

WHAT ARE THE DRUGS OF ABUSE?

- MARIJUANA
- COCAINE
- ACID/LSD
- HEROIN
- ECSTASY (MDMA)
- METHAMPHETAMINE
- PCP

Cont.

- INHALANTS
- CLUB DRUGS
- PRESCRIPTION MEDICATIONS
- STEROIDS
- ALCOHOL
- NICOTINE

MARIJUANA

Cont.

- WHAT IS MARIJUANA?
- ARE THERE DIFFERENT KINDS OF MARIJUANA?

Cont.

- Cannabis sativa
- common name for drug made from dried leaves and flowering tops of the Indian hemp plant
- Sinsemilla (sin-she-me-yah), hashish (hash) and hash oil are the stronger forms of marijuana

Cont.

- All forms of marijuana are mind-altering
- All forms contain THC (delta-9-tetrahydrocannabinol) which is the main active chemical in marijuana
- Marijuana also contains more than 400 other chemicals

- The THC content of marijuana has been increasing since the 1970s

STREET NAMES

- Pot
- Herb
- Weed
- Grass
- Boom
- Mary Jane
- Gangster
- Chronic
- Green
- Budda
- Etc.

Methods of Use

- Marijuana is usually smoked
 - Hand rolled cigarette (joint)
 - Pipe
 - Bong (water pipe)
 - Most recently appeared in cigars (blunts)
- Can be eaten

How long does marijuana stay in system?

- THC in marijuana is strongly absorbed by fatty tissues in various organs. Generally, traces of THC can be detected by standard urine testing methods several days after smoking. However, in heavy users, traces can be detected for weeks after they have stopped using.

Effects of Marijuana

- Short Term
 - Problems with memory and learning
 - Distorted perception (sights, sounds, time, touch)
 - Loss of motor coordination
 - Increased heart rate
- ❖ These effects are even greater when other drugs are mixed with marijuana

Cont.

- Long Term
 - Cancer
 - Lungs and Airway problems
 - Immune System
 - Studies show THC can damage the cells and tissues in the body that help protect against disease.
 - Effects the brain

Signs of Use

- Appear dizzy and have trouble walking
- Silly and giggly for no reason
- Have very red, bloodshot, watery eyes
- Have a hard time remembering things that just happened

Is marijuana the “Gateway” drug?

- YES
- NO
- Long term studies show that very few young people use other illegal drugs without trying marijuana first.
- This does not mean that every person that uses marijuana will use other drugs.

Medical use of Marijuana

- The argument is “NONSENSE”
- THC is manufactured into pill form and is available by prescription

Marijuana Addiction

- Not considered to be physically addicting and no physical withdrawal symptoms occur when use is discontinued but, psychological dependence develops in 10 to 20 percent of long-term regular users

Statistics and Trends

- Used as medicine and intoxicant as early as 3000 B.C.
- Gained wide spread use in United States in 1960s and 1970s

- 1998 survey by DEA found marijuana use in teens increased 300 percent between 1992 and 1998
- According to NIDA 1 in 5 10th graders use and 1 in 4 seniors use

COCAINE

Cont.

- Powerful central nervous system stimulant
- Prepared from the leaf of the Erythroxylon coca bush which grows primarily in Peru and Bolivia
- First extracted and identified by German chemist Albert Niemann in mid-19th century
- Introduced as a tonic/elixir to treat a wide variety of real or imagined illnesses
- Later used as a local anesthetic
- Continues today to have limited employment in surgery

Cont.

- The 1920s and 1930s saw a decline in use, especially after amphetamines became easily available. Cocaine's return to popularity, beginning in the late 1960s, coincided with the decreased use of amphetamines.

Types of Cocaine

- Cocaine HCL (Powder)
- Cocaine Base (Crack)

Methods of Use

- "Snorted"
- Rubbed onto lining of mouth, rectum, or vagina
- Injected
- Smoked (cocaine base)

Street Names

- Powder
- Coke
- C

- Snow
- Blow
- Crack
- Rock

Who's using Cocaine?

- Everyone
- All races
- All sexes
- All ages
- All economic backgrounds

Signs of use

- Dilated pupils
- Increased temperature
- Increased heart rate
- Increased blood pressure

Duration of effects

- If snorted- 15 to 30 minutes
- If smoked- 5 to 10 minutes
- Increased use can reduce the period of stimulation

Health Hazards

- Some users report feelings of restlessness, irritability and anxiety
- In rare instances, sudden death can occur on the first use of cocaine or unexpectedly thereafter.
- Prolonged use can trigger paranoia
- Depression when addicted individuals stop using

Cont.

- Cocaine related deaths are often a result of cardiac arrest or seizures followed by respiratory arrest.
- Added risk when used with alcohol
 - Liver manufactures cocaethylene by combining cocaine and alcohol
 - This increases risk of sudden death

Statistics and Trends

- 12th graders
 - The proportion of seniors who have used cocaine at least once has increased from 5.9 percent in 1994 to 9.8 percent in 1999.
 - This is lower than the peak of 17.3 percent in 1985

Cont.

- 10th graders
 - 7.7 percent of 10th graders had tried cocaine at least once in 1999
 - This is up from a low of 3.3 percent in 1992
- 8th graders
 - The use of cocaine at least once is up from a low of 2.3 percent in 1991 to 4.7 percent in 1999

ECSTASY (MDMA)

ECSTASY

- MDMA is a synthetic, psychoactive drug with both stimulant and hallucinogen properties.
- MDMA was synthesized in 1914
- First produced for the black market in 1970s
- It was placed on Schedule I by the Drug Enforcement Administration in 1985
- Has been made in UK but, more commonly manufactured in Holland or United States

Forms of Ecstasy

- Commonly found in pill form
- Pills come in a wide array of colors, shapes and symbols
- Also found in powder form and powder filled capsules

Contents of MDMA pills

- One never knows what is contained in the Ecstasy pill he or she has purchased
- Contents vary widely and may include caffeine, dextromethorphan, heroin and mescaline.
- In some areas of the country, MDMA-like substances were involved in the death of subjects who thought they were taking MDMA.

Methods of Use

- Orally (most common)
- Can be snorted or injected

Street Names

- E
- XTC
- Ecstasy
- Rolls

Who's using Ecstasy?

- Everyone
- Predominantly the RAVE crowd
- Predominantly 16-25 year old
- Have seen users as young as 12 yoa
- Also users in 30s, 40s and even 50s

Signs of Use

- Profuse sweating
- Increased body temperature
- Grinding of teeth
- Eyes dilated
- Spaced look
- Fidgety

Health Hazards

- Many problems MDMA users encounter are similar to those found with use of amphetamines and cocaine.
- Psychological difficulties include confusion, depression, sleep problems, severe anxiety and paranoia.
- Physical problems include muscle tension, involuntary teeth clenching, nausea, blurred vision, faintness, chills and/or sweating.

Cont.

- Recent research also links MDMA use to long term damage to those parts of the brain crucial to the processes of thought, memory and pleasure.

Statistics and Trends

- No current statistics
- The trend in the Pulaski County area is an increased use of MDMA
- Have seen numerous injuries and deaths as a result of Heat Stroke where MDMA was used

ECSTASY

ECSTASY

CLUB DRUGS

- Types
 - Ketamine
 - GHB
 - Rohypnol

KETAMINE

- Ketamine is an anesthetic that has been approved for both human and animal use in medical settings since 1970.
- About 90 percent of the ketamine legally sold is intended for veterinary use.

Street Names

- Special K
- Vitamin K
- K

Methods of Use

- Snorted
- Injected
- Taken Orally

Health Hazards

- High doses can cause delirium, amnesia, impaired motor function, high blood pressure, depression and potentially fatal respiratory problems.

Statistics and Trends

- Emergency room mentions of ketamine rose from 19 in 1994 to 396 in 1999.
- Recent use has been more frequent among white youth.

GHB

- Gamma Hydroxybutyrate
- Since about 1990, GHB has been abused in the U.S. for euphoric, sedative and anabolic (body building) effects.
- It is a central nervous system depressant
- It was widely available over-the-counter in health food stores during the 1980s until 1992.

Cont.

- It was purchased largely by body builders to aid in fat reduction and muscle building.

Street Names

- Liquid Ecstasy
- Soap
- Easy Lay
- Georgia Home Boy

Signs of Use

- Signs and effects are same as subject who is very intoxicated on alcohol.
- ❖ Used as date rape drug

Health Hazards

- Coma and seizures can occur following use
- Increased risk of seizures when combined with methamphetamine

- Combined use with other drugs such as alcohol can result in nausea and difficulty breathing.
- Withdrawal effects include insomnia, anxiety, tremors and sweating.

Cont.

- It is very easy to overdose on GHB.

Statistics and Trends

- GHB emergency room mentions increased from 55 in 1994 to 2,973 in 1999.
- In 1999, GHB accounted for 32 percent of illicit drug-related poison center calls.

Rohypnol

- THE DATE RAPE DRUG
- Belongs to a class of drugs known as benzodiazepines.
- Rohypnol is not approved for use in the United States and its importation is banned.
- Illicit use started appearing in U.S. in early 1990s.

Cont.

- Rohypnol can incapacitate victims and prevent them from resisting sexual advances.
- It can produce anterograde amnesia which means individuals may not remember events they experienced while under the effects of the drug.

Street Names

- Rophies
- Roofies
- Roach
- Rope

Health Hazards

- Rohypnol may be lethal when mixed with alcohol or other depressants

Statistics and Trends

- Emergency room mentions of Rohypnol were 13 in 1994 and increased to 624 in 1998.
- There was a decrease to 540 in 1999.

Prescription Medications

- Types of Abused Prescription Medications
 - Opioids
 - CNS Depressants
 - CNS Stimulants

Opioids

- Morphine
- Codeine *
- Oxycontin *
- Vicodin *
- Dilaudid *
- Demerol

Opioids

- Sometimes referred to as narcotics
- Are prescribed because of their effective analgesic or pain relieving properties.
- Opioids act by attaching to opioid receptors found in the brain, spinal cord and gastrointestinal tract.
- Opioid drugs can also affect regions of the brain that mediate what we perceive as pleasure.
- This results in an initial euphoria.

CNS Depressants

- Valium (diazepam)
- Librium
- Xanax (alprazolam)

CNS Depressants

- Slow down normal brain functions.

- In higher doses, some CNS Depressants can become general anesthetics.
- Divided into two groups
 - Barbiturates
 - Benzodiazepine

CNS Stimulants

- Ritalin
- Adderall (amphetamine based)

CNS Stimulants

- Enhance brain activity
- Cause an increase in alertness, attention and energy that is accompanied by increases in blood pressure, heart rate and respirations.

LSD

- Generic name for lysergic acid diethylamide-25
- Discovered by Dr. Albert Hofmann in 1938
- One of the most potent mind-altering chemicals known

Street Names

- Acid
- Blotter
- Sugar Cubes
- Tabs
- Liquid or Liquid A
- Micro dots

Ways of Ingesting

- Usually taken orally (on candy, sugar cubes, blotter paper or liquid directly on tongue)
- Liquid drop to the eye
- Liquid drop onto skin

Signs of Use

- Effects are unpredictable.

- Effects last approximately 30 to 90 minutes.
- Physical effects include dilated pupils, high body temperature, increased heart rate, increased blood pressure, sweating, loss of appetite, sleeplessness, dry mouth and tremors.

Health Hazards

- Not considered an addictive drug
- LSD does produce a tolerance so, some users who take the drug repeatedly must take progressively higher doses.
- This is extremely dangerous, given the unpredictability of the drug.
- Hallucinations and Flashbacks

Statistics and Trends

- There has been a study conducted annually by researchers since 1975 (Monitoring the Future Study).
- The percentage of seniors who have used LSD has remained relatively stable.
- Between 1975 and 1997 the lowest reported use was in 1985 at 4.4 percent
- In 1997, 13.6 percent of seniors reported use.

Cont.

- In 1997, 9.5 percent of 10th graders reported use at least once.
- 4.7 percent of 8th graders reported use at least once.
- Also in 1997, 51 percent of seniors said it would have been fairly easy or very easy for them to get LSD if they wanted it.

LSD

Inhalants

- Inhalants are breathable chemical vapors that produce psychoactive effects.
- Many people do not think of these products, such as paint, glue and cleaning fluids as drugs because they were never meant to be used to achieve an intoxicating effect.
- Young children and adolescents can easily obtain them and are among those most likely to abuse these substances.

Categories

- Fall into three categories

↯ Solvents

↯ Gases

↯ Nitrites

Inhalants

- Solvents

Gasoline

Butane

Propane

Acetone

Ether

Chloroform

Solvent Products

Nail Polish Remover

Lighter Fluid

Paint Thinner

Airplane Glue

Dry Cleaning Fluids

Art Solvents

Solvent Products Cont.

Correction Fluid

Felt Tip Markers

Rubber Cement

Gases

↓ Freon

↓ Helium

↓ Xenon

↓ Nitrous Oxide (very common)

↓ Ethylene

Gases

- Aerosol Products
- ↓ Computer Duster
- ↓ Hair Spray
- ↓ Deodorant Spray
- ↓ Spray Paint (most common)
- ↓ Cooking Spray
- ↓ Spray Cleaners

Gases

- Aerosol Products cont.
- ↓ Spray Shoe Polish
- ↓ Carburetor Cleaners

Nitrous Oxide

- Medical drug dating back to the 18th century
- commonly known as laughing gas
- colorless and sweet-smelling
- Medically used for oral surgery and dental work
- Used as recreational drug at concerts and raves

Sources of Nitrous Oxide

- Hospitals and Dentists' offices
- Whipped-cream containers
- small canisters (whip-its) sold in head shops and mail-order ads

Signs of Use

- Inhalants produce short-term effects similar to anesthetics.
- They slow the body down
- Signs close to someone very intoxicated on alcohol
- Look for the paint around mouth and nose.

Health Hazards

- Chronic abuse can cause severe, long-term damage to the brain, liver and the kidneys.
- Hearing loss
- Limb spasms
- Bone marrow damage
- Blood oxygen depletion

Statistics and Trends

- In 2002, a persistent pattern of higher rates of use by younger children continued as more 8th graders than 10th and 12th stated that they used inhalants.
- The 2002 study showed 15.2 percent of 8th graders had used inhalants. 13.5 percent of 10th graders and 11.7 percent of 12th graders stated that they had used.

Methamphetamine

- Amphetamine and its close chemical relations, methamphetamine and dextroamphetamine, are central nervous system stimulants whose actions resemble those of adrenaline.

Cont.

- Amphetamine was first introduced in the 1930s as a remedy for nasal congestion
- Methamphetamine was synthesized by German chemists in WWII in attempt to create a SUPER SOLDIER

Street Names

- Meth
- Crystal
- Speed
- Crank

Types

- Powder
- Rock (ICE)

Methods of Use

- Smoked (most common)
- Snorted
- Injected
- Eaten
- Rubbed into lining of mouth, rectum or vagina

Methamphetamine Labs

- Several ways to produce methamphetamine
- Two Most Common Types in Arkansas
 - ➔ Red Phosphorous Lab
 - ➔ Anhydrous Ammonia Lab

Methamphetamine Labs

- Red Phosphorous Lab
 - ▲ Most Common in Pulaski County
 - ▲ Uses the chemical reaction Red Phosphorous and Iodine Crystals to convert pseudoephedrine or ephedrine to methamphetamine

Products to Look For in Red P Lab

- Pseudoephedrine or Ephedrine Pills
- Red Phosphorous
 - ↑ Matches
 - ↑ Flares
- Tincture Iodine
- Iodine Crystals
- HEET or ISOHEET
- 91% alcohol
- Peroxide
- Acetone
- Starter Fluid
- Nail Polish Remover
- Any Kind of Solvent (Naphtha, Toluene, etc)

Products to Look For in Red P Lab

- Bi-Layered Liquids

- Sulfuric Acids (professional drain openers)
- Liquid Fire
- Red Devil Lye
- Salt
- Gas Cans

- Plastic Tubing
- Duct Tape
- Heating Devices
- Glassware (coffee pots, mason jars, pickle jars, chemistry glassware)
- Funnels

Products to Look For in Red P Lab

- Coffee Filters (used and unused; used will have chemical smell and stains)
- Heavy Duty Paper Towels
- Aluminum Foil
- Kitty Litter

Anhydrous Ammonia Lab

- Uses the chemical reaction between Anhydrous Ammonia and Lithium or Sodium metal to convert pseudoephedrine or ephedrine to methamphetamine
- Anhydrous means “without water”

Products to Look For with Ammonia Lab

- Uses several of the same products found in a red phosphorous lab.
- Anhydrous Ammonia (usually stored in propane or propane like tanks. Will have a teal blue coating on brass fittings)
- Lithium (typically comes from batteries purchased from local stores)
- Industrial Lithium or Sodium (stored in solvent in glass jar)

Hazards of Meth Labs

- Phosphine Gas
- Phosgene Gas
- Conversion of Red Phosphorous to White Phosphorous
- Use of Acid Generators
- Flammability of Solvents
- Irritant toxicity hazard from concentrated Ammonia

- Reaction of water with Sodium or Lithium metals