The Designer Drug Craze

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In states that have legalized medical or recreational marijuana use (or nearby states), there may be “edibles” in the form of Cookies, Brownies, Drinks, Candy bars, Hard candies.
BHO (Butane Hash Oil): Marijuana Wax
Terms

- BHO
- Budder/Buddah
- Honey Oil
- Oil Dabs
- Dabs
- Wax
- Shattah/Shatter
- Ear Wax
Marijuana Wax:

What is it??

- It is a marijuana concentrate that is more powerful than marijuana.
- It leads to a quicker and stronger high and is said to be the strongest form of marijuana on the market.
- THC nanogram levels as high as 6,000!
HOW IS IT USED?

- Once it is made it is either placed in a bong and smoked just like regular marijuana or used with a vaporizer (electronic cigarette).
BHO (SHATTER, WAX, HONEY COMB)

BHO – which costs between $25 and $100 a gram, depending on where you live – comes in a variety of consistencies: from hard, amber-like stuff ("shatter") to soft, golden goop ("budder" or "earwax"). The basic process is surprisingly simple: Pack herb (often leftover parts after the buds have been removed) into a tube and force a solvent (usually butane) through it. The solvent is evaporated off, leaving just the plant’s resins – which are chock-full of psychoactive chemicals, including astronomic levels of THC that can exceed 80 percent.
Shatter lab in Harrisburg:
Detection and Signs of Use

- Hallucinations - seeing things that aren’t really there
- Auditory Hallucinations - hearing things that aren’t there
- Tactile Hallucinations - feeling like bugs are crawling on you
- Blacking out
- Increased heart rate
- Nausea, confusion, and dizziness

Blacking out is just your brain's way of clearing your memory's browser history.
Synthetic Drugs

Amphetamine and methamphetamine were the first synthetic drugs. LSD, PCP and Ecstasy (MDMA) followed after that. Today, one new destructive chemical after another is being sold into the illicit drug market. Some of them manage to stay one step ahead of the law by shifting the formula of a particular drug they are selling, as soon as it has become illegal. They just move a few molecules and they have a new chemical that may not be illegal.

This has been the pattern of the game as a long list of new drugs have been distributed across Europe, the UK and the US. Certain formulations have become recognized as "bath salts" or synthetic marijuana and many other drugs are just identified by numbers and letters. As a whole, this category of drug is known for its unpredictable effects.
Synthetic Drugs

- Synthetic drugs are those man-made chemical compounds that mimic the effects of illicit drugs.
  - "Spice" and "K2" are synthetic marijuana products.
  - Bath Salts are a synthetic amphetamine.
- All drugs of abuse that do not come from plant products or diverted pharmaceuticals could be categorized as synthetics.
  - Synthetic drugs act on the brain in the same manner as more traditional substances.
  - Unfortunately the most recent trend is the combination of synthetic substances which complicates testing and research even further.
Detection and Signs of USE:

- Seizures
- Suicidal tendencies and attempts
- Homicidal tendencies
- Delusions
- Overstimulation
- Aggression
- Paranoia
- Chest pain
- Heart attack/ Death
- Overheating that causes a person to tear off his clothes
- Self-destructive behavior (like bashing one's body or head against walls)
- Anxiety progressing to violent behavior
- Severe Hallucinations/Psychotic Delusions
- Intense Paranoia
- Increased Heart Rate/Elevated Blood Pressure
- Insomnia/Lack of appetite
- Muscle spasms/tense muscles
- Not sleeping
- Inability to feel pain
- Vomiting
Synthetics: Detection and Signs of Use

- Snorting
- Oral
- Injection
- Smoking
- Used with electronic cigarettes
Many experts say "synthetic marijuana" is a huge misnomer for these drugs, which have also have taken on street names like "K2" and "Spice," since they produce far different effects and can be up to 100 times more potent than traditional marijuana.

Just like with the main psychoactive ingredient in traditional marijuana, THC, the psychoactive ingredients in synthetic marijuana bind to the brain's CB1 receptors. Because spice is so much stronger, however, it is much more likely to cause everything from seizures to psychosis.
The majority of synthetic marijuana users report they use the drug to avoid positive drug tests.

Most users of synthetic marijuana report using it as a substitute for marijuana during drug-testing periods, and returned to marijuana use once that period has ended.

Synthetic marijuana is particularly dangerous because its ingredients are unknown, they have not been tested for safety, and their ever-changing ingredients can be unusually powerful. Users don’t know what they are getting. Excerpts from Cesar FAX January 13, 2014.

Detection periods for synthetic marijuana is up to 72 hours. Synthetic marijuana does not bind to the fat cells in the body like THC does.
MARIJUANA

PHYSICAL EFFECTS

- Elevated blood pressure
- Red eyes
- Dry mouth
- Increased breathing rate
- Faster heart rate
- Increased appetite

SYNTHETIC CANNABINOIDs

PHYSICAL EFFECTS

- Extremely high blood pressure (stroke range)
- Dilated pupils, red eyes
- Glazed expression
- Inability to speak
- Rapid heart rate (possible heart attack)
- Nausea and vomiting
- Kidney failure
Synthetic Drugs: Mephedrone, Methylone, Bath Salts and Flakka

- These are psychoactive drugs that are meant to mimic the effects of both amphetamines and hallucinogens; their effects can be somewhat similar to the effects of MDMA, methamphetamine, and cocaine.
- Flakka, for example, is made from a compound called alpha-PVP, a chemical cousin of cathinone, the amphetamine-like drug found in bath salts.
- The active ingredient in bath salts was officially banned in 2011, its newer relative, alpha-PVP, was not. That means it is legal in any state without its own ban.
- Like cathinone, alpha-PVP is a type of stimulant. Stimulants are linked with feelings of euphoria, enhanced alertness and wakefulness, and increased movement — all symptoms that are similar to those experienced by people on other drugs like amphetamines or cocaine.
- These drugs cause a surge in 2 chemicals: Dopamine and Norepinephrine. Dopamine is responsible for making you feel good and causing euphoric sensations. Norepinephrine raises your heart rate and blood pressure and make us feel more alert.
Synthetic drugs: Flakka

- It’s cheap! $5.00 a dose!
- Raises the body’s temperature to 106 degrees. At temperatures that high the brain and other organs can be irreversibly damaged.
- Even a higher addictive quality than crystal meth
- It is easy to obtain small quantities through the mail
- It gives people the paranoia of meth, the aggression of cocaine, and the inability to feel pain that heroin causes
- Treating it with Narcan appears to strengthen the effects and causes a risk to first responders
'Zombie drug' flakka at center of brutal Pa. killing

Flakka is called the 'zombie drug' because people who use it go into a zombie state and either eat themselves or bite and chew other people. Two Pa. men were taking it for the first time, and now one is dead and the other is charged with beating him to death. Pictured: Bethlehem homicide suspect James Heimbach, 30, who told police the beating victim attacked him, trying to bite his face and then biting his hand. The suspect claimed he was "fighting for his life" to escape the allegedly drug-crazed victim. (Via LehighValleyLive.com)
Flakka's toll: The face of a new street scourge

The designer drug, known as "$5 insanity" on the streets and Alpha-PVP in research labs, became a South Florida staple last year. Ever since, Broward County's Medical Examiner has tallied every death in which Flakka may have played a role.
Synthetic drugs: Barriers

- There will never be a test available for every synthetic drug out there.
- Finding creative ways to work with your clients/offenders to determine if they are using or have used.
- The inability to get them into a drug and alcohol rehab if you don’t get a positive screen or if they do not admit.
- Hospitals discharging without referral to inpatient once symptoms subside.
- There is a highly addictive quality of the substance (presumed).
- The lack of research on the subject related to long term effects.
GHB: (gamma hydroxybutyric acid)

- GHB is commonly in an odorless, colorless liquid form or it appears as a white powder material.
- GHB is commonly ingested in the liquid form, usually mixed with alcohol.
- In lower doses, GHB causes drowsiness, dizziness, nausea, and visual disturbances. At higher dosages, unconsciousness, seizures, severe respiratory depression, and coma can occur. Overdoses usually require emergency room treatment, including intensive care for respiratory depression and coma.
- GHB has been used in the commission of sexual assaults because it renders the victim incapable of resisting, and may cause memory problems that could complicate case prosecution.
- GHB has become popular among teens and young adults at dance clubs and “raves.”
- Slang: G, Sodium Oxybate, Easy Lay, Soap, Gamma 10, Georgia Home Boy
- Detection: It is possible to detect GHB in urine for 12-24 hours, a drug test for GHB use is generally only done if there is suspected abuse, such as a case of date rape.
Phencyclidine (PCP)

- PCP or “angel dust” is a powerful psychedelic known for its dissociative effects at high doses. PCP also possesses hallucinogenic, central nervous system stimulant, central nervous system depressant, and analgesic properties.
- PCP can be ingested, inhaled, injected intravenously, but is most commonly smoked.
- PCP is most commonly used in combination with other drugs such as THC and ketamine.
- Common signs of a person under the influence include tachycardia, hypertension, hallucinations, stupor, disorientation, lethargy, sensory isolation, and gross loss of coordination. Excitation and violent behavior may also occur, leading to unpredictably violent behavior not usually encountered with other hallucinations. Higher doses of PCP can result in convulsions and prolonged or fatal coma.

Detection: PCP is detectable in urine for 1-8 days after a single use and for up to 30 days with regular use.
PCP abuse can result in dangerous hallucinations coupled with aggressive behavior.
Ketamine:

- Ketamine is a tranquilizer most commonly used on animals.
- The liquid form can be injected, consumed in drinks, or added to smokable materials. The powder form can be used for injection when dissolved. In certain areas, Ketamine is being injected intramuscularly.
- Ketamine comes in a clear liquid and a white or off-white powder form.
- Higher doses produce an effect referred to as “K-Hole,” an “out of body,” or “near-death” experience.
- Use of the drug can cause delirium, amnesia, depression, and long-term memory used as a date-rape drug.
- **Slang:** jet, super acid, Special “K”, green, K, cat Valium
W-18 (1-(4-Nitrophenylethyl)piperidylidene-2-(4-chlorophenyl)sulfonamide) is an interesting drug of a potency 10000x that of morphine that was discovered in 1981, the details of which were laid out in a patent (US4468403), and has virtually no history of human use.

In August 2015, law enforcement officials in Calgary, Alberta, made a routine drug bust that yielded 110 tablets. As part of regular procedure, these pills were sent to Health Canada for their properties to be analyzed. The laboratory experts were astonished to find that the tablets contained an ultra-potent form of opioids that had never been seen on the street before. The compound in the pills is dubbed W-18.
W-18 was first thought to be a synthetic opioid compound, meaning that it was created in a laboratory setting. The drug was actually developed 30 years ago by researchers in Edmonton, Alberta, who were seeking to create novel opioids that could be used in medical settings. W-18 was never picked up by a pharmaceutical company, but its chemical structure was published in medical journals. Authorities speculate that clandestine Chinese laboratories used this information to produce the W-18 tablets that have hit streets in North America.

W-18 tablets were apparently sold as fentanyl, a schedule II prescription drug that is much stronger than morphine.

Unlike fentanyl, which is used pharmaceutically, W-18 has no known clinical use. It is 10,000 times more potent than morphine and 100 times more potent than fentanyl. This makes W-18 an incredibly dangerous drug that could have lethal consequences.
W18

- The average dose of fentanyl is 125 micrograms, about the same as two grains of salt. With W-18 being 100 times more potent, that means that users cannot safely consume more than a tiny amount, perhaps just 1 or 2 micrograms, without suffering serious consequences.

- Given that the drug is produced in clandestine laboratories, it is unlikely that its creators are being careful about quality control. This means that individual batches of W-18 could have irregular amounts of the drug. Getting a bad pill could be fatal.

- Most recently after testing at the University of Calgary and University of North Carolina Chapel Hill found W-18 didn’t trigger all opioid receptors. Therefore it is not an opioid and it is still unknown exactly what the compound consists of.
HARMFUL CONSEQUENCES OF W-18

- This drug is relatively new to the drug market. As its availability spreads, it is likely to cause major health problems among users. The typical effects of opioids include analgesia, euphoria, drowsiness, lightheadedness, fatigue, weakness, and slowed breathing. As a drug that is several orders of magnitude more potent than morphine, W-18 is likely to have an even more severe profile of effects than other opioids. Even at very small doses, W-18 could cause a person to stop breathing.

- One of the most alarming aspects of W-18 is that it so closely resembles fentanyl and other opioid pills. Unsuspecting users could purchase tablets containing W-18 and easily overdose from this much more potent drug.
MDMA (3,4-Methylenedioxymethamphetamine) is one of the most common popular recreational psychoactives, also known as ecstasy. Ecstasy is usually ingested in tablet form, but can also be crushed and snorted, injected, or used in suppository form.

It is known for its empathogenic, euphoric, and stimulant effects, and has also been used in psychotherapy. In addition to chemical stimulation, the drug reportedly suppresses the need to eat, drink, or sleep.

When taken at raves, where all-night dancing usually occurs, the drug often leads to severe dehydration and heat stroke in the user since it has the effect of “short-circuiting” the body’s temperature signals to the brain.
Molly: slang for molecular

- The term Molly is used interchangeably with MDMA and ecstasy.
- What is in Molly is up to the person who is making it. It can be any of the following:
  - Synthetic drugs
  - Cocaine
  - Methamphetamine
  - Opiates
  - Amphetamines
Detection and Signs of Use:

- MDMA is detectable in urine for 1-3 days after a single use and for 3-5 days after heavy use. MDMA is closely enough related to amphetamines that MDMA users will test positive in both amphetamines and methamphetamines.

- If you get a person that tests positive for AMP, MET, COC, OPI, etc... it could be that they used Molly.

- An Ecstasy overdose is characterized by a rapid heartbeat. High blood pressure, faintness, muscle cramping, panic attacks, and, in more severe cases, loss of consciousness or seizures.

- One of the side effects of the drug is jaw muscle tension and teeth grinding. As a consequence, Ecstasy users will often suck on pacifiers to help relieve the tension. Ecstasy may cause hyperthermia, muscle breakdown, seizures, stroke, kidney and cardiovascular system failure, possible permanent damage to sections of brain critical to thought and memory, and death.
Slang MDMA:

X, XTC, ROLLS, ROLLING, ADAM, GO, HUG DRUG, ADAM, E, XTC, ROLLS, CLARITY, ESSENCE, STACY, LOVER’S SPEED, EVE, HUG, WHITE DOVES, LOVE DRUG, BEANS, DISCO BISCUITS, STARFISH SEX
BROMO DRAGONFLY

- It is a designer hallucinogen.
- Named due to its winged appearance of its chemical structure and because of an attached bromine atom.
- This drug works on serotonin and changes the way we feel and experience the world through thoughts and senses.
- It is extremely potent, and even a small dose can cause a big kick.
- It lasts a long time…usually 2-3 days.
- With it having that long of an effect, if someone has a side effect that can also last a really long time and make the experience not enjoyable.
Bromo-Dragonfly has been reported to have caused confusion, heart problems, hallucinations, seizures, and death.

- It is not detected on a standard urine drug screen.
- It is not regulated on the federal level and therefore is currently legal.
- If you have access to a credit card and the internet you can buy dragonfly online and have it shipped to your house.

3 Day LSD Trip? No thank you.
Krokodil

- This drug is easily made from codeine, iodine, lighter fluid, industrial cleaning fluid, paint thinner, gasoline, and red phosphorus.
  - Similar to the process for making methamphetamine
- Krokodil is primarily used by Heroin addicts that can no longer afford heroin due to the price being much lower.
- Krokodil first appeared in Siberia and East Russia in 2002. It’s US alternative is Desomorphine which was invented in 1932.
- Sedative and analgesic effects.
- The drug is named for its scale-like appearance of the skin on the user. Causes severe tissue damage - phlebitis and gangrene sometimes requiring limb amputation in long-term users and deterioration of kidney and liver.
- Life expectancies 2-3 years.
**Krokodil**

- Drug is injected into a vein. Small lumps begin to appear around the injection site, followed by scaling and discoloration of flesh (red, black, brown, green or grey).
- The skin scales up, tissue rots and starts to deteriorate.
HEROIN vs KROKODIL

ONE DOSE OF HEROIN

- A HIGH FOR 4-6 HOURS
- IT TAKES WEEKS EVEN MONTHS TO HARVEST, REFINE AND CONVERT OPIUM INTO HEROIN
- WITHDRAWS FOR HEROIN CAN LAST A WEEK
- HEROIN ON AVG COSTS $100-$300/GRAM

ONE DOSE OF KROKODIL

- A HIGH FOR 1 HOUR
- IT TAKES 1 HOUR TO COOK KROKODIL
- WITHDRAWS FOR KROKODIL CAN LAST OVER A MONTH
- KROKODIL ON AVG COSTS $10-$30/GRAM

KROKODIL IS 10X STRONGER AND 3X MORE TOXIC THAN HEROIN
THE FLESH EATING
"ZOMBIE DRUG"

PERSONALITY CHANGES

SORES AND ULCERS
ON THE FOREHEAD AND SKULL

INFECTED/ROTTING SOFT
TISSUE (EARS, NOSES, LIPS)

ROTTING GUMS RESULTING
IN TOOTH LOSS

AFFECTED MEMORY AND
CONCENTRATION

BLACK OR GREEN SCALY SKIN

PIECES OF DEAD SKIN THAT
COME OFF IN ONE PIECE

KROKODIL SYMPTOMS

SPEECH IMPEDIMENTS

DECAYED STRUCTURE OF JAW AND
OTHER FACIAL BONES

VEINS THAT ULCER AND ROT
AWAY FROM THE INSIDE

NECROSIS

MOTOR SKILL IMPAIRMENTS

GANGRENE

DEATH
Kratom:

- Kratom is a relatively new drug to the US and Europe. It has been used for many years in Southeast Asia as an anti-diarrheal medicine, a painkiller and a recreational drug. Kratom is the popular name for a tree and the drug comes from its leaves.

- The drug may be bought in leaf form but in this country, it is more likely to be purchased as a capsule filled with powdered leaf material or a chopped up form of the leaf that can be used for tea or smoking. Most people ingest the drug. The effects of kratom come on rather quickly and last between five and seven hours, although high doses can last longer.

- At lower doses it acts as a stimulant and at higher doses it produces a sedative/opioid-like effect. It is on the FDA watch list but is currently legal in the U.S. It is addictive. It can be bought right on the internet and shipped to you. It is extremely dangerous when mixed with other drugs. Someone under the influence of the lower doses will look a lot like an Adderall or cocaine, so the person will be alert, have a lot of energy, talkative, sociable. At the higher sedative level the person will be more like being under the influence of heroin/Oxycodone etc. They will not be sensitive to pain, itching, sweating, constricted pupils, and nausea. Side effects of long term Kratom use would be weight loss, dark pigmentation on the face, muscle aches, irritability, crying, runny nose, diarrhea,
In the United States people are increasingly using kratom for self-management of pain and opioid withdrawal.

Although it is still legal in the United States, the US Drug Enforcement Administration has placed kratom on its “Drugs and Chemicals of Concern”

There are plenty of websites available promoting the use of kratom, but remember the scientific validity of the claims and anecdotes have not been substantiated.

Some websites go as far as to discuss how to grow your own and show the optimal methods and conditions for growing your own.

It still remains somewhat of an underground phenomenon.
A wide variety of kratom products including raw leaves, capsules, tablets, and concentrated extracts are readily available from Internet-based suppliers.

These products are also sold in specialty stores commonly known as “head shops” or “smoke shops” as well as corner stores.

Low-dose effects are mainly characterized by an unpleasant sense of anxiety and internal agitation.

Opioid-like effects, such as analgesia (pain relief), constipation, euphoria, and sedation are typically associated with the use of moderate-high doses of kratom.

The higher-dose effects may be either euphoric (excitement) or dysphoric (dissatisfaction of life), depending on the individual.
The acute adverse effects of kratom experienced by many users appear to be a direct result of kratom’s stimulant and opioid activities.

- Stimulant effects manifest themselves in some individuals as anxiety, irritability, and increased aggression.
- Opioid-like effects include sedation, nausea, constipation, and itching.
- Chronic high-dose is associated with several unusual effects. Hyperpigmentation of the cheeks, tremor, anorexia, weight loss, and psychosis have been observed in individuals with long-term addiction.
There have been several recent reports of seizures occurring in individuals who have used high doses of kratom, either alone or in combination with other drugs.

During the past five years, there have been reports of 9 deaths related to kratom.

A large number of Internet posts refer to the use of kratom as a euphoriant or “legal opioid”.

Although there are some reports that it may be less addictive than classical opioids, but there are numerous is that it may be highly addictive.

There have been increasing reports of individuals becoming physically dependent on or addicted to kratom.

Individuals also exhibit substantial tolerance to the effects of kratom and showed overt symptoms of withdrawal when kratom was stopped.
The symptoms of withdrawal were similar to those from traditional opioids and included irritability, dysphoria, nausea, hypertension, insomnia, yawning, running nose, muscle pain, diarrhea, and joint pain.

Although various tests for kratom-derived compounds have been developed they are not widely available for general use.
Kratom: Found in Harrisburg Jan 2016
LEAN OR SIZZURP
WHAT THE HELL IS IT?

- It is known as lean, sizzurp, purple drank, and syrup
- It is a mix of a codeine based prescription cough syrup, soda, and often candy
- It has been popularized by rap singers
WHAT DOES IT DO?

- The codeine is an opiate and creates the feeling of euphoria
- The cough syrup contains a drug called promethazine which acts as a sedative
- The combo makes the users lean over, thus the nickname “lean”
DANGERS

- Too much codeine and promethazine can depress the central nervous system and respiratory systems, stopping the heart and breathing.
- The person can feel nausea, dizziness, impaired vision, memory loss, hallucinations, and seizures.
- It can be deadly especially when it is mixed with other drugs and alcohol.
- Teen may think because it comes from a pharmacy it's won’t harm them but that isn’t true.
- US Drug Enforcement Agency estimates 1 in 10 teens uses it to get high.
- They may also be using other OTC cough medicines to get high with the active ingredient of dextromethorphan.
CCC’S

So what is a CCC?

- It is the over-the-counter medication Coricidin HBP Cough & Cold which contains DXM (dextromethorphan)

- It is abused because it contains the DXM which when taken in doses that dramatically exceed those recommended by physicians or pharmacists, produces hallucinations and a sense of dissociation

- Street names: Orange Crush, Red Devils, Skittles, Dex, Rob, Rob-trippin’, Candy

- It is available in red tablets that contain 30 mg of DXM. Other common types abused are Coricidin HBP Chest Congestion and Cough (available as soft gels and have 10 mg DXM) or Coricidin HBP Maximum Strength Flu (available and contain 15 mg of DXM)
CCC’S

- How are CCC’s abused? They are generally taken orally.
- Who abuses CCC’s? It is common with young adults and teenagers.
- They are usually stocked openly in grocery stores, although sometimes behind the counter but these are typical places teenagers work.
- Triple CCC’s are often shoplifted. They are easily accessible and relatively low priced which make it attractive to young people.
CCC’S

- Consumer’s typically consume many times the recommended dose, which gives them similar feelings to PCP or Ketamine.
- The drug’s high can last as long as 6 hours, abusers risk injuring themselves and others because the drug’s effects on visual perception and cognitive processes.
- It can result in an increased body temperature, which poses a particularly acute health threat if the drug is used in an environment such as a rave or dance club.
- It is not illegal and the medication is available without a prescription.
CCC’S

- What the effects of Triple C’s?
  - Nausea
  - Abdominal Pain
  - Vomiting
  - Irregular heartbeat
  - High Blood Pressure
  - Headache
  - Numbness of fingers and toes
  - Loss of consciousness
  - Seizure
  - Brain Damage
  - Death
LIQUID METH
LIQ UID M ETH

- It is the newest form of methamphetamine that is reported to be surfacing throughout many areas of the United States.
- Manufacturers of this highly toxic drug are beginning to dissolve meth in water in order to liquefy the drug.
- The reason that liquid meth is quickly becoming popular with many of the individuals who are meth dealers, is because it had made transporting the toxic drug so much easier.
Individuals who produce meth will often place the liquid form of the drug into various different types of liquor bottles, which are regularly seen at various different ports of entry.

One the liquid meth has passed inspection and been shipped to its destination, individuals will then boil away the water; then only the solid form of meth will remain.

It is being applied to paper and is sometimes sent through packages in the U.S. mail.
LIQUID METH

- It has been reported to be stronger than any of the other forms of methamphetamine that is currently available on the street.
- Users report that liquid meth is much better than any of the other forms of methamphetamine.
- The rest of the ingredients can be purchased at the local grocery store or pharmacy.
- Lab techs have determined it would take minutes to make a batch of liquid meth, and just over ten minutes to cook it up.
LIQUID METH SIDE EFFECTS

- Tremors and involuntary spasms that often occur automatically in the body
- Chest pain
- High blood pressure
- Irreversible damage to the brain or the heart
- Dilated pupils
- Extreme irritability
- Talking incessantly
- Disturbance in sleep patterns
- Extreme nervousness
- Increase in body temperature
LIQUID METH

SHORT TERM EFFECTS
- Tremors and involuntary spasms that often occur automatically in the body
- Chest pain
- High blood pressure
- Irreversible damage to the brain or the heart
- Dilated pupils
- Extreme irritability
- Talking incessantly
- Disturbance in sleep patterns
- Extreme nervousness
- Increase in body temperature

LONG TERM EFFECTS
- Damage to the major organs of the body including kidneys, liver, and the lungs
- Panic
- Paranoia
- Repetitive behavior patterns
- Feeling of being homicidal or suicidal
Chemicals used in the Meth lab

- Ephedrine or Pseudoephedrine Cold Tablets
- Red Phosphorus (Match Heads)
- Methanol (Heet)
- Rubbing Alcohol
- Lithium (Batteries)
- Veterinarian Products
- Iodine Crystals
- Sulfuric Acid (Drano)
- Solvents (Camp Stove Fuel, Acetone, etc)
- Litter – Salt
- Sodium Hydroxide (Lye) – Toluene (Break Cleaner) – Ether (Starting Fluid)
- Anhydrous ammonia
- Drano/ Red devil lye.
- Etc, etc.
ONE POT METH

Figure 1: Conversion of PSE to Meth

Pseudoephedrine

Common household ingredients

Methamphetamine

Source: CIC
MORNING GLORY SEEDS

- These are seeds from a flowering plant with the same name.
- They contain a chemical that is similar in nature and effects as LSD.
- The amount present in each seed is very small, so you have to eat a lot to get the psychoactive effects.
- Some people crush up the seeds and mix the powder with alcohol to increase the effects.
- Some even extract the active chemical and inject it intravenously.
- This is not a new trend by any means, it was very popular in the 1960’s and is resurfacing.
Effects of morning glory seeds

They vary person to person depending on dose, age, and life experience.

Most users experience strong sensory and visual distortion.

Colors seem brighter, patterns could seem to “breathe” and users can experience an altered sense of time.

Morning glory seeds may also impair judgement and the ability to perceive danger, so accidents on morning glory seeds are common, sometimes even fatal.

A morning glory trip can last up to 12 hours and have long term psychological effects.

There is another compound in morning glory seeds that can also cause nausea and headache.
EFFECTS OF MORNING GLORY SEEDS CONTINUED

- Many people have reported vomiting from eating morning glory seeds.
- Some can experience what is known as “bad trip”.
- A bad trip can be terrifying and disorienting. Users experience intense sensations and feeling with rapid mood swings.
- Some morning glory users experience severe, frightening thoughts and feelings, fear of losing control, fear of insanity and death, and despair while using morning glory seeds. This can cause anxiety, panic attacks, or full blown mental psychosis.
- For people with pre-existing mental illness, such as schizophrenia, this can be very dangerous.
The Legalities

- Morning glory seeds are legal to buy and grow at home
- Some retailers monitor whether or not they are being bought in bulk
- The chemical compound in morning glory seeds is not legal
- Therefore, using an extraction techniques like crushing and combining with alcohol, you would then be in possession of a controlled substance
- It is a popular trend as it easily obtained and relatively inexpensive
Buprenorphine (BUP) and Methadone (MTD)

- Both are used to treat heroin addiction. Methadone and buprenorphine/naloxone are two of the primary medication options for treatment of people affected by opioid addiction. Both medications belong to a treatment approach called opioid substitution therapy—basically you are substituting one drug for another.
- Methadone is an opioid medication produced in pharmaceutical laboratories from the same chemical structure that forms the basis for the naturally occurring opioid morphine. When an individual addicted to a powerful opioid drug (the classic example is heroin) takes this medication, he or she can reduce the level of danger associated with taking opioid substances while still receiving enough of an opioid boost to avoid withdrawal symptoms. Methadone produces this benefit, in part, because its effects do not kick in as rapidly as the effects of heroin or other powerful opioids. In addition, methadone has a relatively low ability to trigger euphoria, the intensely pleasurable state that opioid abusers and addicts typically seek to recreate again and again over time. Some people receive the medication on a short-term basis as part of an effort to entirely discontinue opioid use. However, many others receive methadone for extended periods of time as part of an ongoing effort to manage and contain the harms of full-blown opioid addiction.
Buprenorphine (BUP) and Methadone (MTD)

- Buprenorphine is an opioid medication that produces even lower levels of euphoria than methadone. As is true with methadone, doctors can use this medication as a substitute for more powerful opioid substances in order to control the risks for withdrawal symptoms during the addiction treatment process.

- Naloxone is an anti-opioid medication that stops opioids from triggering their mind- and body-altering effects. Pharmaceutical manufacturers combine these two medications in order to reduce the chances that any given person using buprenorphine will abuse his or her prescription and start taking the opioid for recreational purposes.

- In this context, naloxone plays its part by effectively limiting the amount of time in which buprenorphine remains active and produces an opioid effect. In the U.S., most patients receive a buprenorphine/naloxone combination known as suboxone, which dissolves gradually when placed under the tongue.
WHAT IS SUBOXONE?

- It was a drug developed for the treatment of addiction to opiates.
- It is a combination of buprenorphine and naloxone. Buprenorphine is the synthetic opiate that prevents withdrawal in a person who stops using opiates and naloxone is a drug intended to block the euphoric effects of the opiate.
SYMPTOMS OF ABUSE

- Nausea
- Vomiting
- Muscle pain and cramps
- Watery eyes
- Diarrhea
- Fever
- Insomnia
- Sweating
- Depression
- Drowsiness
- Slurred Speech
- Increased Blood Pressure
- Poor Memory
- Small Pupils
The person who chooses to abuse Suboxone is likely to have abused opiates over a long period of time.

They may simply abuse Suboxone as a way to prevent withdrawal symptoms from heroin and other opiate addiction, or may want to get high, or simply be curious about the effect of the drug.
WAYS TO GET HIGH OFF OF SUBOXONE

- **Crushing**: Users crush the tablets for either nasal inhalation, to later be dissolved in solution for injection, or in an attempt to speed the drug in their mouths.

- **Injecting**: Users dilute Suboxone with water or another liquid so it can be directly injected into their bloodstreams.

- **Injecting Suboxone** can paradoxically cause someone to go into immediate withdrawal because of a sudden and full potential for the naloxone to antagonize the activity of any other opioid drug present in the user's system.
METHADONE

- It is used not only as treatment for opiate addiction but also for pain relief.
- Methadone can come in a small pill that is intended to be swallowed or dissolved, or as a liquid to be drunk, diluted or injected.
- It is not expected to cause the same initial euphoric rush as heroin but they will still feel high when they first start abusing it.
- As they develop a tolerance, if they don’t increase their dosage, they will probably just feel numb and drugged without the high.
- There is a high risk of overdose with Methadone for this reason.
- It is a very long lasting drug. Taking doses too close together makes it easy to overdose.
METHADONE SIDE EFFECTS

- Drowsiness
- Weakness
- Nausea
- Vomiting
- Constipation
- Trouble Sleeping/Unusual Sleep Schedule
- Skin rashes
- Headache
- Dry Mouth
- Itchiness
- Lack of Appetite
- Sweating
- Flushing
- Weight Gain
- Water retention
- Difficulty urinating
In 2015, 3,383 drug-related overdose deaths were reported in Pennsylvania, an increase of 23.4 percent from the total number of overdose deaths (2,742) reported in 2014.

The 2015 statewide drug overdose death rate in Pennsylvania was 26 per 100,000 people, an increase from the reported 2014 rate of 21 per 100,000 people. According to the CDC, the national drug overdose death rate in 2014 (most recent available) was 14.7 per 100,000 people.

Heroin was the most frequently identified drug in toxicology test results, as nearly 55 percent of drug-related overdose decedents showed the presence of heroin in 2015.

Heroin remains a pervasive drug of abuse, as it was present in overdose decedents in 59 of the 62 counties (95 percent) that reported drug-related overdose deaths and associated toxicology results.
The PFD received and analyzed data on 3,383 drug-related overdose deaths in 2015 from 65 counties in Pennsylvania. Cameron and Warren counties reported no drug-related overdose deaths in 2015.

Acetyl fentanyl was found to be an emerging drug of concern in 2015. Acetyl fentanyl was not reported in any 2014 overdose deaths, however, it was present in approximately 4 percent of all 2015 decedents whose toxicology test results were reported. Further, acetyl fentanyl was present in approximately 7 percent of opioid-positive and approximately 4 percent of heroin-positive 2015 decedents.

Fentanyl was the most commonly reported drug (23 percent) in 2015 heroin-positive decedents in 2015, followed closely by cocaine (20 percent). In fentanyl-positive decedents, 36 percent were also heroin-positive, while 26 percent were cocaine-positive. The combinations of heroin and/or cocaine with fentanyl present in this dataset is supported by law enforcement intelligence regarding illicit drug suppliers utilizing fentanyl as an adulterant to heroin and cocaine to increase potency and attract users.
Heroin
Heroin

- Heroin is a powerful opiate pain killer that produces euphoria and blissful apathy.
- Heroin is usually taken in one of two ways: it is either injected or smoked. Smoking is by far the safest way of using, as injecting makes you much more liable to the risks of infection and overdose.
- Chemical name: Diacetylmorphine. It is processed from morphine extracted from the seed pod of poppy plants.
- It is typically sold as a white or brownish powder that is “cut” with sugars, starch, or powdered milk.
In 1874 it became an response to the morphine epidemic sweeping the United States.

It’s been an epidemic ever since.

It was being marketed in the late 1800’s, early 1900’s as a cure for all types of physical and mental ailments from alcohol withdrawal to cancer, depression, sluggishness, coughs, colds, tuberculosis and even old age.

They were unregulated and sold legally in the United States until 1920 when Congress recognized the danger of these drugs and enacted the Dangerous Drug Act. This made the drugs illegal to purchase and deemed distribution to be federally regulated.
Slang terms for heroin and...

- **Heroin and Marijuana:** Atom Bomb, Canade, Woola, Woolie, Woo-Woo
- **Heroin and Cold Medicine:** Cheese
- **Heroin and Ecstasy:** Chocolate Chip Cookies, H Bomb
- **Heroin and Alprazolam:** Bars
- **Heroin and LSD:** Beast, LBJ
- **Heroin and Cocaine:** Belushi, Boy-Girl, He-She, Dynamite, Goofball, H&C, Primo, Snowball
- **Heroin and Crack:** Chocolate Rock, Dragon Rock, Moonrock
- **Heroin and Ritalin:** Pineapple
Slang terms for heroin use:

- Chasing the Dragon
- Daytime (being high)
- Evening (coming off the high)
- Dip and Dab
- Do Up
- Firing the Ack Ack Gun
- Give Wings
- Jolly Pop
- Paper Boy
- Channel Swimmer
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You didn’t tell me this was HEROIN.
What 30 Days of HEROIN Does to You

**Brain**
Addiction
Heroin creates an especially strong addiction. Quitting cold turkey results in aches, diarrhea, vomiting, and can even cause death.

**Heart**
Infection of Valves
Bacteria from dirty syringes attach to the heart valves and cannot be removed by the body. Fatigue and fever are a result.

**Lungs**
Pneumonia
The lungs swell and breathing is restricted. Cough, fever and chest pain result.

**Veins**
Collapsed Veins
Veins at the site of repeat injections swell and cut off circulation. Poor technique greatly increases the chance of vein collapse.

**Liver**
Hepatitis C
An infectious disease transmitted blood-to-blood that, if left untreated, can lead to cirrhosis and liver failure.

**Skin**
Abscesses
Pus collects inside a cavity of dead skin.

Cost to get high for 30 days
1x/day $210
2x/day $420
3x/day $630

Sources:
drugfree.org/drug-guide/heroin
drugabuse.gov/researchreports/heroin/heroin3.html
emedsicine.medscape.com/article/216650-overview
alcoholism.about.com/od/heroin/a/effects-LvN.htm
Heroin: seized in Harrisburg

Black Tar Heroin
Arrest by Vice 4/2015

Black Tar Heroin 3/2015
“TRASHCANS”
Heroin: Detection and signs of use

- Depression
- Euphoria
- Mood Swings
- Anxiety
- Hostility towards others
- Agitation and irritability
- Weight Loss

- Scabs and bruises from picking the skin
- Delusions, Disorientation, Hallucinations, and Paranoia
- “Nodding Out”
- Warm, flushed skin
- Constricted Pupils
- Slurred Speech
Fentanyl is estimated to have hundreds of times the potency as pure, pharmacy-grade heroin and about 80 times the potency of morphine.

Intravenous, Patches, Intranasal, Lozenges....

Risks- micrograms
Last spring Chinese customs agents seized 70 kilograms of the narcotics fentanyl and acetyl fentanyl hidden in a cargo container bound for Mexico. The synthetic opium-like drugs were so potent that six of the agents became ill after handling them. One fell into a coma.

Fentanyl is up to 50 times as potent as heroin but easier and cheaper to produce, made from chemicals instead of fields of poppies.
Signs of Use
- Drowsiness or nodding
- Constricted or pinpoint pupils
- Agitation
- Depressed respiration
- Confusion
- Euphoria

Signs of Overdose
- Severe drowsiness and inability to be awaken
- Slow heartbeat
- Seizures
- Respiratory reduction
- Low blood pressure

Slang terms and texting phrases to be aware of
- Fading (slang for the high)
- Fet and Fetty
- Ice cream
- Chinese food
- White 80's
- Phantom 100
- A-215's

ILICIT FENTANYL
Carfentanil

- Carfentanil or carfentanyl is a synthetic opioid with a clinical potency 10,000 times greater than morphine or pure heroin and 100 times that of fentanyl.
- Carfentanil is intended for large-animal use only as its extreme potency makes it inappropriate for use in humans.
- It’s been found mixed with or disguised as heroin. Resistant to NARCAN.
- When used on animals, veterinarians wear face masks, gloves, and aprons covering as much of their skin as possible. A single drop that splashes in your mouth, nose, or eye could be fatal, and even getting some on your skin is dangerous. An antidote for the drug is kept ready whenever a tranquilizer is being prepared.

To put this in perspective, wild African elephants—an animal that Carfentanil is used on—weigh between **5,000 and 14,000 lbs** as reported by National Geographic, which is roughly **26 to 72 times** the weight of your average adult male of **195.5 lbs**.
Carfentanil Incidents

- It is one of the most potent opioids known and is commercially available.
- This is believed to be the cause of multiple overdoses in Pennsylvania that have resulted in death.
- It is being mixed with or sold as heroin.
- In October 2016, a heroin sample was confirmed to have contained carfentanil. It was in clear plastic bags and seized along with the stamps FUEGO AND OBSESSION.
- In October 2016, law enforcement seized 41 unmarked blue glassines which were verified to have contained carfentanil.
In November 2016, law enforcement investigated an overdose death where carfentanil was packed in a lottery ticket.

In December 2016, law enforcement investigated an overdose death associated with clear plastic bags containing a substance with a “bright glassy white” look to it. Laboratory testing proved it was carfentanil.

In December 2016, law enforcement investigated an overdose death. There were a total of six stamps seized consisting of the images HEART AND ARROW stamp, two FORTY OVER 40 stamps, and two UNMARKED WHITE stamps. The county coroner confirmed carfentanil presence in the descendant’s toxicology report.
Two 13-year-old boys in the ski town of Park City, Utah died within 48 hours of each other in September, likely overdosing on a powerful heroin substitute that had been delivered — legally — to their homes by the U.S. mail, and is now turning up in cities across the nation.

Ryan Ainsworth was found dead on his couch two days after his best friend Grant Seaver passed away. "I wish I had been better warned," sang one of their friends at a massive memorial service. "But now it's too late."
U-47700 or “PINK”

- If you touch it, it can cause someone to go into cardiac arrest instantly
- It is 8 times stronger than heroin
- It is really cheap....$5.00 a dose plus shipping
- Is shipped from China to the United States
- It is a ersatz opioid (this is a fancy German word for good)
- It is a relatively new drug that not much is known about other than it is being mixed in with heroin.
- There have been 80 deaths across the country
- It is currently a legal drug!!
There could be more deaths out there, but there is a delay with reporting.

The DEA took initial steps to ban the drug nationally by putting out a notice of intent to issue a temporary ban. This allows 3 years of research on the drug to occur. This research determines if it will be put on the controlled substance list.

Deaths have been reported in New Hampshire, North Carolina, Ohio, Texas, Wisconsin, and Utah.
LOPERAMIDE

- Immodium Capsules
- Addicts are using it to treat withdrawal symptoms or to cause euphoria
- It is extremely dangerous in high doses
- Even when taken to the emergency room for treatment when an overdose occurs people are still dying
- There is a 71% increase in this drug being abused
- The drawl to Loperamide is that it is easily accessible, is relatively inexpensive, and can be obtained over the counter. There is also a lack of social stigma with people using this drug
Loperamide has an opioid agent that helps to bind receptors in the brain and cause a similar euphoria or high.

In order to use it to treat withdrawal or to get high, the user needs to use between 50-300 pills per day!

Abuse of loperamide causes heart problems and abnormal heart rhythms.

Another risk is that several medications interact with loperamide.

There have been 48 reported cases of heart issues, with over half of these being reported in the last 5 years.

Fainting and cardiac arrest are risk factors.

When you stop using loperamide, you will experience an opioid-like withdrawal which includes sweats, shakes, cramps, diarrhea, and muscle aches.
This is the practice of smoking oxycontin or opana

Smokers report a highly unpleasant taste when using this method

Using this drug will result in a fast onset due to rapid absorption from the nasal mucosa and capillaries in the lungs

Using oxycontin this way can still cause overdose, especially when mixed with other drugs and alcohol

There is a high risk of depressing the Central Nervous System and stopping breathing

Users inhale the vapors by heating the crushed drug on tin foil

The issue with this method is it only extracts about 12% of the total dose
BLACK DRAGON

- **Adverse effects**
  - Abnormal physical weakness or lack of energy
  - Constipation
  - Dizziness
  - Headache
  - Insomnia
  - Nausea
  - Severe itchy skin
  - Sleepiness
  - Vomiting
This is brand new, and no information has been put into forums to gather additional information.

It is a pressed pill that costs $25.00 on the streets.

You dissolve it in a carbonated drink.

It is a mixture of fentanyl, molly, coke.

The high lasts 12 hours.

Popular among adolescents.
Questions/ comments

Questions are guaranteed in life; Answers aren't.
Resources:

- Government/Professional Sites:
  - Drug Enforcement Agency: [www.usdoj.gov/dea](http://www.usdoj.gov/dea)
  - Prescription Drug Information: [www.drugs.com](http://www.drugs.com)
  - Pharmacology of Kratom: An Emerging Botanical Agent With Stimulant, Analgesic, and Opioid-Like Effects

- Drug Users Sites:
  - Erowid: [www.erowid.org](http://www.erowid.org)
  - High Times: [www.hightimes.com](http://www.hightimes.com)
  - PACIC Information Bulletin, February 8, 2017