

Current Drug Trends



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Objectives

- ▣ Describe the effects of secondhand and third hand smoke on pregnancy and children
- ▣ Define current drugs of use and abuse
- ▣ Identify health risks of using substances
- ▣ Discuss current laws and pending legislature

Secondhand or Passive Smoke

- ▣ A mixture of side stream smoke from the end of a burning cigarette or tobacco product
- ▣ A mixture of side stream smoke from the end of a burning cigarette or tobacco product
- ▣ A mixture of gases and fine particles
- ▣ Fresh side stream smoke is almost 4 times more toxic than exhaled smoke
- ▣ Classified by the US EPA as a class A carcinogen



Secondhand Smoke

- ▣ More than 7,000 chemicals are in cigarette smoke
- ▣ 50-70 can cause cancer
- ▣ Estimated 22% of children under the age of 18 live with someone who smokes and are exposed to involuntary SHS
- ▣ 40% of children under the age of 5 live with a smoker and are exposed to SHS
- ▣ Medical costs for US children exposed to SHS is about 4.6 billion annually



Secondhand Smoke

- ▣ Non-Hispanic black children are more likely than white children to live with a smoker
- ▣ 68% of families with an income less than \$10,000 have regular SHS in the home
- ▣ 36% of families with incomes over \$40,000 have SHS in the home
- ▣ Children of less educated mothers are more likely to be exposed to SHS than children of mothers with more education

Pregnancy and Secondhand Smoke

- ▣ Miscarriage
- ▣ Premature birth
- ▣ Low birth weight
- ▣ Higher risk of Sudden Infant Death Syndrome
- ▣ Higher risk of Learning Disabilities
- ▣ Higher risk of ADHD



Children and Secondhand Smoke

- ▣ Effects of SHS are more intense for infants and children because their organs, such as lungs are still immature and continuing to develop
- ▣ Infants and children spend more of their time in the home



Secondhand Smoke and Children

Places they can be exposed to SHS

- Car
- Bus
- Childcare
- School
- Babysitter's home
- Friend's house
- Relative's house
- Restaurant
- The mall/store
- Sporting event
- Concerts
- Parks/playgrounds



Health Risks for Children

- ▣ Ear infections
- ▣ More severe and frequent asthma attacks
- ▣ Respiratory infections – bronchitis/pneumonia
- ▣ Respiratory symptoms – coughing, sneezing, shortness of breath
- ▣ Stuffy nose
- ▣ Headache
- ▣ Sore throat
- ▣ Hoarseness
- ▣ Eye irritation
- ▣ Tooth decay
- ▣ Increased risk of SIDS



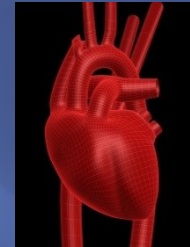
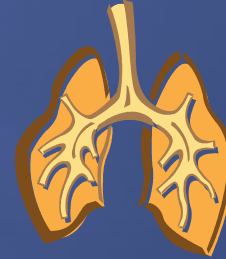
Health Risks for Children

- ▣ Miss 40% more days of school
- ▣ Under age of 18:
 - Estimated 150,000-300,000 new cases of bronchitis and pneumonia each year in US
 - Approximately 7,500 – 15,000 hospitalizations annually in the US
 - 200,000 cases of asthma in children directly linked to SHS



Long Term Health Risks for Children

- ▣ Poor lung development
- ▣ Lung cancer
- ▣ Heart disease
- ▣ Cataracts/eye disease
- ▣ Respiratory problems/asthma





Health Risks for Adults

- ▣ Harmful effects on cardio vascular system
- ▣ COPD
- ▣ Increased risk of heart attack
- ▣ Increase risk of heart attack by 25-30%
- ▣ Estimated 46,000 heart disease deaths annually due to exposure to SHS
- ▣ 3,000 Lung cancer deaths each year among non smokers

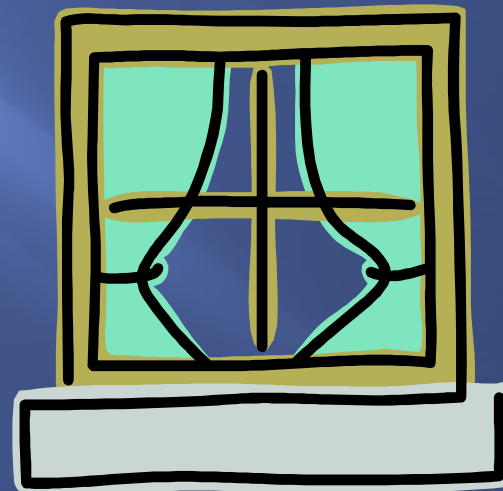


Statistics

- ▣ COPD (Chronic Obstructive Pulmonary Disease)
 - 47.5% in active smokers
 - 48.3% in ex smokers
 - 44.7% in non smokers (passive smoke)
- ▣ 90% of non smokers have inhaled SHS in the home environment

Doesn't Work

- ▣ Separating smokers and non smokers
- ▣ Cleaning the air
- ▣ Opening windows
- ▣ Ventilating buildings



Secondhand Smoke

Smoke can travel from room to room and apartment to apartment by:

- Ventilation systems
- Pipes
- Walls
- Open windows
- Electrical sockets
- Tiny cracks in plaster/drywall
- Using fans/air conditioners



Third-hand Smoke

The residual nicotine and other chemicals left on a variety of surfaces by tobacco products

- Hair
- Skin
- Clothes
- Furniture
- Drapes
- Walls



- Toys
- Bedding
- Carpets
- Dust
- Vehicles

Third-hand Smoke

- ▣ Tobacco smoke is absorbed into surfaces within minutes to hours after it is exhaled.
- ▣ Chemicals can be recycled into the air for hours, days or even months.
- ▣ Non-smokers are at risk if they inhale, ingest or touch objects containing third hand smoke.





Solutions?

- ▣ Smoke free public places helps reduce SHS exposure
- ▣ By 1999 all 50 states had some public smoking restrictions
- ▣ Ethical/controversial issues are involved in discussions about restrictions on smoking in homes and cars

NIH



E-Cigarettes

- ▣ Introduced in 2007
- ▣ “Vaping”
- ▣ Battery Operated Devices designed to deliver nicotine with flavors and other chemicals in vapor instead of smoke
- ▣ Consists of 3 components:
 - Cartridge – holds liquid solutions
 - Heating devise (vaporizer)
 - Power source (usually battery)





E-Cigarettes



- ▣ Sales have doubled since 2008
- ▣ Use among high school and middle schoolers doubled from 2011-2012
- ▣ Health experts have questions about possible side effects of inhaling nicotine vapor for users and non users

**Medical News; Discovery Health;
The Partnership at Drug Free**





E-Cigarettes

- ▣ Since they do not contain tobacco, they are not regulated by tobacco laws
- ▣ Can be sold to minors
- ▣ Increase in the number of people using marijuana in liquid form in e-cigarettes – no odor
- ▣ September 2012 – New York passed a law that made it illegal to sell e-cigarettes to minors
- ▣ NJ Law – 100% smoke free venues – restaurants, bars, non-hospitality workplaces – also include e – cigarettes

E-Cigarettes

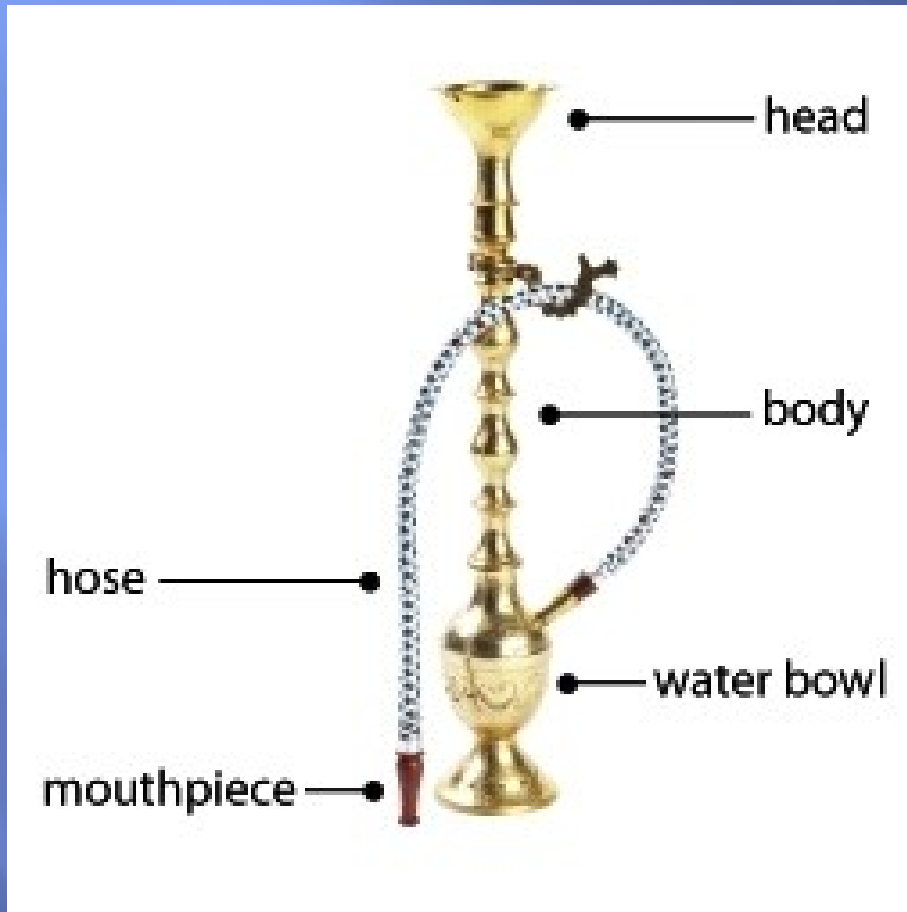
Adverse Effects Voluntarily reported to the FDA:

- Pneumonia
- Congestive heart Failure
- Disorientation
- Seizure
- Hypotension
- Other health problems



** It is unknown whether the e-cigarettes alone caused these effects or if the users had pre-existing medical conditions

Hookahs



Hookahs

- ❑ Water pipes used to smoke special tobacco products
- ❑ Flavors such as apple, mint, cherry, chocolate, coconut
- ❑ Also called narghile, argileh, shisha, hubble-bubble, goza
- ❑ Began centuries ago in ancient Persia and India
- ❑ Hookahs vary in size and shape
- ❑ Typically smoked in groups, with the mouthpiece passed around
- ❑ Hookah Lounges gaining in popularity



Health Risks



- ▣ Charcoal used to heat the tobacco high levels of carbon monoxide, and cancer causing chemicals
- ▣ Contain toxic chemicals known to cause lung, bladder, stomach, esophagus and oral cancers
- ▣ Toxic chemicals can cause clogged arteries and heart disease
- ▣ Pregnant women who use hookahs have babies born with lower birth weight and increases risk of respiratory diseases in the infant

Health Risks

- ▣ Hour long session involves 200 puffs as opposed to 20 puffs from an average cigarette
- ▣ Person in a typical hookah session inhales about 90,000 ml of smoke as compared to 500-600 ml from a cigarette
- ▣ Even herbal shisha smoke contains carbon monoxide and other toxins
- ▣ Hookah pens, similar to e-cigarettes, are also harmful in the same way



PALCOHOL®

Patent Pending

Powdered Alcohol

COSMOPOLITAN

Vodka with Natural Flavors, Sucralose and Artificially Colored

Just add water for an instant cocktail

55% Alcohol by Weight
10% Alcohol by Volume
when added to water



200 ml with water
added

Net contents: 29g

Powdered Alcohol

- ❑ Dehydrated ethyl alcohol molecularly encapsulated into sugars (Palcohol)
- ❑ When combined with 5-6 oz of water, juice or other liquid it becomes a standard mixed drink
- ❑ Small packets are easy to conceal
- ❑ Federally approved for sale by March 2015 by the Alcohol Tax and Trade Bureau
- ❑ FDA hasn't approved it or done any testing



Palcohol

- ▣ NJ pending legislature:
- ▣ Assembly bill A-3580 and Senate bill S-2846
- ▣ *" no person shall sell, offer sale, or deliver, receive or purchase for resale, in this state, any product consisting of or containing powdered alcohol"*
- ▣ Many other states have pending legislature
- ▣ Manufacturers insist it is safe, more expensive than liquid alcohol so youth would not abuse it

Current Users



ANY ILLICIT DRUG:
22.6 million
(8.7 % of population)

MARIJUANA: 17.4 million

Rx Drugs: 7 million

COCAINE: 1.5 million

METHAMPHETAMINE: 353,000

HEROIN: 239,000

SOURCE: 2010 National Survey on Drug Use and Health (NSDUH) published Sept 2011 by the Dept of HHS / Substance Abuse and Mental Health Services Administration (SAMHSA)

Marijuana

- ▣ In the 1980's THC concentrations were less than 4%
- ▣ Today those concentrations are 10-20% and some even as high as 30%
- ▣ Contain greater amounts of carcinogens than tobacco smoke
- ▣ Inhale deeper and hold breathe longer further increasing lung exposure to carcinogens
- ▣ Today's marijuana has up to 500 chemicals, 70 of which are known as cannabinoids, with THC being the psychoactive one

Marijuana

- ▣ 4.5 million people in the US meet the criteria for abuse and dependence
- ▣ Impairs intelligence, reasoning, judgement and clarity of thought
- ▣ Can cause anxiety, panic attacks, paranoia, psychotic symptoms, respiratory and cardiovascular distress
- ▣ Can lower IQ by 6-8 points if begin using before age 18
- ▣ Drivers under the influence are twice as likely to be involved in a motor vehicle accident

Marijuana

- ▣ Legalization versus decriminalization
- ▣ Legalization leads to increased use
- ▣ In California, from 1992 to 2008, the number of admissions to treatment due to marijuana use quintupled
- ▣ There are medical uses for marijuana, however it was meant to be in pill form

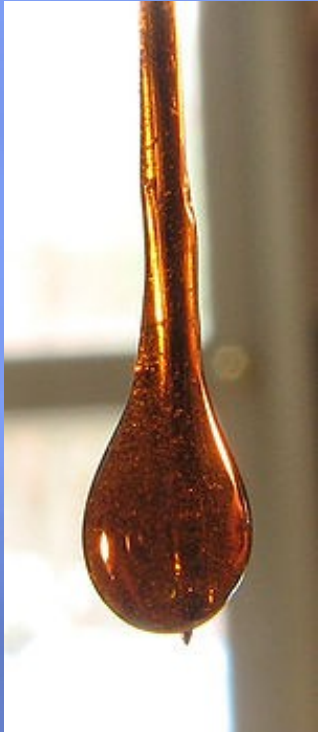


Butane Hash Oil

- ▣ Also known as hashish oil, butane honey, BHO, wax, shatter, honey oil, dabs, liquid cannabis, amber, ear wax
- ▣ Highly concentrated form of THC
- ▣ Made from the resin from the dried female hemp flowers
- ▣ Can be ingested by smoking, ingestion or vaporization (dabbing)



Butane Hash Oil



- ▣ Dabbing – small drops of hash oil are dropped onto a hot, metal surface - typically to close to 800m degrees C and then inhaled
- ▣ THC concentration can range from 10-30%
- ▣ Can also use devices similar to e-cigarettes called vapor pen, wax pen or dabbing pen

Designer Drugs

- ▣ Designer drugs are synthesized chemical analogues of known, dangerous drugs
- ▣ Our Biggest Trends are
 - Synthetic Marijuana
 - Synthetic Cathinones and
 - Phenethylamines
 - (Bath Salts, Molly)
 - Vaporized Substances
 - (Blue Blossom, BHO etc.)
- ▣ All are classified as designer drugs and connected in many ways.

Synthetic Marijuana



SYNTHETIC MARIJUANA

| | |
|-----------------------------|---|
| Most closely mimics: | Marijuana |
| Showed up: | Early 2009 |
| Active chemical: | Cannabinoids |
| Effects/symptoms: | Agitation, paranoia, seizures, vomiting, hallucinations, increased heart rate |
| Sold as: | K2, spice |

Source: NJ.com

Synthetic Marijuana



Synthetic Marijuana

- ▣ Wide Variety of herbal mixtures that produce effects similar to marijuana.
- ▣ Some products are sold as “incense” but more like potpourri.
- ▣ Sold under many names:
 - Spice
 - Bliss
 - K2
 - Skunk
 - Fake weed
 - Genie
 - Bombay Blue
 - Moon Rocks
 - Black Mamba



Synthetic Marijuana



- ▣ Usually smoked in joints or pipes
- ▣ Can be mixed with marijuana
- ▣ Can be prepared as herbal infusion for drinking
- ▣ Five chemicals most frequently found in Spice is designated as Schedule I controlled substances making it illegal to sell, buy or possess them
- ▣ Manufacturers get around this by substituting different chemicals
- ▣ No studies of Spice's effect on the brain but it does act on the same cell receptors as THC, but more strongly

Health Effects

- ▣ Rapid heart rate
- ▣ Vomiting
- ▣ Agitation
- ▣ Confusion
- ▣ Hallucinations
- ▣ Anxiety
- ▣ Paranoia
- ▣ Elevated mood
- ▣ Altered perception
- ▣ Relaxation



Synthetic Cathinones

- ▣ “Bath Salts” – family of drugs containing one or more synthetic chemicals related to cathinone, an amphetamine-like stimulant found in the Khat plant
- ▣ Usually white or brown crystalline powder
- ▣ Sold in small plastic or foil packages
- ▣ Labeled “not for human consumption”
- ▣ Usually taken orally, inhaled or injected
- ▣ Worse outcomes if snorted or injected

Bath Salts



Bath Salts

- ▣ Marketed as plant food, jewelry cleaner, phone screen cleaner
- ▣ Sold under a variety of names:
 - Ivory wave
 - Lunar wave
 - Bloom
 - Vanilla Sky
 - Cloud Nine
 - White Lightening
 - Scareface

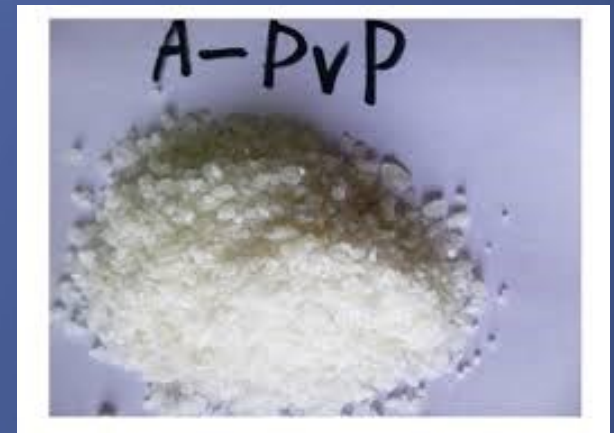


Effects

- ▣ Users can feel euphoria, increased sociability and sex drive
- ▣ But can also experience paranoia, agitation, hallucinatory delirium, panic attacks, hallucinations
- ▣ Some can display psychotic or violent behavior
- ▣ Cardiac symptoms such as racing heart
- ▣ High blood pressure
- ▣ Chest pains
- ▣ Death



Flakka



- ▣ Alpha-PVP
- ▣ Chemical composition similar to bath salts
- ▣ Usually white or pink crystals, foul smelling
- ▣ Can be ordered on-line- mostly from China
- ▣ Can be eaten, snorted, injected, vaporized
- ▣ Spreading from Florida, Tennessee, Kentucky, Ohio
- ▣ Causing increase in emergency room visits and overdose deaths

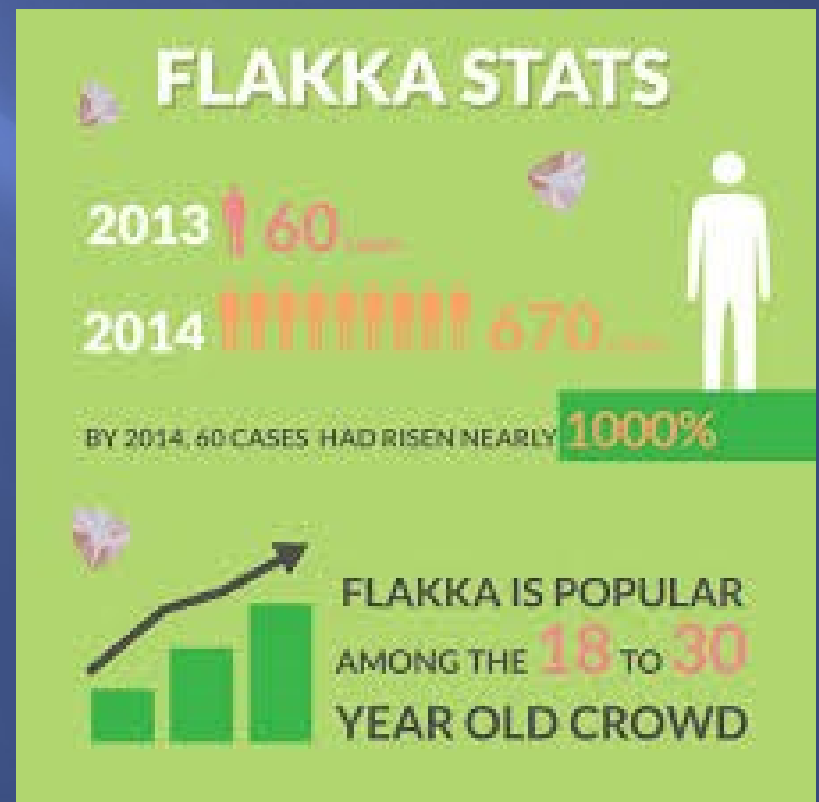
Flakka

- ❑ Especially potent when vaporized in e-cigarette
- ❑ Can cause excited delirium – including hyper-stimulation, paranoia and hallucinations
- ❑ Can lead to violent aggression and self-injury
- ❑ Can raise body temperature to dangerous levels and cause kidney damage
- ❑ Deaths also linked to suicide and heart attacks



Flakka

- ❑ Some individuals have experience the excited delirium up to 5 months after using the drug
- ❑ Can cause drastic weight loss
- ❑ It is illegal in the USA
- ❑ Broward County, Florida reported 29 deaths in the last year attributed Flakka



MDMA



- ▣ 3,4 –methylenedioxy-methamphetamine
- ▣ Also known as Ecstasy or Molly
- ▣ Synthetic drug that mimics both amphetamine (stimulant) and mescaline (hallucinogen)
- ▣ Initially popular in “raves” but now goes beyond that
- ▣ Effects last 3-6 hours
- ▣ Usually in tablet or capsule
- ▣ Interferes with the body’s ability to regulate temperature



Molly

- ▣ Molly (molecular) – pure crystalline form of MDMA usually in a capsule
- ▣ Usually a higher level of purity
- ▣ Biggest risks are dehydration and over-hydration to the point the brain swells and can be fatal
- ▣ Users report intense feelings of pleasure but it is followed by a serious crash with serious levels of depression



MDNA

What You
Need to Know
About
Drugs

Ecstasy

- ▣ MDMA was first used in the 1970's as an aid in psychotherapy - without FDA approval
- ▣ 1985 DEA labeled MDMA a Schedule I substance – a drug with high abuse potential
- ▣ MDMA can increase heart rate and blood pressure
- ▣ May experience muscle tension, involuntary teeth clenching, nausea, blurred vision, faintness, chills or sweating
- ▣ Can often contain other drugs such as ephedrine, dextromethorphan, ketamine, caffeine, cocaine, methamphetamine





Salvia

- ▣ An herb in the mint family native to southern Mexico
- ▣ Used to have hallucinogenic experiences
- ▣ Usually ingested by chewing fresh leaves or drinking extracted juices
- ▣ May be smoked in cigarettes, pipes or vaporized and inhaled
- ▣ Intense effects appear in less than a minute and lasts less than 30 minutes
- ▣ Currently not regulated by Controlled Substance Act

Salvia

- ▣ Psychedelic- like effects on visual perception, mood and body sensations, emotional swings, feelings of detachment,
- ▣ Highly modified perception of external reality, which causes concern about driving under the influence of salvia



Salvia

▣ May Experience:

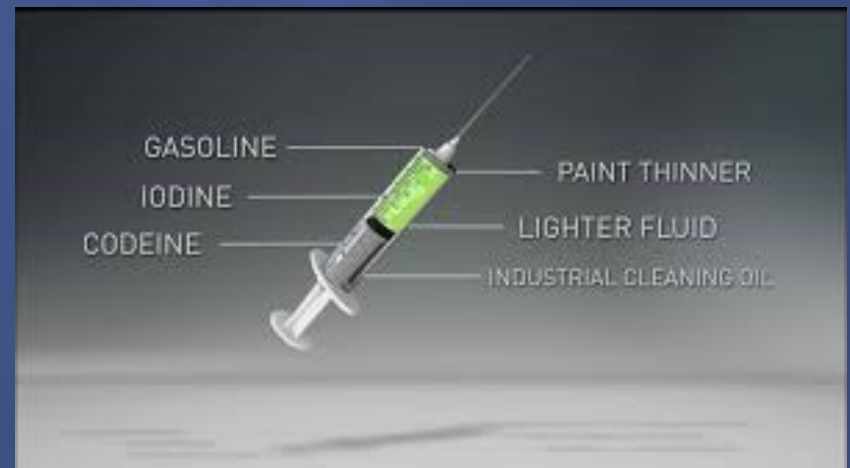
- Loss of physical coordination
- Uncontrollable laughter
- Alternate realities
- Contemplative sense of peace
- Altered visions
- Sense of profound understanding
- Sense of total confusion/madness
- Sense of flying, floating, twisting, turning
- Feeling of being underground or underwater
- Appear to travel to other places and/or times
- Feeling of being connected to a larger “whole”



Krokodil



- ▣ Desomorphine
- ▣ Began in Russia over 10 years ago
- ▣ Street names: krokodil, Russian Magic, Cheomaya, Himiya
- ▣ Start with codeine, cook it, then add solvents such as gasoline, paint thinner, lighter fluid, iodine, hydrochloric acid, and red phosphorus (from matches) which may not be fully “cooked” out



Krokodil

- ▣ 8-10 times more powerful than morphine
- ▣ Effects last less than 2 hours so potential for repeated use
- ▣ Causes extreme skin ulcerations, infections and gangrene
- ▣ Patches of skin turn dark green or black and scaly, like a crocodile
- ▣ Chunks of skin fall off



Krokodil – Health Hazards

- Blood vessel damage
- Limb amputations
- Pneumonia
- Blood poisoning
- Meningitis
- Rotting gums/tooth loss
- Bone infections
- Speech and motor skills impairment
- Memory loss and impaired concentration
- Liver and kidney damage
- Blood borne viruses (HIV, HCV)
- Overdose
- Death



Sizzurp

- ▣ Also called purple drink, syrup, lean
- ▣ Consists of
 - Promethazine with codeine syrup (cough medicine)
 - Fruit flavored soda
 - Jolly Rancher



Urban Dictionary;
Today News.com

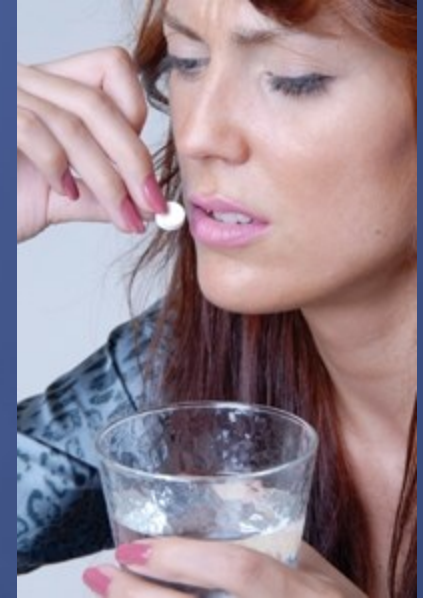


Sizzurp

- ❑ Motor skill impairment, lethargy, extreme drowsiness
- ❑ Can cause seizures, loss of breathing
- ❑ Very addictive
- ❑ Sweetness causes user not to realize how much they are ingesting
- ❑ Glamorized in songs and social media

Opiates

- ▣ Medications to relieve pain
- ▣ Hydrocodone /Vicodin
- ▣ Oxycodone – OxyContin, Percoset
- ▣ Morphine – Kadian, Avinza
- ▣ Although these medications, taken as prescribed can manage pain safely and effectively.
- ▣ However, they are currently among the most commonly abused drugs in the US
- ▣ In 2013, 6.5 million Americans aged 12 or older had used prescription drugs non-medically in the past month



Heroin



- ▣ Synthesized from morphine
- ▣ White or brown powder or black sticky substance known as “black tar heroin”
- ▣ In 2011, 4.2 million Americans aged 12 or older used heroin at least once in their lives
- ▣ About 23% of heroin users become dependent on it
- ▣ Can be injected, snorted, or smoked
- ▣ All routes of administration take the drug to the brain rapidly, which contributes to high risk of addiction

Heroin

- ▣ “ Plugging” – heroin is dissolved and withdrawn into an oral syringe which is lubricated and inserted into the anus or the vagina and the plunger is pushed
- ▣ The drug is absorbed into the membranes



Heroin

- ▣ Short term effects include rush of euphoria, flushing of skin, dry mouth, heavy extremities, slow CNS
- ▣ Following the initial feelings, the user goes “on the nod”



- ▣ Long term effects include risk of HIV or Hep C, collapsed veins, abscesses, infection of heart lining and valves, constipation, gastrointestinal cramping, liver or kidney disease, pulmonary complications

Trends

- ▣ Illicit drug use in US has been increasing. In 2013, about 24.6 million Americans used in the past month
- ▣ Marijuana is the most commonly used illicit drug
- ▣ Marijuana use has increased since 2007 19.8 million up from 14.5 million
- ▣ Drug use is higher among people in late teens and twenties
- ▣ Underage drinking has declined
- ▣ Tobacco use has decreased
- ▣ Cocaine use has decreased (2.0 million down to 1.5 million)

References

- ▣ *Emerging Trends*, National Institute on Drug Abuse (NIDA), August 2015
- ▣ *Flakka, the New Killer Drug, is Spreading Across the Country*, MSN.com, 2015
- ▣ *Trends and Statistics*, NIDA, updated 2015
- ▣ *Cocaine/Crack*, Partnership for Drug Free Kids
- ▣ Reefer Sanity: Seven Great Myths about Marijuana, Kevin Sabet, PhD, 2013
- ▣ *Dangerous Chemistry: Powdered Alcohol*, NJ Prevention Network, 2014
- ▣ www.cdc.gov
- ▣ www.partnershipfordrugfreekids
- ▣ www.urbandictionary



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