INTRODUCTION TO DRUGS THAT IMPAIR
for Educational Professionals
PURPOSE

- To improve your ability to recognize a student who is reasonably suspicion to be to using or are under the influence of a controlled substance, and to take appropriate action.
UPON COMPLETION OF THIS TRAINING, YOU WILL BE ABLE TO:

- Define the term “drug” in the context of impairment and/or influence.
- Name the 7 major categories of drugs.
OBJECTIVES (Continued)

- Describe the observable signs associated with the major drug categories.
- Describe appropriate procedures for dealing with drug-impaired or medically-impaired suspects.
- Describe medical conditions and other situations that can produce similar signs.
THIS TRAINING WILL **NOT** QUALIFY YOU AS A DRUG RECOGNITION EXPERT.
What is a “drug”? 

ATIVAN
Working Definition of “Drug.”

- Any chemical substance, natural or artificial, which, when taken into the human body, can impair the person.
CENTRAL NERVOUS SYSTEM DEPRESSANTS

- Alcohol
- Barbiturates
- Valium
- Chloralhydrate
CENTRAL NERVOUS SYSTEM STIMULANTS

- Cocaine
- Amphetamines
- Methamphetamine
HALLUCINOGENS

- LSD
- PEYOTE
PHENCYCLIDINE (PCP)
NARCOTIC ANALGESICS

- Heroin
- Morphine
- Codeine
- Synthetic Opiates (e.g., Demerol, Methadone)
INHALANTS

- Toluene
- Gasoline
- Other Volatile Substances
- Anesthetic Gases
CANNABIS

- Marijuana
- Hashish
40-50 Million Americans Regularly Use Drugs Other Than Alcohol

- Marijuana...20 Million
- Cocaine...8-20 Million
- Prescription Drugs...6 Million
- Hallucinogens...1 Million
- Heroin...1/2 Million
During a typical year, more than **60 million** Prescriptions are written in America for Valium and similar tranquilizers.
High School Seniors and Drugs

During the past 12 months....

85% drank alcohol
40% smoked marijuana
25% used “stimulants”
10% used cocaine
10% used hallucinogens or tranquilizers, or both
5% used barbiturates...

...AND ONLY 5- 10% DIDN’T USE ANYTHING AT ALL
Studies show that more than 10% of fatally-injured drivers have ingested drugs other than alcohol.
The Eye Examinations
EYE EXAMINATIONS USED TO ASSESS POSSIBLE DRUG OR MEDICAL IMPAIRMENT

- Tracking Ability
- Pupil Size
- Horizontal Gaze Nystagmus
- Vertical Nystagmus
TRACKING ABILITY

- If the two eyes do not **track together**, the possibility of a serious medical condition is present.
- Passing a stimulus across **both eyes** allows you to see if both eyes are tracking equally.
- If they don’t, there is a possibility of a neurological disorder.
Drugs That Will Induce Nystagmus

CNS Depressants

PCP

(Most) Inhalants
PUPIL SIZE
Drugs Causing Pupil Dilation

CNS Stimulants

Hallucinogens

Possibly Cannabis (Slight Dilation)
Narcotic Analgesics
Usually Cause Pupil Constriction
Drugs That Usually Don’t Affect Pupil Size

CNS Depressants

PCP

Inhalants
What are the 3 clues?

1. Lack of Smooth Pursuit
2. Distinct Nystagmus at Maximum Deviation
3. Onset Prior to 45 Degrees.
PCP Usually Causes Immediate Onset of Nystagmus
Central Nervous System Depressants

- Alcohol
- Barbiturates
- Valium
- Chloralhydrate
METHOD OF INGESTION

- CNS Depressants are usually taken orally, in the form of pills, capsules, liquids, etc.
Indicators of CNS Depressants

General Indicators

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

- Horizontal Gaze
  Nystagmus
- Possibly Vertical
  Nystagmus
- Pupil size generally normal (but dilated by methaqualone, and soma.)
DURATION OF EFFECTS

- BARBITURATES: 1-16 HRS.
- TRANQUILIZERS: 4-8 HRS.
- METHAQUALONE: 4-8 HRS.
Cocaine
Amphetamines
Methamphetamine
METHODS OF INGESTION

Cocaine abusers may take the drug by:

- “Snorting”
- Smoking (freebase, or “Crack”)  
- by injection
- orally
METHODS OF INGESTION

Abusers of amphetamines may take their drugs by:

- Injection
- Orally
- by “Snorting”
Indicators of CNS Stimulant Influence

General Indicators
- Restlessness,
  Excitation
- Talkative
- Euphoria
- Exaggerated Reflexes
- Anxiety
- Grinding Teeth
- Redness to Nasal Area
- Runny Nose
- Body Tremors
Indicators of CNS Stimulant Influence (Cont.)

Eye Indicators

- No Nystagmus
- Pupils will be noticeably dilated
DURATION OF EFFECTS

- COCAINE: 5-90 MIN.

- AMPHETAMINES: 4-8 HRS.

- METHAMPHETAMINE NES: 12 HRS.
Psilocybin
LSD
Peyote
MDA
Synesthesia:

A Transposition of Senses

“Seeing Sounds”

“Hearing Colors”
METHODS OF INGESTION

Hallucinogen abusers usually take their drugs orally: however, some can be smoked, or injected or “snorted.”
Indicators of Hallucinogen Abuse

General Indicators
- Hallucinations
- Dazed Appearance
- Disoriented, Uncoordinated
- Body Tremors
- Perspiring
- Paranoia
- Difficulty in Speech
- Nausea
Indicators of Hallucinogen Abuse (Cont.)

Eye Indicators

- No Nystagmus
- Pupils will be noticeably dilated
DURATION OF EFFECTS

- DURATION VARI ES W I D E L Y FROM ONE HALLUCINOGEN TO ANOTHER.
Phencyclidine

(PCP)
METHODS OF INGESTION

- Many PCP users *smoke* the drug, by using it to adulterate tobacco, marijuana, or various other substances.
- PCP can also be taken orally or by injection, or inhaled.
Indicators of PCP Influence

General Indicators

– Warm to the Touch
– Perspiring
– Blank Stare
– Repetitive Speech
– Incomplete Verbal Responses
– Confused
– Muscle Rigidity
– Possibly Violent and Combative
Indicators of PCP Influence
(Cont.)

Eye Indicators

- Horizontal Gaze Nystagmus with Very Early Onset
- Vertical Nystagmus
- Pupil Size Generally Normal
DURATION OF EFFECTS

- ONSET: 1-5 MIN.

- PEAK EFFECTS: 15-30 MIN.

- EXHIBITS EFFECTS: 4-6 HRS.
NARCOTIC ANALGESICS

Heroin
Morphine
Codeine
Synthetic Opiates
(e.g., Demerol, Methadone)
NARCOTIC ANALGESICS

A large number of drugs that share three important characteristics.

1. They will relieve pain.
2. They will produce withdrawal signs and symptoms after chronic administration.
3. They will suppress the withdrawal signs and symptoms of chronic morphine administration.
METHODS OF INGESTION

- Some narcotic analgesics (such as heroin) usually are injected.

- Some narcotic analgesics (such as codeine) usually are taken orally.
The Concept of *Tolerance* for a Drug

1. The same dose of the drug will produce diminishing effects.
2. A steadily larger dose is needed to produce the same effect.
Indicators of Narcotic Analgesic Influence

General Indicators

- “On the Nod”
- Droopy Eyelids
- Depressed Reflexes
- Dry Mouth
- Facial Itching
- Low, Raspy Speech
- Possibly Puncture Marks, “Tracks”
Indicators of Narcotic Analgesic Influence (Cont.)

**EYE INDICATORS**

- **NO NYSTAGMUS**
- **PUPILS WILL BE SEVERELY CONSTRIC TED.**
DURATION OF EFFECTS

- HEROIN: 4-6 HRS.
- METHADONE: UP TO 24 HRS.
- OTHERS: VARY
Inhalants

- Toluene
- Gasoline
- Spraypaint
- Many Common Household Products
- Nitrous Oxide
Indicators of Inhalant Influence

General Indicators

– Disorientation
– Slurred Speech
– Residue of substance on face, hands, clothing
– Confusion
– Possible Nausea

Eye Indicators

– Horizontal Gaze Nystagmus usually will be present
– Vertical Nystagmus may be present
– Pupil size will generally be normal
DURATION OF EFFECTS

- 6-8 HRS. FOR MOST VOLATILE SOLVENTS
- ANESTHETIC GASES AND AEROSOLS - VERY SHORT DURATION
Marijuana

Hashish
METHODS OF INGESTION

Cannabis products usually are smoked, although they also can be ingested orally.
Indicators of Cannabis Influence

General Indicators

- Very bloodshot eyes, with pronounced veins in the eyeballs
- Body Tremors
- Odor of Marijuana
- Disoriented
- Relaxed Inhibitions
- Difficulty in dividing attention
Indicators of Cannabis Influence (Cont.)

Eye Indicators

- No Nystagmus
- Pupil size normal or perhaps slightly dilated
POLYDRUG USE

- Using two or more drugs at the same time

Examples:
- PCP and Marijuana
- Heroin and Cocaine
- Many others
General Types of Polydrug Effects

**ADDITIVE**
(The two drugs independently produce some similar effects)

**EXAMPLE**
Depressants and Narcotic Analgesics both induce drowsiness
ANTAGONISTIC
(The two drugs produce some opposite effects)
EXAMPLE
Stimulants usually cause pupil dilation, narcotics usually cause constriction.
OVERLAPPING
(Each drug affects people in some distinct ways)

EXAMPLE
PCP causes nystagmus but doesn’t affect pupil size; narcotics constrict pupils, but doesn’t cause nystagmus.
DEALING WITH SUSPECTED DRUG INFLUENCE OR MEDICAL IMPAIRMENT
WITH SOMEONE UNDER THE INFLUENCE OF DRUGS:

- Contact DRE if available
- Question Suspect
A PERSON WHO POSSIBLY HAS A MEDICAL CONDITION

- Check your school policy
  - EMT’s
  - Medical Doctor’s Exam

- Question Suspect
  - Injuries (past, present)
  - Medical Conditions (Diabetes, Epilepsy, etc.)
THE END