New Trends in Street Drugs

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Objectives

Upon completion of this program the learner will be able to:

1. Identify new trends in street drug use and legal highs
2. Discuss some of the geographic, demographic and cultural factors of drug use
3. Review signs, symptoms and treatment options of suspected drug use, withdrawal or overdose

NIH: Monitoring the Future 2015

Drug-Laced Candy

Two types of drug-laced candy surfaced in two Florida counties:

- Bradenton: candy laced with meth. Agents found brightly colored packages that looked like bags of candy containing methamphetamine
- Miami-Dade: candy that resembled Sour Patch Kids candy, laced with ethylone, a synthetic drug related to methyline – a type of bath salt similar to FLAKKA

The Strawberry flavored meth "Strawberry Quick" has been reported in several states including Missouri, Washington State, Wisconsin, and Texas, Nevada, and California

Senators Grassley and Feinstein sponsored a bill that would make it a federal crime to sell candy flavored drugs due to the appeal to children
New Trends in Street Drugs

- National trends:
  - Heroin on the rise regional
  - Rx drugs use remains, but Heroin is cheaper alternative
  - Hallucinogenic: LSD (Acid) and MDMA (Ecstasy, Molly)
  - Cocaine and Methamphetamine – Regional
  - Marijuana use and dependence has risen (plus introduction of Wax/Dabs)
  - Synthetic cannabinoids (K2 and Spice)
  - Synthetic Cathinones (Bath Salts, Flakka)
  - "Legal Highs" Chemical Drugs – EG: N-Bomb, B-Fly, Internet Purchases

Old Drug – New Trends... Heroin

May be smoked snorted or injected
Recently used as an alternative to Rx drugs

Cutting Heroin: When other substances are used to increase the bulk:
- Talcum powder
- Dextrose
- Flour
- Mannitol

Symptoms of Heroin Use

Short Term Effects
- Confusion, Disorientation, Delirium
- Cold and clammy skin
- "Rush" feeling a surge of euphoria
  - Accompanied by a warm flushing of the skin
  - Dry mouth, and heavy extremities
- "On the Nod" following the initial euphoria, this is a wakeful and drowsy state

Long Term Effects of Heroin

- Pulmonary complications - Including pneumonia
- Organ complications (including Liver disease) and vessel damage due to the additives that the heroin was cut with

Needle Users Long Term Effects
- Endocarditis
- Collapsed veins
- Abscesses
- Cellulites
- Infected sites
- HIV, Hep B and C in needle users

Why is Heroin use increased?

- Oxycodone and prescription narcotics have become more difficult to attain
- Reduced availability means Street value increased
- On Friday, August 22, 2014, the DEA published the final rule (PDF) in the Federal Register
  - Hydrocodone combination products rescheduled from Schedule III to Schedule II of the Controlled Substances Act (CSA).
- The DEA’s rationale for the move is to combat prescription drug abuse
Legislative discussions: supervised injection sites

The idea is to permit drug addicts to use illicit substances under the supervision and care of trained medical professionals. The centers do not provide the drugs or admit people already under the influence.

Switzerland has implemented "people-centered" policy with supervised injection sites and substance analysis services and access methadone.

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**Fentanyl**

- **Brand Names:** Actiq, Duragesic, and Sublimaze
- **Synthetic Opioid analgesic (since 1960’s)**
- **Fentanyl is a schedule II substance.**
- **Rapid onset and short duration of action**
- **Prescription fentanyl: Diverted from medical facilities**
- **Street fentanyl: produced in clandestine laboratories, may be liquid or powder**
- **Approx 100 x more potent than morphine (DEA)**

https://www.drugabuse.gov/drugs-abuse/fentanyl

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**Heroin and Fentanyl**

May 14, 2014: Fox News, Guilford Co, North Carolina
- Multiple deaths due Heroin cut/mixed with Fentanyl
- 36 overdoses and 9 deaths in period of 15 days

DEA Update March 18, 2015
- DEA issued nationwide alert = dangers of fentanyl + its compounds - 50-100 times more powerful than morphine
- Vancouver, Canada, warned that fentanyl being concealed in non-injection drugs, oxycodone, marijuana and "party drugs"
- Because of this new threat, British Columbia officials are urging all recreational drug users to "know their source."
  http://www.drugabuse.gov/drugs-abuse/emerging-trends

May 4th, 2016: Orlando Sentinel, Orlando, Florida:
- Orange, Osceola top in state for fentanyl and heroin deaths
“Super pill” Fentanyl laced Xanax

ST. PETERSBURG, Fla: March 21st, 2016

- Killed 9 people in a matter of weeks
- The pill looks just like a Xanax
- The fake Xanax is mixed with Fentanyl: rapid overdose and death
- Origin is unknown
- Pinellas County appears to be the only place it’s found
- Plus, it’s super cheap – only $5 a pill

Difficult to tell the difference. The counterfeits operations have a pill press to create the have stamp that makes the pill look like a real Xanax.

Counterfeit Oxycodone Tablets containing Fentanyl

- DEA News Release: April 15, 2016
- Hundreds of Counterfeit Oxycodone Tablets Seized at Port of Entry Contained Ultra-Deadly Fentanyl
  - APR 15 (SAN DIEGO) – A suspected smuggler’s recent attempt to bring hundreds of counterfeit oxycodone pills through the Otay Mesa Port of Entry had failed.
  - The seizure is believed to be the first time that federal officials along the California-Mexico border have intercepted counterfeit oxycodone tablets containing fentanyl as they were being smuggled from Mexico into the United States.

W-18 1-(4-Nitrophenylethyl)piperidylidene-2-(4-chlorophenyl)sulfonamide (W-18)

- Known as synthetic heroin
- “Beans” or “shady 80s”
- Stronger than Fentanyl (>100x)
- Synthetic opioid
- First invented at the University of Alberta, Canada in 1981 to make an Rx opiate for analgesia
- Some success saving life with Narcan
- Labs in China ship to North America via services such as FedEx

April 26th, 2016: New Channel 10, Tampa Bay FL Reported:
- On April 20, Edmonton police seized four kilograms of W-18.
- Last month, a Florida drug dealer convicted of importing fentanyl also had 2.5 pounds of W-18, the Sun Sentinel reported. The drug isn’t illegal so it didn’t factor into his sentence.

Reports that Maine and Massachusetts have had cases of W-18 overdoses

Krokodil

- Krokodil, “a toxic homemade opioid
- Used as a cheap heroin substitute in poor rural areas of Russia – Heroin addiction is massive problem in Russia.
- In 2011, estimated that as many as 2 million Russians were addicted
- Spread into Europe - Germany, France, Belgium, Sweden, Norway, Czech Republic, and Ukraine. Recently been featured in news reports alleging its appearance in parts of the United States
- Case reported in St. Louis - (Thekkumuriy, John, & Pillai, 2014)
- July 9, 2015: Manchester, New Hampshire
- Russian Recipe: Caffetin, formic acid, tropikamide eye drops, add petrol and coo
- In USA: mixing codeine with gasoline, paint thinner, hydrochloric acid, soda and red phosphorous. May substitute lighter fluid and industrial cleaners

Interesting report by British journalist: http://all-that-is-interesting.com/krokodil
Krokodil
- Krokodil gets its name from the scaly, gray-green dead skin that forms at the site of an injection.
- The flesh destroyed by krokodil becomes gangrenous, and, in some cases, limb amputation has been necessary to save a user’s life.
- Users often present with multiple scabs and skin infections.
- Users often smell of iodine.
- In the U.S., many are hoping that the pictures of flesh rotting off the bone like the following will be enough to discourage any potential krokodil users from ever trying this devastating drug.

Signs of Overdose
- Opioid OD triad (observed in Heroin and opiates)
  - Coma
  - Respiratory depression and failure
  - Depression of CNS – Miosis - pin point pupils
- Convulsions (Seizures)
- Hypoxia and Cynosis
- Hypotension
- Bradycardia
- Respiratory depression – Prepare to intubate

Naloxone
- CVS Health offers without prescriptions across 22 states
  - most recently Virginia – this week
- Walgreens also will be installing safe medication disposal kiosks in more than 500 pharmacies in 39 states
  - Walgreens: most recently added New Jersey – May 5th.
- The federal government and pharmaceutical companies have also negotiated in extending the nearly 20 percent price cut for naloxone

Withdrawal From Heroin and Opiates
- Drug craving, Restlessness, Insomnia
- Intense pain: muscle and bone pain
- Vomiting and diarrhea
- Cold flashes with goose bumps (“cold turkey”)
- Kicking movements (“kicking the habit”)
- Withdrawal symptoms peak between 48 and 72 hours and subside after about a week.
- Sudden withdrawal by heavily dependent users in poor health is occasionally fatal
  - less dangerous than alcohol or barbiturate withdrawal
- Use in pregnancy leads to Neonatal abstinence Syndrome (NAS) in the baby

Cocaine News: May 9th 2016
- Two alleged drug smugglers in Brooklyn arrested for smuggling cocaine inside frozen fish
- 20 kilos of cocaine (street value of about $600,000) found inside frozen fish
- Seized in Miami Airport
- Cocaine removed and fish replaced for their transport to Queens (under surveillance)
2015 Drug Trends: Cocaine

Cocaine Powder
- Cocaine is a White crystalline powder
- Freely soluble in water
- Popular method: "Snort" lines with a straw, rolled up paper or $ bill

Crack Cocaine
- 'Free' the cocaine alkaloid 'base' from the salt
- No salt = ↑ combustion = ↑ Smoke
- Not soluble
- Intense high lasts 5-30 mins

Medications and Cocaine

Treatments:
- Charcoal - Oral ingestion (especially stuffers/packers)
- Benzodiazepines and vasodilators for HTN (nitroprusside and NTG)
- Ventricular arrhythmias may respond to sodium bicarbonate (effects of cocaine on the Na+ Channels), lidocaine (in combo with Benzodiazepines) and Magnesium

Medications to Avoid:
- Avoid Beta-blockers - unopposed alpha responses (↑BP, ↓Coronary blood flow, ↓CO)
- Avoid Calcium Channel blockers (↑ ingested cocaine from GI, and may ↑ ICP): Avoid Nifedipine (Procardia, Adalat) ↑ seizures
- Avoid some antiarrhythmics: quinidine, procainamide, and disopyramide (Norpace) (class 1a) > QRS and QT intervals and slows the metabolism of cocaine

Is Meth still a trend?

May 10, 2016: KALIHI, OAHU
Honolulu police arrested three men Tuesday following an early-morning raid at a suspected methamphetamine house in Kalihi

May 09, 2016: Etowah County, Alabama
Arrested 7 men in meth distribution ring

April 19, 2016: Clay County, Mississippi
$300,000 of street-worth crystal meth seized during traffic stop

December 15, 2016: Las Cruces, New Mexico
34 individuals face Federal and Tribal Charges Arising Out of Methamphetamine Trafficking on Mescalero Apache Reservation
21 natives and 13 non-Natives are charged

Methamphetamine
- A white odorless powder that easily dissolves in water or alcohol and bitter-tasting

Street terms are:
- Speed
- Meth
- Poor man’s Cocaine
- Crystal meth
- Crystal
- Chalk
- Crack
- Uppers

Use/Route:
Oral, Snorting, Smoking, IV or Rectal (Bootie bump)

What does Meth look like?
Short Term Effects
- Smoking or IV provides an intense sensation, called a “rush” or “flash.”
- Lasts only a few minutes and is described as extreme pleasure.
- Oral, intranasal or rectal use produces euphoria—a high, but not a rush.

Long Term Effects
- Skin abscesses appear as chemicals rise to the surface.
- Teeth rot from gum line.
- Acute lead poisoning is a potential risk for methamphetamine abusers.
- Risk of Parkinson's and Alzheimers.
- Heart failure.
- Brain damage.
- Stroke.
- Epilepsy.

Signs of Overdose of Methamphetamine
Symptoms of use and signs of overdose are very similar to cocaine. Treatments are also similar:
- Hyperthermia.
- Convulsions/seizures.
- Anxiety, confusion, depression.
- Chronic fatigue, insomnia.
- Delusions, paranoia, aggression, hallucinations.
- Toxic psychosis.

MDMA (Ecstasy/Molly) and LSD

Street terms:
- Ecstasy (pill)
- Molly (powder)

Also known as:
- XTC, X
- Adam
- Hug drug
- MDMA or MDA
- Dove
- Love, E

MDMA tablets are usually sold with logos, creating brand names for users to seek out.
- Colorful pills may be hidden among colorful candies.
How is MDMA Used?
- Can be snorted, injected, and rectally inserted, but is usually taken orally in tablet form
- Effects last approximately 4 to 6 hours
- Considered a "party drug."
- Rarely used alone, commonly mixed with alcohol and marijuana
  - "Candy flipping" is the combination of MDMA and LSD
  - "Stacking" is taking three MDMA or more tablets at once
  - "Piggy-backing" is taking a series of tablets over a short period of time

Molly - MDMA
- Molly—slang for "molecular"
- Usually contains pure MDMA
- Ecstasy often has additives such as caffeine or methamphetamine.
- Pure crystalline powder, or can be capsules containing powder
- Molly is street term to describe some "Bathsalts" such as Methylene: (bk-MDMA) or Mephedrone (meow meow)
  - (especially in the UK)
- Molly is street term for Methamphetamine/meth combos
- User may not get what they expected with Molly

Molly - MDMA
- Molly can be purchased in capsules for $8 to $40 per pill depending on location
- Molly had a surge in interest in the past few years, being celebrated frequently by actors and musicians
- Molly also comes in the form of high-priced, specially branded water, called Mollywater (glow-in-the-dark container).

Testing the Purity of Molly
- The bunker police risk prison to bring drug testing kits to music festivals
- Testing for impurities
  - Featured November 4 2015
  - Lisa Ling’s CNN Report about designer drugs at music festivals
  - EDM Festival "Mysterland"
  - Electronic Dance Music
  - Risk: Dehydration, over heat, death

Uses (why people use)
- MDMA in any form produces energy and euphoria
- Suppresses the need to eat, drink, or sleep
- Enables club-scene users to endure all-night / 2-3 day parties
- Eliminates anxiety
- Giggling uncontrollably
- Reduces inhibitions
- Produces feelings of empathy/affection for others
- Talking excessively
- Enjoying touching
- Enjoying being touched
- Making it a Rape Drug
**Lysergic Acid Diethylamide (LSD)**

**Street terms:** "acid", Dots, Mellow Yellow, Loony toons, Blotter
- First discovered in 1938
- Produced in the US - on the West Coast, particularly San Francisco
- Effects are unpredictable from 30 mins to 12 hrs
- Schedule I - No currently accepted medical use in treatment in the United States
- Odorless
- Colorless
- Slightly bitter taste
- Usually taken by mouth
- Found as a liquid, microdot, sugar cubes, gelatin squares and blotters (soaked paper)

**Signs of Use/Side Effects of LSD**
- Elevated BP
- Tachycardia, Palpitations
- Hyperthermia
- Elevated blood sugar
- Dilated pupils
- Tremors
- Gooseflesh
- Perfuse perspiration
- Hallucinations, delusions and paranoia
- Panic reactions
- Flashbacks are a unpredictable and dangerous side effect
- Occur spontaneously
- Vary in frequency and duration
- May occur days up to months after use
- Increase occurrence during times of stress

**Management of overdose for Cocaine, Methamphetamine, MDMA, Molly, or LSD**
- Treat as a Medical Emergency – Call 911 if not in the hospital
- Stabilize (ABC’s), Oxygen, Monitor, IV
- Code Cart – May need defibrillator
- Prepare to intubate
- No specific antidote is known
- Benzodiazepines for seizures and muscle spasms
- Treat Hyperthermia - use cold water, fans, cooling blankets, and anti-pyretics (Tylenol)
- Additional treatment depends on the presenting complaint and organ system involved

**Warning from Europe: "Superman" pills**

NIH Posted January 16, 2015
- Alert issued in The Netherlands warning about pills with a Superman logo, sold as MDMA (aka ecstasy) or Molly
- The drug actually containing a lethal dose of another substance, PMMA (pararmethoxymethylamphetamine)
- PMMA is a stimulant and psychedelic drug closely related to the amphetamine-class serotonergic drug para-methoxyamphetamine
- These pills have not been reported in the U.S., but four deaths in the UK are thought to be related to these pills
Cannabis and Synthetic Cannabinoids (K2, K9, Spice, and ‘Herbal Incense’)

THC – Wax/Dab – “dabbing”
- Potent - high level of THC psychoactive compound; up to 80% THC, (range 50-75%)
- Marijuana joint average 20% THC
- Obtained from the cannabis plant
- Marijuana leaves and stems are soaked in a solvent such as butane which extracts the cannabinoids
- The residue is then dried out, resulting in a sticky paste
- Produced into: Viscous oil, hardened waxy substance, or brittle/glassy pieces

Known as:
- Hash (hashish) oil
- Wax
- BHO
- Honey Oil
- Budder or shatter

THC – Wax/Dab – “dabbing”

How is it used:
- Smoked in vaporizers and water pipes
- e-cigarettes
- Edibles, drinks and liquids

Side Effects:
- Scary vision/Halucinations
- Psychosis/Mental health issues
- Tachycardia and Hypertension
- Increase in stomach acid

E-Cigarettes and THC
Biggest trends upward in teenage use

Laws and legal issues about marijuana in Tampa, United States

Where to buy weed and marijuana seeds in Tampa, United States

Products and more information about canna in Tampa, United States

This is not legal, you never know when and if you will be caught. You may wish to just get a dabbing machine and practice to appear in court. Law enforcement against marijuana users is quite limited during Canna week, Gasparilla and other city events. If the policewill were you are concealing pot, it must have to be more than a smaller size. Costs are not more dangerous about marijuana users but other, they are more dangerous to other users as well.

Marijuana leaves and stems are soaked in a solvent such as butane which extracts the cannabinoids. The residue is then dried out, resulting in a sticky paste. Produced into: Viscous oil, hardened waxy substance, or brittle/glassy pieces known as: Hash (hashish) oil, Wax, BHO, Honey Oil, Budder or shatter.
Plant material and herbs Sprayed/ laced with synthetic cannabinoids

Compounds chemically similar to THC

Mimics the Psychoactive ingredients in marijuana (THC)

The chemical compounds typically include HU-210, HU-211, JWH-018, and/or JWH-073

>100 such substances have been synthesized and identified to date

Act on cannabinoid receptors found throughout the body (just like THC)

Not generally detectable by current drug screening methods (that look for THC)

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**How is it used:**

- Most often smoked
- Sometimes made into a tea
- Intravenously

**Why:** Mimic delirious effects of THC

**Street Names:** Hundreds of brands: Aroma, Banana Cream, Black Mamba, Bombay Blue, Cloud 9, Fake Weed, Genie, K2, Mojo, Nuke, Scooby Snax, SpicyXXX, Spice, Zohai

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**Scooby Snax Herbal Incense**

- One of the original most popular herbal incense blends on the market
- Original, Hydro, and flavored
- New 2nd Generation
- Available for next day shipping
- $20.99 for 4 grams ($16.99 for original)
- $34.99 for 10 grams (as of 4/2/15)

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**K2, Spice Gold, and Herbal 'Incense'**

**Side Effects:**

- Arrhythmias, palpitations, chest pain, ↑ HR, ↑ BP
- Dyspnea and diaphoresis
- Appetite changes, nausea and vomiting
- Severe agitation, irritability, anxiety, and paranoia
- Intense hallucinations,
- Paranoia and psychosis
- Panic attacks, psychotic episodes, and suicidal fixations
- Muscle spasms, tremors and seizures

- It appears to be stored in the body for long periods of time, and therefore the long-term effects are not fully known.

**DEA News – October 2015**

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**K2, Spice Gold, and Herbal 'Incense'**

**Commonly purchased in:**

- head shops
- tobacco shops, gas stations, retail outlets, and the Internet
- Often marketed as Herbal Incense, Potpourri, or "fake weed."
- Users consider it a "Legal high"
- Many states have banned some substance involved in making it

- An example of deceptive language used on Spice labels "not for human consumption"
- Once banned, compound is modified to avoid laws

**Desired Affects:** Euphoria & giddiness

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Cathinones – Natural vs Synthetic

- Khat natural Cathinone
- "Bath salts" chemical formulas

Natural Cathinone
- Khat (Quat, Cot, Tea)
- Cathinone is an alkaloid
- Leaves of the khat bush
- Grows in East Africa and in southern Arabia
- Used for its euphoria and stimulating amphetamine-like properties
- Hallucinogenic and entactogenic
- DEA reports that 10 million people worldwide chew khat

Synthetic Cathinone
- Bath salts (Group name)
- Chemically structurally Cathinone
- Like Amphetamines, they stimulate the CNS and have sympathomimetic features.
- Emerged in the recreational drug markets as legal alternatives ('legal highs') to amphetamine, ecstasy, or cocaine

Synthetic Cathinones (Bath Salts)
- Synthetic chemical stimulants
- Stimulant effects similar to cocaine, amphetamines, Khat, LSD, and MDMA
- Increases dopamine, serotonin, and norepinephrine in synapses
- Marketed as “bath salts” to evade detection (Not to confuse with bath products or Epsom salts)
- Originally synthesized in the 1920s
- Recreational in UK & Europe 2009, USA in 2010
- Majority of synthetic cathinones don’t show up on drug tests

Synthetic Drug Abuse Prevention Act of 2012 - reclassified 24 additional synthetic compounds as Schedule I drugs, but new synthetic substances are created each year (drug companies remain one step ahead)

Synthetic Cathinones (General)
- Duration: 4 to 8 hours
- Route:
  - Sniffing/snorting (Most common)
  - Oral ingestion
  - Smoking, vaporization,
  - Intravenous, intramuscular
  - Rectal insertion
  - MDPV (bath salts) loses potency when Dissolved, rarely used IV/IM
- Desired effects:
  - Reported by users:
    - Increased energy
    - Empathy, Openness
    - Increased libido, Enhanced Sexual experience

Side Effects:
- Tachycardia
- Hypertension
- Vasoconstriction
- Feeling extreme heat
- Diaphoresis
- Prolonged panic attacks
- Agitation, Psychosis
- Paranoia, Hallucinations
- Seizures
- Higher doses/Overdose:
  - Severe Hyperthermia
  - Rhabdomyolysis
  - Hepatic and renal failure
  - Cardiac Injury
  - Death

Smoked bath salts in the maternity ward, was found running naked, kicked a nurse and bit a police officer
MDPV: Bath salts
Mephedrone: Meow-Meow
Methylyone: bk-MDMA Not to be confused MDMA = Ecstasy
Alpha PVP – Flakka
Ethylone

- Usually marketed with the warning “Not intended for human consumption.”
- Most often found in college towns in head shops novelty stores, convenience stores, and gas stations.
- Sold over the Internet
- Users want to get high without engaging in criminal activity

Methylenedioxypyrovalerone (MDPV)

**Street Names:**
- Bath salts
- Ivory Wave
- Plant fertilizer
- Shock Wave
- Jewelry Cleaner

- Psychological effects duration approx 3 to 4 hours
- Mild stimulation lasts from 6 to 8 hours
- MDPV has 4x times the potency of methylphenidate (Ritalin, Concerta)

4-methylmethcathinone - Mephedrone

- Street terms:
  - M-Cat, Meow Meow, drone, bounce, mad cow, bliss
  - Mephedrone mixed with methylyone = bubbles
  - Used: A white powder, capsules, or tablets
  - Generally the same desired effects, side effect as MDPV
  - Most common side effect: teeth grinding - also found in MDMA (Ecstasy, X, Molly)
  - Problem in UK and now India

- Like with MDPV: Mephedrone producing similar effects to MDMA, Amphetamines and Cocaine

Headliners: High on Bath Salts:

**Meadow: High on Bath Salts: Meow Meow**

- January 13th, 2014
- West Sussex, UK:
  - 19 yrs old Student high on meow meow
  - Stabbed his mother
  - Then sliced off his own penis
  - Was found hanging out of a window with blood gushing from his groin
  - Mother, 46, called EMS
  - Both parent and son survived, and surgeons were thought to have re-attached his penis

- Huffington Post UK
**Methyline: (bk-MDMA)**
N-methy-3,4- Methylenedioxyethylcathinone

- **Methyline:** Currently encouraged as a "safe" alternative to amphetamines
- Available in US in powder and crystal form
- Purchase on the internet
  - Delivered in 3-5 days (Dr. Synthetic ships from Bulgaria and China)
  - $100 for 10 gms
- Europe: Sold in plastic tubes containing 5 mL of liquid.
- "Room odorizer" or "Explosion"
- Also may be named/sold as Molly

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**Alpha PVP - Flakka**

- Alpha-Pyrrolidinopentiophenone, α-PVP, alpha-PVP, O-2387, β-ketone-prolintane, Prolintaneone
- Second generation synthetic cathinone
- Stimulant compound developed in the 1960s
- The mechanism of action is unknown - believed to act similarly to the designer drug MDPV.
- May act as a norepinephrine-dopamine reuptake inhibitor (NDRI)
- Street terms:
  - Flakka/Flocka/Flocca (Florida)
  - Gravel (other parts of the US)
- DEA Schedule I, but chemical manipulation changes are made – making new versions of the drug

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**Alpha PVP – Flakka or Gravel**

- July 2015: 'flakka' shakes Kentucky county, Small town of Vanceburg, Kentucky
- Case: Ashley lost 50 pounds, blew through $15,000 of a settlement and sold her house for $700 using Flakka for 6 months

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**Ethylene**

- Ethylene, also known as 3,4-methylenedioxy-N-ethylcathinone (MDEC, bk-MDEA)
- Recreational designer drug classified as an entactogen, stimulant, and psychedelic of the phenethylamine, amphetamine, and cathinone chemical classes
- It is the β-keto analogue of MDEA ("Eve")
- In the United States, it began to be found in cathinone products in late 2011
- Schedule I Controlled Substance
Butylone

- Butylone, also known as β-keto-N-methylbenzodioxolybutanamine (bk-MDBB)
- It is an entactogen, psychedelic, and stimulant of the phenethylamine chemical class.
- It is the β-keto analogue of MDBB
- Butylone is produced as a white crystal
- Similar effects as MDMA (Ecstasy) and MDBD (Eden and Methyl-3)
- It causes an increase in the levels of extracellular serotonin and dopamine.
- Schedule I Controlled Substance

General Chemicals (sometimes known as Bath Salts)

- Drugs in the “bath salts” group usually contain hallucinogenics biochemically characterized as analogs of mescaline or LSD
  - Mescaline is a natural hallucinogenic phenethylamine compound found in the peyote cactus
  - Phenethylamine hallucinogens are similar to the effects of Mescaline
    - Eg: 2C-I (India) and Bromo DragonFly (B-Fly) Ethylone and Butylone
  - Tryptamine hallucinogens are similar to LSD
    - Eg: N-Bomb (Smiles)
  - The LSD analog 25I-NBOMe was the most common hallucinogen detected in our 4-year surveillance program in Arkansas

Additional Chemical Drugs you may hear about in this group

- 2,5-Dimethoxy-4-(n)-propylthienophenethylamine (2C-T-7)
- Street Names: Blue Mystic, T7, Beautiful, Tripstay, Tweety-Bird, Mescaline
  - psychedelic phenethylamine
- 5-Methoxy-N,N-diisopropyltryptamine (5-MeO-DIPT)
  - Street Names: Foxy, or Foxy Methoxy
  - psychedelic tryptamine
PCP (Phencyclidine)

- PCP is a white crystalline powder that is readily soluble in water or alcohol. (bitter chemical taste)
- Available in tablets, capsules, and colored powders
- Usually snorted, smoked, or ingested.
- Distorts perceptions of sight and sound
- Produces feelings of detachment (dissociation) from the environment and self
- Distorts perception of pain

Street terms:
- Angel dust
- Ozone
- Wack
- Rocket fuel
- If mixed with Marijuana it may be termed
- Killer joints
- Crystal supergrass

Symptoms of Use or Overdose:
- Agitated and irrational behavior
- Feelings of Detachment from reality
- Distorted body perception
- Delusions, hallucinations, paranoia, and catatonia
- Speech is often sparse and garbled
- Overwhelmingly strong, no awareness of pain
- Severe Anger, Violent, Homicidal or suicidal
- Nausea, vomiting, dizziness,
- Seizures, Coma, and death

New Drug Trends – Legal Highs

- New synthetic or herbal products are emerging
- Marketed along the same pathways:
  - Gas stations
  - Convenience stores
  - Gardening/plant stores
  - Online
- Google search for "legal high"
  - K2 and Spice are high on the google search listings

Wetstick

- "Wet" and "Wet Sticks"
- Marijuana cigarette dipped in liquid PCP or have PCP inserted inside a marijuana cigarette
- May also be laced with embalming fluid
- Street terms are:
  - Wet Sticks
  - Amp
  - Wet
  - Sherm
  - Happy Sticks

Symptoms of Use: Same as PCP
- Coma
- Convulsions
- Rage / violence
- Blackouts
- Respiratory failure
- Kidney failure

PCP and marijuana were being sold out of a family owned daycare center (Oviedo, FL)
New Drug Trends – Legal Highs

- Law enforcement and legislation challenges
- Availability and “Not for Human Consumption” notice
- The internet also offers users information on how to use the drugs and how to share their highs and other drug-related experiences online
- You can seek questions like: “How will taking a dose of this product affect me?”
- The Names are deceiving
- The results are unpredictable

Legal High’s are on Sale – online

- Sold primarily through websites claiming to be suppliers of research chemicals
- There are multiple websites – Biggest supplier in UK

Affects are the similar to MDMA (Ecstasy):
- Alertness, increased energy, euphoria, feelings of peace and love toward others, tingling feelings, and intense sexual responses
- Dilated pupils, tightening of jaw muscles, raised body temperature, tachycardia, anxiety/panic attacks and paranoid/confused states.

Benzo Fury or 6-APB

- Colorless stimulant, sold in powder and pellet or tablet form for oral consumption
- Can also be snorted
- Compound of the phenethylamine and amphetamine classes
- Marketed as a “research drug”, “not suitable for human consumption”
- Currently unscheduled in the U.S.
- $15-16 U.S. dollars) per pill/pellet
- Effect within 30 to 60 minutes
- Effects plateau after approx 2 hours
- May last up to 10 hours

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Red Dawn Vector Unbelievable Bliss

- Advertised as:
  - "OUR customers tell us this is our best herbal pill product!"
  - BLISS is a mood enhancer composed of natural herbs
- Effects include extreme aphrodisia and mood enhancement.
- Website Review: Our team and many satisfied repeat customers agree this is the best herbal energizer and mood enhancement product available.
- User Notes: Use strictly one capsule at a time; though you can take another 1 1/2 hrs later, if desired.
- Contains 2 Capsules
- $11.95

Smoking Alcohol

- Become drunk without the extra calories
- Vapor inhalation takes the person from sober to drunk within seconds
- Hangovers may be reduced
- How is this done?
  - Use a plastic bottle, fill with alcohol and seal with a cork
  - A hand tire pump is then used to pump air into the bottle to increase the pressure
  - A vapor develops when the pressure mixes with the alcohol
  - Once the vapor is seen, the cork is pulled off and the vapors are inhaled through the mouth and nose
  - Sometimes used with dry ice: Once the dry ice mixes with the alcohol, a vapor will develop

Smoking Alcohol (Risk of overdose):

- When a person drinks too much alcohol, the body induces vomiting to eliminate it. This does not happen with smoking alcohol.
- Smoke alcohol bypasses the stomach and intestines and is not broken down in the liver.
- The person does not have this safety net to prevent alcohol poisoning.
- Overdose risk is much higher due to the fact that the body has not broken down the alcohol.

Powdered Alcohol

- Coming soon to a liquor store near you: Currently available online
- Legal, but banned in some states
- Manufactured with Dextrin to be diluted in water to make alcoholic beverages
- Abused by snorting

Drug Paraphernalia

- Arrhythmias, seizures, vomiting, diarrhea, and disorientation, death
- The FDA recommends that consumers avoid caffeine powder and parents be alert to their hazards

Caffeine Powder

- Overdose lead to the death of an Ohio high school
- Prompted the FDA to issue a safety advisory about caffeine powders
- Bulk bags of pure caffeine powder are readily available online, and attractive to young people for energy/stimulation or for help losing weight
- Just a teaspoon of pure caffeine powder is equivalent to about 25 cups of coffee—a lethal amount.
Determining Use and Overdose

- Look for clues — Paraphernalia
  - Does anything look like a pipe?
  - Shake a bottle of water to test for GHB
  - Look for empty soda cans (with holes in)
  - Candy, Bubbles, glow-sticks

DEA News – May 6th, 2016

- DEA Collects Record-Setting Amount of Meds at Latest National Rx Take-Back Day
- MAY 06 (WASHINGTON) - Americans turned in more unused prescription drugs at the most recent DEA National Prescription Drug Take-Back Day than on any of the previous 10 events since it began in 2010, demonstrating their understanding of the value of this service.
  - Law enforcement partners collected 893,498 pounds of unwanted medicines—about 447 tons—at almost 5,400 sites - through all 50 states
  - Texas (almost 40 tons); California (32 tons); Wisconsin (31 tons); Illinois (24 tons); and Massachusetts (24 tons)
- 8/10 new heroin users began by abusing prescription painkillers and moved to heroin when they could no longer obtain or afford those painkillers

Smuggling

Smuggling Trick: Using plastic water bottles with a hidden compartment for drugs.

Questions?

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