many years and they continue to evolve in the drug culture. However, some of the more common combinations include:

- Cocaine and Marijuana
- Cocaine and Heroin (*street name Speedball*)
- PCP and Marijuana (*street name Sherm*)
- Marijuana and Alprazolam (Xanax) (*street name Bars*)
- Heroin and Marijuana (*street name A-Bomb*)
- Marijuana and Crack Cocaine (*street name Bazooka*)
- Crack Cocaine and Heroin (*street name Chasing the Dragon*)

## Specific Effects

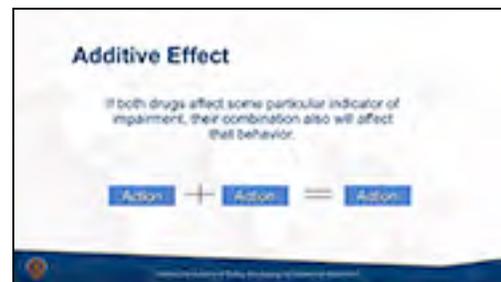
- Null Effect: This is when neither drug category has an effect on the body function.
  - Example: Neither CNS Stimulants nor Narcotic Analgesics cause HGN. Therefore, HGN would not be expected to be seen with these drug categories in combination



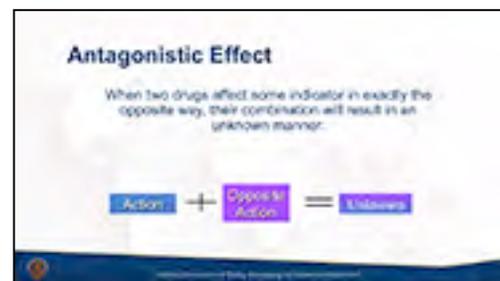
- Overlapping Effect: When one drug category affects the body function, the other does not.
  - Example: CNS Depressants cause HGN, CNS Stimulants do not. HGN would be expected to be seen with this drug category combination



- Additive Effect: When one drug category affects the body function, plus the same affect by another drug category, reinforces the affect.
  - Example: Both Hallucinogens and CNS Stimulants dilate the pupils. Therefore, dilated pupils would be expected with this drug category combination



- Antagonistic Effect: When one drug category affects the body function versus the opposite affect by another drug, outcome can not be predicted.
  - Example: Cannabis dilates the pupils. Narcotic Analgesics constrict the pupils. What is observed cannot be predicted.



## POLYDRUG COMBINATIONS

### Null Effect                      *No Effect + No Effect = No Effect*

	CNS DEPRESSANT	CANNABIS
<b>HGN</b>	Present	None
<b>VGN</b>	Present	None
<b>LOC</b>	Present	Present
<b>PUPIL</b>	Normal	Dilated (6)
<b>RCT/LT</b>	Slow	Normal
<b>PULSE</b>	Down (2)	Up
<b>B/P</b>	Down	Up
<b>TEMP</b>	Normal	Normal

The **Null Effect** would only apply to one symptom: **Body Temperature**. Since neither drug category has any effect on body temperature, the combination of the two categories will have no effect on body temperature.

### Overlapping Effect                      *Effect + No Effect = Effect*

	DISSOCIATIVE ANESTHETIC	CANNABIS
<b>HGN</b>	Present	None
<b>VGN</b>	Present	None
<b>LOC</b>	Present	Present
<b>PUPIL</b>	Normal	Dilated (6)
<b>RCT/LT</b>	Normal	Normal
<b>PULSE</b>	Up	Up
<b>B/P</b>	Up	Up
<b>TEMP</b>	Up	Normal

The **Overlapping Effect** would influence several symptom categories in this combination. **Horizontal and Vertical Gaze Nystagmus** are both present in Dissociative Anesthetics but not Cannabis. Because *Effect + No Effect = Effect*, both symptoms should be present during evaluation. Also, Dissociative Anesthetics have no effect on **Pupil Size**, but Cannabis will dilate. Because of the overlapping effect, pupils should be dilated. Finally, Dissociative Anesthetics elevate the **Body Temperature** while Cannabis has no effect on body temperature. During the evaluation, the suspect should have an elevated body temperature.

**Additive Effect**                      **Effect + Effect = Reinforced Effect**

	CNS STIMULANT	CANNABIS
<b>HGN</b>	None	None
<b>VGN</b>	None	None
<b>LOC</b>	None	Present
<b>PUPIL</b>	Dilated	Dilated (6)
<b>RCT/LT</b>	Slow	Normal
<b>PULSE</b>	Up	Up
<b>B/P</b>	Up	Up
<b>TEMP</b>	Up	Normal

The **Additive Effect** will reinforce several symptoms indicative to both categories. First, **Pupil Size**. The symptom of dilated pupils should be reinforced and very apparent since both categories have a tendency to dilate pupils. Secondly, **Pulse Rate and Blood Pressure** are elevated in both categories. Again, this should reinforce an elevated pulse and blood pressure during the evaluation. **Effect + Effect = Reinforced Effect**.

**Antagonistic Effect**                      **Effect + Opposite Effect = Any Effect**

	CNS STIMULANT	NARCOTIC ANALGESIC
<b>HGN</b>	None	None
<b>VN</b>	None	None
<b>LOC</b>	None	None
<b>PUPIL</b>	Dilated	Constricted
<b>RCT/LT</b>	Slow	Little/None Visible
<b>PULSE</b>	Up	Down
<b>B/P</b>	Up	Down
<b>TEMP</b>	Up	Down

The **Antagonistic Effect** will appear in several observable symptoms of this combination. First will be in **Pupil Size**. Since CNS Stimulants dilate and Narcotic Analgesics constrict, we may see anything from either symptom to possibly a normal pupil. However, if the stimulant is wearing off and the narcotic is still active or predominant, then we would most likely see a constricted pupil. The opposite would be true if the stimulant was the dominant drug, then we would notice a dilated pupil.

Also, the following symptoms are antagonistic: **Pulse, Blood Pressure, and Body Temperature**. As with the pupil size, we could see anything from elevated to lowered, to normal, again depending on the strength or predominance of each drug in the body. It is important to remember that we simply cannot predict the outcome of antagonistic effects.

### DRUG INTERACTIONS IN COMBINATION

<b>DISSOCIATIVE ANESTHETIC and HALLUCINOGEN</b>	
<b>HGN</b>	Overlapping
<b>VGN</b>	Overlapping
<b>LOC</b>	Overlapping
<b>PUPIL SIZE</b>	Overlapping
<b>RCT TO LIGHT</b>	Null (may be overlapping (3))
<b>PULSE</b>	Additive
<b>B/P</b>	Additive
<b>TEMP</b>	Additive

<b>CNS DEPRESSANT and CANNABIS</b>	
<b>HGN</b>	Overlapping
<b>VGN</b>	Overlapping
<b>LOC</b>	Additive
<b>PUPIL SIZE</b>	Overlapping (may be additive (1), (6))
<b>RCT TO LIGHT</b>	Overlapping
<b>PULSE</b>	Antagonistic (may be additive (2))
<b>B/P</b>	Antagonistic
<b>TEMP</b>	Null

<b>CNS DEPRESSANT and CNS STIMULANT</b>	
<b>HGN</b>	Overlapping
<b>VGN</b>	Overlapping
<b>LOC</b>	Overlapping
<b>PUPIL SIZE</b>	Overlapping (may be additive (1))
<b>Rx TO LIGHT</b>	Additive
<b>PULSE</b>	Antagonistic (may be additive (2))
<b>B/P</b>	Antagonistic
<b>TEMP</b>	Overlapping



## Session XI

## ASSESSMENT PROCESS

### Overview

### Objectives

Upon successfully completing this session, participants will be better able to:

1. Complete the DITEP drug assessment process.
2. Document the results of the DITEP drug assessment process.
3. Interpret the information obtained during the DITEP drug assessment process.

### Content Segments

A. Assessment Process and Procedures

### Learning Activities

Instructor Led

## SESSION ELEVEN: ASSESSMENT PROCESS AND PROCEDURES

To assist in documenting the observations during the DITEP drug assessment, two possible assessment forms are provided. These forms complement the initial Referral Form introduced on Day One.

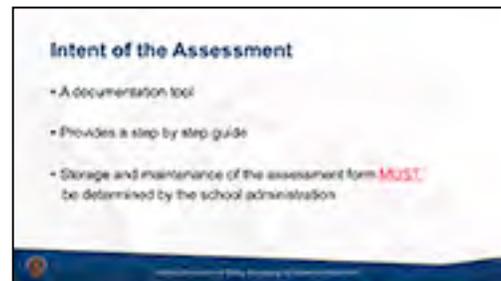


**Point out: Even though the assessment procedure may seem similar to the DRE evaluation, it will not qualify participants to become a Drug Recognition Expert or conduct a DRE evaluation.**

**Point out: Copies of two possible assessment forms are included Appendix 11A and 11B of this session.**

The Assessment forms provide a step-by-step documentation tool to assist the examiners in the DITEP drug assessment process.

School administration should determine what process will be used to store and maintain the completed assessment forms.



The assessment forms include the following areas:

- Initial Contact and Interview
  - If alcohol is suspected and the school or school district has an alcohol testing device and process in place, a screening test is recommended



**Point out: The participants should follow school policy and procedures on chemical testing.**

- The examiner should note their first impressions and the general appearance of the subject in question.
- The examiner should also record responses to the initial questions asked of the subject
- Vital Signs
  - If the subject's vital signs are taken, they should be recorded in the assessment form

- As a reminder, if any of the vital signs are abnormal to the point of medical concerns, medical personnel should be consulted
  
- Eye Examinations

The assessment eye examinations should be recorded and should include the following tests:

  - Equal tracking
  - Equal pupil sizes
  - Resting nystagmus
  - Horizontal gaze nystagmus (HGN)
  - Vertical nystagmus (VGN)
  - Lack of convergence (LOC)
  
- Divided Attention Tests

The divided attention tests administered to the subject should be recorded and should include the following tests:

  - Modified Romberg Balance
  - Walk and Turn
  - One Leg Stand
  - Finger to Nose
  
- Pupil Size/Dark Room and Ingestion Examination

The pupil size, dark room examinations and signs of ingestion observations should be recorded on the assessment form.
  
- Muscle Tone

Any checks of the subject's muscle tone should be recorded on the assessment form.
  
- Injection Marks

If any injection marks are observed during the assessment of the subject, those should be recorded on the assessment form. Care should be used in inspecting injection marks for health purposes. Protective gloves are recommended.

## Assessment Conclusions

The conclusions of the assessment should include the following:

- Interview questions, statements, and other observations of the subject
- Examiner's summary

- Additional chemical testing. This could include a breath test, if alcohol is suspected, or could include additional drug testing following school policy

- Team Consultation and Recommendations

If an assessment team, or other relevant personnel, are involved or consulted, their recommendations should also be included in the assessment

- Conference with Parent(s)

If the assessment includes a conference with the parents or guardians, that information should be included in the assessment along with any relevant information obtained during that contact.

***Solicit questions or concerns about the assessment form(s) and the assessment process and procedures.***

***Refer the participants to the assessment form(s) and if necessary, go through the assessment forms with them.***

