Designer Drugs
“Synthetics”

Impact, Availability and Emerging Trends
By Amy Ronshausen
Synthetic Marijuana Products
• Plant material that is sprayed with a mix of chemical compounds sold as incense.

• Synthetic cannabinoids have tested at least 5x more potent marijuana; and some reports indicate that it may be up to 100x more potent.
Effects of Spice

- elevated blood pressure
- elevated heart rate
- hallucinations
- heart palpitations
- increased agitation
- nausea
- pale skin
- seizures
- vomiting
Effects of Spice

- seizures
- anxiety/panic attacks
- a feeling of alienation/disassociation from the world
- psychotic episodes
- acute kidney injury and failure
- DEATH
Connor Reid Eckhardt died after taking ONE HIT of synthetic MJ (SPICE,K2,POTpourri).

Find his story on FB
Legal Status of Spice

• Florida has added over 200 compounds known to be used in these products to the list of Schedule I drugs. That means it is a felony to purchase, possess, sell or distribute.

• As fast as we can identify and ban the compounds, chemists alter them by one molecular making them legal again.

• Cities and counties throughout the state have taken further steps to ban these products in their communities.
25i-NBOMe
2-(4-iodo-2,5-dimethoxyphenyl)-n-[(2-methoxyphenyl)methyl]ethanamine

Derivative of phenethylamine hallucinogenic known as 2C-I, with a potency 16x stronger

- 25i
- Smiles
- NBOMe
- BOM-Cl
- Cimbi-5
- solaris
Effects of 25i

Effects usually last 6-10 hours if taken under the tongue. When snorted, the effects usually last 4–6 hours.

Lethal Dose has not been determined as it is a relatively new drug of abuse.
Effects of 25i

- confusion and difficulty focusing
- shaking
- nausea and vomiting, insomnia
- looping, recursive, out-of-control thinking
- paranoia, fear, and panic
- seizure
- acute kidney injury
- brain damage
- **Death**
Legal Status

Using emergency scheduling authority, the DEA named 25i a Schedule I substance in the United States. Several other counties have done the same.

Florida legislators are considering a bill that adds these chemicals to the Florida Controlled Substances Act.
Molly
Chemical name: 3,4-methylenedioxymethamphetamine

• MDMA – psychoactive drug, active ingredient in Ecstasy.
• Molly refers to purest form of MDMA.
• Differs from Ecstasy because it is without filler drugs such as heroin.

Synthetically made in illegal labs by underground chemists.
Usually a white or yellowish powder
Molly on the Brain

Use of Molly’s cause an overproduction of dopamine (pleasure chemicals) in the brain.

Overtime the brain adapts by limiting the production of dopamine in response to pleasure.
Effects of Molly

Takes effect 30-45 minutes after dosing and can last 3-4 hours.

- Rushes or exhilaration
- Nausea
- Disorientation
- Stomach churning
- Panic
Users can become addicted in a very short time. Symptoms of withdrawal include depression and anxiety.

Effects of Molly

Signs of an overdose:
• Overheating
• Panic attacks
• Faintness
• Severe dehydration
• Loss of consciousness
• Death
Bath Salts
Bath Salts
MDPV (3,4-methylenedioxypyrovalerone)

• Derived from Cathinone the active ingredient in Khat, a leaf chewed for its stimulant effects throughout NE Africa and the Arabian Peninsula.

• Synthesized by pharmaceutical companies and never used.
Bath Salts

- Ivory Wave
- Tranquility
- Blue Silk
- Bliss
- White Lightning
- Cloud 9
- Vanilla Sky

Comparable to methamphetamine, cocaine and PCP.
Effects of Bath Salts

- Hallucinations
- Paranoia
- Suicidal thoughts
- Agitation
- Increased heart rate
- Hypothermia
- Seizures
- Fits and delusions
- Insomnia

- Kidney failure
- Risk of renal failure
- Violent Rage
- Dysphoria
- Chest pain
- Hypertension
- Vasoconstriction
- Panic Attacks
- Muscle spasms/tension

• **Death**
People on Bath Salts are Violent and Unpredictable

Reports from Florida:

• Took 6 deputies and multiple EMTs to sedate a man for safe transport to Bay Medical Center after he snorted 2 packages of bath salts.

• 71 year old woman was attacked by her 48-year old daughter high on bath salts and swinging a machete in an attempt to behead her.

• Man breaks into house, strips naked, throws furniture and bites homeowner.
Worse than Meth?

• New research confirmed MDPVs powerful stimulant effects in rats and found evidence that it could be more addictive than methamphetamine, one of the most addictive substances to date.

• Rats emitted 60 lever presses to get a single dose of meth and up to 600 for MDPV; some even emitted 3,000 presses.

“If you consider these level presses a measure of how much a rat will work to get a drug infusion, then these rats worked more than 10x harder to get MDPV”

- The Scripps Research Institute
Effects of Bath Salts

Single dose can last up to 5 hours, peaking after an hour. Users think it's out of their system and re-dose causing extreme side effects.

Re-dosing Bath Salts can last as long as 3-6 days. Some report continued side effects after stopping use.
Legal status of Bath Salts

• In 2011 Florida Attorney General, Pam Bondi, deemed bath salts containing psychoactive substances to be a significant threat to health and public safety and added the compounds to Florida’s list of controlled substances as Schedule I.

• The main compounds of Bath Salts are also illegal at the federal level.
Desomorphine
(opioid: a synthetic narcotic)

- derivative of morphine that has sedative & analgesic effects.
- 8-10 times more potent than morphine.
- classified as a Schedule I substance.
Codeine

iodine

lighter fluid

Industrial cleaning fluid

paint thinner

Gasoline

Red phosphorus
Effects of Krokodil

- High lasts from 1-1.5 hours similar but more powerful than effects of heroin
- Kidney and liver damage
- Rotting teeth
- Blood poisoning
- Brain damage
Effects of Krokodil

- Causes flesh to rot from the inside out
- Skin becomes scaly; blood vessels burst causing the surrounding tissue to die
- Results in gangrene and amputations
- Exposed bone
EFFECTS OF KROKODIL

Death; average lifespan of users is 2-3 years, 3 year expectancy after first use

- Media reports recent cases of use in Arizona and Illinois.
- Treatment professionals report mentions of use in Miami
Kratom (Herbal Drug of Abuse)
Kratom

• Large tree indigenous to Thailand and Malaysia

• Leaves are usually chewed but it can now be found in a dried form to create powder, tinctures and resins and is sold in the US in pill form.
Kratom

- Kratom contains at least 22 compounds that act as poisons, the most significant being mitragynine and 7-hydroxymitragynine.

- The former is considered a “true opiate” and is 17 times more potent than morphine by weight.
In low doses, Kratom acts as a stimulant, having a cocaine-like effect.

In high doses, Kratom acts as a sedative, having an opioid-like effect.

Kratom is frequently marketed as a natural pain reliever and an alternative to powerful addictive narcotics like oxycontin. However.....

Kratom IS addictive and regular users experience symptoms of withdrawal when they discontinue use.
Effects of Kratom

**Short-term effects**
- Nausea
- Vomiting
- Loss of appetite
- Dehydration
- Frequent urination
- Skin irritation

**Long-term effects**
- Depression
- Insomnia
- Malnutrition
- Organ dysfunction
- Lowed immune system
- Respiratory illness
- Cardiac problems
- Dark spots on face
Legal Status of Kratom

• Kratom is legal in Florida, however anything dubbed as a “legal high” comes under suspicion and is being watched.

• Legislation was introduced in both the House and Senate this session to include Kratom as a Sch I controlled substance.
Flakka

a-PVP (or, methylenedioxyxpyrovalerone)
Flakka

A synthetic amphetamine-like stimulant

Active compound is similar to active compound in Bath Salts.

Described as a cross between of crack cocaine and meth.
Flakka
Swallowed
Snorted
Smoked
Vaped
Injected
Effects of Flakka

- severe agitation
- aggression
- Psychosis
- delusions and hallucinations
- extreme paranoia
- Delirium
- Extreme violent outbreaks
Flakka in Florida

2014 672 recorded cases in FL compared to 2,720 nationally. Of those 576 were in South Florida.

Broward Sheriffs office analyses 191 cases in 2014 compared to 275 in the first 3 months of 2015!
Legal Status of Flakka

Flakka was banned by the DEA in early 2014. Flakka was banned in Florida in March of 2014

Made in China and sold online
Seeking Help

• Nothing to be ashamed about.
• Tell someone so you are not in it alone.
• DO NOT attempt to sleep it off, always seek medical help. Don’t let a friend sleep it off, calling for help could mean the difference between life and death.