Emerging Drug Trends

New drugs are emerging at an unprecedented rate

- Manufacturers of “legal high” products use new chemicals to replace those that are banned.
- These drugs are highly accessible, touted as legal and perceived as safe.
- Despite the popularity in designer drugs and legal high products, the abuse of heroin and prescription painkiller medication is still trending throughout the country.
Opioids are the most commonly abused prescription drug. Opioids are synthetic chemical substances made by drug companies that act in the body similar to the opiates, i.e., drugs derived from the opium plant, such as heroin, morphine, codeine. Examples of opioids include fentanyl, oxycodone, methadone, and hydrocodone. The introduction of the powerful new opioid painkiller Zohydro has spotlighted the nation’s growing prescription drug abuse problem.
ZOHYDRO

- Zohydro ER hit the market in March 2014. Zohydro is a potent extended-release formulation of hydrocodone without the additives of aspirin or acetaminophen and without anti-abuse formulation.

- The effects of hydrocodone are similar to heroin. Zohydro contains 10 times the amount found in other painkillers, as much as 50mg of hydrocodone in a dose.

- Zohydro is a Schedule II drug and has no tamper-resistant features. Zohydro can be crushed, chewed, or mixed with alcohol and still retain full potency. Users can also simply separate the halves of the capsule and snort it, or solubilize with saline and inject.

- The FDA has stated the drug is safe if used correctly and is a necessary alternative for patients who built up a tolerance to other opioids.

- The abuse of Zohydro ER has the ‘potential of becoming the next major medical epidemic when it comes to substance abuse’ (FBI Situational Information Report, 2014).
ACETYL FENTANYL

• Mixing fentanyl with heroin isn’t new; however, the development of this synthetic fentanyl has just started to make headlines.

• Acetyl fentanyl is often marketed as heroin but it is five times more potent than heroin, 16 times more potent than morphine, leading to many overdose deaths. The pills are also peddled as oxycodone.

• The prescription drug fentanyl is actually even more potent but is safe to use in pharmaceutically controlled dosages. A specific antidote, naloxone, can be administered to block the effects of heroin, morphine, fentanyl and other opioids. Unfortunately, acetyl fentanyl is difficult to detect and easy to miss in drug overdose cases.

• **Acetyl fentanyl is not scheduled under the Controlled Substance Act.**
Tramadol is a Schedule IV opioid analgesic similar to codeine. When taken orally, rather than injected, it produces opiate-like effects similar to oxycodone.

- Tramadol costs $1-2 for a 50mg tablet on the street. In extreme cases it may cause hypertension, hallucinations, tremors, respiratory depression, blurred vision and speech disorders.
- In 2011, the drug was linked to 20,000 emergency room visits throughout the country.
- In Florida, there were 379 overdose deaths from Tramadol. In most of the cases, Tramadol was combined with other drugs or alcohol.
- Also in 2011, 2.6 million people ages 12 and older used Tramadol for nonmedical purposes according to the DEA.
More than 15,500 people die every year of prescription drug overdoses and nearly one-third of those overdoses involve methadone (Centers for Disease Control, CDC).

Methadone has been used for decades to treat drug addiction but in recent years it has been prescribed to relieve pain. Methadone is available as a low-cost generic drug.

The synthetic opiate is taking a toll in many parts of the country as heroin addicts try to detox themselves, self-dosing with methadone and overdosing.

The CDC reported that most users are finding their methadone on the street. Taking methadone improperly can slow breathing; death could occur if the breathing becomes too weak.

On the street, methadone costs $0.50-$1 per mg.
SUBOXONE

• Similar to methadone, Suboxone is used to treat drug addiction and is sometimes prescribed for chronic pain management.
• In 2012, Suboxone generated $1.55 billion in sales in the United States, surpassing Viagra and Adderall. Its success was partly fueled by the nationwide opioid-abuse epidemic.
• Buprenorphine, an opioid in Suboxone, can produce euphoria and cause dependency. Its effects are milder than methadone, making overdose deaths less likely.
• Although widely available by prescription, cash-only buprenorphine clinics have developed that cater to addicts, recreational users and inmates who use it as “prison heroin” - especially in a new dissolvable filmstrip that is ideal for contraband. “It’s a thin strip. They’ll put it in the Holy Bible, let it melt and eat a page right out of the good book,” said a jailer in Whitley County, Ky., who randomly screened 50 inmates recently (Mar 2014) and found 21 positive for Suboxone.
• On the street, Suboxone costs $5-$8 per pill.
Opiates, such as heroin and codeine, are derived from the poppy plant, which contains opium.

Heroin is the most popular opiate, flooding the U.S., reaching a large market of American pain-pill addicts seeking a less-expensive high.

Overdoses and emergency room visits have skyrocketed across the country; more abusers are dying from a drug whose purity can be hard to judge.

Codeine appears in dozens of different formulations, including cough syrup. Some users use scams to obtain prescription-strength cough syrups from doctors, others burglarize pharmacies and others purchase syrup that has been smuggled in from Mexico.
• Law enforcement officials across the Southeast note that heroin use is on the rise everywhere, across all demographics.

• The resurgence of heroin seems to be directly related to the decrease in the availability of opioid prescription drugs (due in large part to stricter laws, pharmaceutical advances, and increased law enforcement) and the availability of lower-cost, higher-quality heroin from Mexico.

• Three percent of U.S. high school students have tried heroin, according to a 2013 survey by the Centers for Disease Control. Nearly 50 percent of young people who used heroin reported using prescription painkillers such as Oxycontin or Vicodin first.
HEROIN

• According to the 2013 White House National Drug Control Strategy report, the reemergence of heroin has affected most states in the Southeast, from Florida to Virginia and Texas to North Carolina.

• **Most agencies report the primary heroin user to be Caucasian, age 17-25. There is no socioeconomic limit on heroin users; it is no longer confined to the poor city areas or drug hubs.**

• Heroin purity increased as the price per milligram decreased between 2010 and 2011. An 80mg Oxycodone is $80, while a half gram of heroin is approximately $60, less if the user is a steady customer.
Purple Drank or Lean, a mixture of Sprite, Jolly Ranchers and codeine, is consumed by youth. If prescription codeine is unavailable, DM cough syrup is often substituted. Other names include sizzurp, syrup, drank, barre, purple jelly, Texas tea and Tsikuni.

- Cough syrup containing promethazine and codeine are usually purple in color, but there are other colors of cough syrup that work the same way.

- The prescription-only cough syrup is a controlled substance with widespread recreational use. It is usually obtained by doctor shopping, forged prescriptions, and pharmacy theft.

- Demand for the syrup has sent its price soaring on the streets. Syrup that typically costs $12 per pint is sold to street dealers for $300 per pint. Dealers sell it by the ounce for $40-$80.
ANTI-ENERGY DRINKS

• Commercial bottlers have now produced non-codeine based legal drinks such as Sippin Syrup and other anti-energy drinks (Drank, Unwind, Mary Janes Relaxation Soda) to replace Purple Drank.

• Anti-energy drinks have the opposite effect of energy drinks, like Red Bull, and are marketed as “extreme relaxation beverages.” **Anti-energy drinks are typically sold as a dietary supplement** since its ingredients (melatonin and kava kava) aren’t FDA approved food additives.

• Users report effects similar to alcohol intoxication or cold medication/syrup. The manufacturers of Sippin Syrup also sell a dessert- style brownie called a 1/2 Baked Brownzz, which contains the same ingredients as Sippin Syrup.

• Although the products have no illegal ingredients, there is concern that anti-energy drinks could be abused by young people in a manner similar to cough syrup or cold medicine. The label on the drinks warns users not to exceed two servings within a 24-hour period and not to drive or operate heavy machinery.
KROKODIL

- **Desomorphine**, another drug replacing heroin, is the main ingredient in **Krokodil**, “the zombie drug.”
- Krokodil is the street name of a **synthetic heroin** product. It is used by injection; however, it rots the flesh around injections, turns the flesh grey, green and scaly until the skin peels away and the bone is exposed – leading to amputated limbs and death.
- **Krokodil addicts’ life expectancy runs one to three years once they start on the drug.**
- Desomorphine is a synthetic morphine derivative, made from codeine processed with gasoline, lighter fluid, industrial cleaning fluid, paint thinner and red phosphorus. The cooking process takes 30 minutes. **The production of Krokodil leaves several pounds of hazardous waste, similar to methamphetamine.**
- Desomorphine is much cheaper than heroin and ten times more potent than morphine. It costs $6 to $8 per injection.
Synthetic Cathinones and other Designer Drugs

- Synthetic cathinones have one or more synthetic chemicals related to cathinone, an amphetamine-like stimulant found naturally in the Khat plant.
- Chemically they are similar to amphetamines (such as methamphetamine) as well as to MDMA (ecstasy). In 2012, and continuing, legislation made many chemicals used in synthetic drugs illegal.
- Manufacturers responded to new laws by producing new chemicals to evade legal restriction.
BATH SALTS

Until recently, bath salts were legal and considered cheap substitutes for cocaine and amphetamines. Bath salts are typically a white or brown crystalline powder sold in small plastic or foil packages labeled “not for human consumption.”

• Bath Salts are sometimes marketed as plant food, jewelry cleaner, or phone screen cleaner.
• They are sold online and in drug paraphernalia stores under a variety of names, including Ivory Wave, Cloud Nine, Lunar Wave, Vanilla Sky, White Lightning, and Scarface.
• Bath salts are taken orally, inhaled, or injected. The hallucinatory effects are consistent with other drugs such as MDMA or LSD.
• Negative reactions include cardiac symptoms and psychiatric symptoms, including paranoia, hallucinations and panic attacks.
Chemists actively invent new compounds to circumvent legal restrictions. One such product to replace bath salts is **Pump-It Powder**, marketed as an enhanced plant vitamin.

Geranamine is the active ingredient found naturally in the geranium plant; it is a legal substance.

Users report effects similar to bath salts. It produces effects considered to be more powerful than cocaine and methamphetamine.

It is easy to find and relatively cheap: $30 for a tin container packed with the powder. The drug can be snorted, injected, eaten or smoked.

**Methoxetamine or MXE** is a new designer “research chemical product” MXE is considered to be an analog to the drug Ketamine, classified as a dissociative anesthetic originally used as a powerful tranquilizer on animals. The packaging reads “research chemical” and “not for human consumption.”

MXE is marketed as a safe alternative to Ketamine and is sold as a white powdery substance. It is currently unscheduled in the United States. It has been linked to deaths in Europe and placed under temporary class drug control in Great Britain.

MXE is usually snorted or ingested in capsule. It is primarily sold online under the names MXE, M-Ket, Kmax, or Mexxy.
Cannabis and Synthetic Cannabinoids

- Cannabinoids are chemical compounds that act on cannabinoid receptors in brain cells. The most notable cannabinoid is THC, the primary psychoactive compound of cannabis (marijuana).

- Synthetic Cannabinoids are psychoactive designer drugs that mimic THC. Synthetic marijuana products, thinly veiled as incense or potpourri, are laced with laboratory research chemicals.

- Synthetic cannabis is claimed by manufacturers to contain a mixture of traditionally used medicinal herbs, each of which produce mild effects that overall result in a cannabis-like intoxication.
SPICE

• *Spice is a mixture of herbs combined with synthetic cannabinoids to produce a high similar to marijuana.* ‘Spice’ may refer to the dominant brand of synthetic marijuana but is generally used to describe all herbal blends with synthetic cannabinoids added.

• It is often marked as ‘*herbal incense*’. Other names include K2, Black Mamba, Bombay Blue, Fake Weed, Genie, Zohai, Bliss, Blaze, Yucatan Fire, Skunk, Moon Rocks, JWH-018, -073 and -250. Spice products are sold as incense but more closely resemble potpourri. It is abused mainly by smoking.

• *Adverse effects are often more severe than marijuana* and include cardiac symptoms, vomiting, hallucinations, psychoses, seizures, convulsions and panic attacks.

• *Because the chemicals used in Spice have a high potential for abuse and no medical benefit, the DEA designated the five active chemicals most frequently found in Spice as Schedule I controlled substances, making it illegal to sell, buy, or possess them.*
DABS / BHO

• **A highly concentrated version of THC known as Butane Hash Oil, Dabs, or Wax is made using highly explosive butane.** A clear, golden-brown cannabis derivative, BHO has little smell either in its solid form or when vaporized. **It sells on average for $50/gram.**

• **BHO is 15 percent THC and a drop or two can be as potent as a joint.** The process for producing BHO is extremely dangerous. Butane is so flammable that a spark can set off an explosion.

• First responders should receive training to identify items used in hash oil extraction as it can be mistaken for pipe bombs or meth lab explosions.
State troopers are seeing more marijuana hash-infused transdermal patches (similar to a nicotine patch) being purchased from Colorado and crossing state lines. Once removed from the package, the patches have no markings. They do have a slight odor of marijuana and easily test positive for THC.

Patches are an effective method of delivering cannabinoids into the body as they enter the bloodstream directly. The patches are 1.5 inches square and can be cut for smaller doses.

THC levels can vary drastically with time. If the suspect has a patch on during a traffic stop, they could be getting higher as the stop continues. Additionally, levels could vary from the time when the suspect is pulled over to when they are tested.
THC/PUPPY CHOW

- Puppy Chow is a common party food made by melting chocolate and butter and combining it with powder sugar and Chex cereal. The THC oil is added to the butter during the cooking process. Users are also mixing the THC oil with Cinnamon Toast Crunch cereal.
- The high lasts approximately five hours and costs $10 per cup.
- Marijuana is not visible on the product. It does have a faint odor of marijuana that grows stronger when the bag is shaken.
Phenethylamines are trending among youth, particularly the consumption of the 2C-I and 2C-B drug types, which have psychedelic qualities.

Effects are similar to amphetamines and MDMA. Molly, a “pure” form of MDMA (Ecstasy), has become the drug of choice to combine with heroin.

Phenethylamines are often marketed as research chemicals and may be sold in bulk, which can be resold as individual dosages.
MOLLY

- Sometime in the past decade Ecstasy returned to clubs as Molly, a powder or crystalline form of MDMA that implied greater purity and safety: Ecstasy re-branded as a gentler, more approachable drug.

- Molly is said to be the purest form of MDMA or Ecstasy, an upper. It is a psychoactive drug of the phenethylamine and amphetamine classes of drugs.

- MDMA is crossing the Canadian border and reemerging on university campuses as a common party drug. Heroin, a downer, is a favorite combination for MDMA.
PARTY PILLS

Harmless fun or a dangerous drug?
With concerns being raised about the safety of legal party pills, the government is considering clamping down on the sale of the “herbal highs.” But others say the pills are a safe alternative to other drugs and are as popular among housewives and 40-somethings as young partygoers.
The original ingredient in party pills or “herbal highs” was benzylpiperazine (BZP) but the ingredients have since expanded. BZP was listed as a Schedule I controlled substance in 2002. It is still legal in Canada, also home to the largest supplier of party pills. It is often marketed as a dietary supplement. Other retailers claim it is a natural product that produces a natural high; however, the drug is entirely synthetic.

The effects of BZP are largely similar to amphetamines and MDMA. Users report alertness and euphoria. The high typically lasts four to six hours. Side effects include headache, dizziness, anxiety, vomiting, insomnia, hallucinations, hyperthermia, respiratory failure and seizure.

The new legal ingredients found in party pills are untested and unregulated substances that are difficult to monitor. Common party pills include Xplode, XTZ and Cok-n.
Some herbal products are emerging as popular drugs for recreational abuse. Plant and herbal supplements used recreationally can have a wide spectrum of clinical effects ranging from euphoria and stimulation to hallucinations. Despite the potential for abuse, addiction, and serious adverse effects, there may be a false perception that these products are all safe, legal, and organic.
• **Kratom** is a tropical evergreen tree in the coffee family; it is found in Southeast Asia.
  • Its leaves are used for medicinal purposes and produce psychoactive effects when chewed. It may also be drunk like a tea. It behaves similar to an opioid e.g. morphine.
  • **Kratom use is increasing among those who self-manage chronic pain with opioids purchased without a prescription.**
  • Because it is not on the banned plants list nor is it a synthetic, **Kratom is legal in the United States**. Kratom can be purchased online at botanical shop websites. It may also be sold as incense resembling Bath Salts and Spice.

• **Angel’s Trumpets aka moonflowers or daturas**, are short-lived perennial flowers of various colors cultivated in the US.
  • All Datura plants contain tropane alkaloids in their seeds and flowers; because of this, **Angel’s Trumpets have been used in some cultures as a poison and a hallucinogen**. There can be a 5:1 toxin variation between plants, making it exceptionally hazardous.
  • **There have been multiple incidents of adolescents and young adults intentionally ingesting Datura and dying or becoming seriously ill.** Consumed as a tea for the hallucinogenic effects, it may actually cause hyperthermia, bizarre behavior and severely dilated pupils. Pronounced amnesia may also occur.
Salvia Divinorum

- **Salvia Divinorum is a perennial herb in the mint family** native to certain areas of Mexico. **Salvinorin A is believed to be the responsible ingredient for the plant’s hallucinogenic effects**, typically when chewed or smoked.

- Effects appear in five to ten minutes when chewed. Psychic effects include perceptions of bright lights, vivid colors and shapes. Other effects include uncontrolled laughter, hallucinations, incoordination, dizziness and slurred speech.

- **Neither Salvia Divinorum nor Salvinorin A are controlled under the Controlled Substances Act.** It is estimated that **1.8 million persons aged 12 or older have used Salvia Divinorum in their lifetime**, most commonly by young adult males. It is sold as seeds, plant cuttings, whole plants, fresh and dried leaves and liquid extracts at head shops and via the Internet.
MORE INFORMATION AND THE FULL ROCIC SPECIAL RESEARCH REPORT CAN BE FOUND AT WWW.DRUGFREEMANATEE.ORG