The Rise of Synthetic Drugs

LABIOMED/Options for Recovery
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Why Us?!
Don’t we have enough drugs as it is?

- Synthetic Drugs Million dollar industry
- Originated in Overseas (Germany & London)
- First report in the U.S 2008 Dayton, OH
- Low Prices
- Misconception that Synthetic Drugs are “Natural”
What are Synthetic Drugs

- Synthetic drugs are chemically laced substances similar to marijuana, cocaine, methamphetamine and ecstasy.
- They are sold over the counter at some convenience stores, gas stations and tobacco/smoke shops.
- Based on their chemical make-up, these drugs are commonly divided into two categories:
  - Synthetic Cannabinoids & Cathinone/Stimulants
Synthetic Drugs

- Synthetic Cannabinoids
  - Spice/K2
  - Synthetic Marijuana (effect similar to marijuana)
- Synthetic Stimulants/Cathinone
  - aka “Bath Salts”
  - Effects similar to cocaine, methamphetamines and ecstasy
Synthetic Cannabinoids

- Chemically formulated versions of synthetic marijuana
- They consist of lab-manufactured THC
- In 2015; 84 reported types of Synthetic Cannaboids
  - Popularly known as Spice/K2; Ace of Spades; AK-47; Amnesia; Atomic Blast; Black Magic; Black Mamba; Blaze; Cherry Bomb; Voodoo Child; Time Traveler; Ninja; GI Joe; Dragon; Kong; OMG; Dead Man; Just Chill; and Cowboy Kush; and Yucatan.
Spice/K2

- Typically a variety of herbal mixtures that have an effect similar to marijuana
- Marketed as "safe," legal alternative
- Labeled "not for human consumption"
- Contains dried, shredded plant material and chemical additives that are responsible for their psychoactive (mind-altering) effects.
- Most used illicit drug by high-school seniors, second only to marijuana.
Spice/K2

- They are more popular among boys than girls
  - in 2012, nearly twice as many male 12th graders reported past-year use of synthetic marijuana as females in the same age group.
  - In 2012 this same group showed a decline in use of Synthetic Drugs. Why?

- Easy access and misconception that Spice/K2 is “Natural” and therefore harmless; this has contributed to its popularity

- Another selling point is that the chemical used in Spice/K2 are not easily detected in standard drug tests
Images of Spice/K2

http://buyherbalspice.com/spice_reviews/category/news/

http://en.wikipedia.org/wiki/Synthetic_cannabis

Our K2 blends are *100% legal!

View our entire collection as low as $7/gram

http://cenblog.org/terra-sigillata/files/2010/11/K2-Spice-100-percent-legal-300x166.png
Spice and K2

- **Cost**: $20-50 per 3gm
- **Route**: pipes, water pipes or rolled cigarettes
- **Contents**: inert plant material sprayed with SCs
Side Effects of Spice/K2

- Anxiety
- Paranoia
- Headache
- Vomiting
- Psychosis
- Diaphoresis
- HR/BP increase
- Seizures

http://investigationmiami.blogspot.com/2011/01/be-afraid-really-afraid.html
Long Term Affects of Spice/K2 Use

- Long term damage to mental health
  - Hallucinations,
- High BP
- Increased alertness
- Heart Problems
Images of People on Spice/K2
Synthetic Stimulants (Cathinone)

- Often known as “Bath Salts”, cathinone contain chemical compounds that mimic the effects of cocaine
  - Bath salts are sold as crystalline powder in a small bag with names such as
    - Ivory Wave, Blow, Red Dove, Vanilla Sky, Aura, Zeus 2, Zoom, Bliss, Blue Silk, White Lightning, Ocean, Charge, White Dove; Lunar; Ocean Burst; White Knight; Drone; Cloud 9, Recharge.
Images of Bath Salts


MDPV and Mephedrone

- The most commonly reported ingredient in "bath salts" is methylenedioxypyrovalerone (MDPV), although other stimulants may be present, such as mephedrone.
- MDPV is a psychoactive recreation drug that acts like a stimulant in the body; it is found in the khat plant; has like effects as cocaine and methamphetamine.
- Mephedrone is a similar cathinone that is also found in the this same plant that comes in tablet and/or powder form.
- CNS Stimulant
- Previously abused primarily in Europe and Australia

http://www.herbalextracts.net/library/supplements/khat_uses.html
Effects of MDPV

- “High” lasts 3-4 hours
- Physical effects may last 6-8 hours
- May cause seizures, panic attacks, or psychosis with high doses or increased frequency of use
- Avg dose: 5 to 20mg
Routes of Administration

- Oral ingestion
  - Swallowing capsules
  - Bombing
- Insufflation
- Rectally
- IV (use 1/2 to 1/3 dose)

http://www.guardian.co.uk/society/mephedrone
Effects of Bath Salts

- Euphoria
- Sociability
- Stimulation
- Sexual Arousal
- Music Appreciation
- Hallucinations

http://www.drugs.org.im/campaigns.htm
Bath Salts Long Term

- Loss of appetite
- Increase in body temperature, sweating, hot flushes
- Tense jaw, bruxism, stiff neck, muscle clenching
- HR/BP elevation, chest pains
- Dehydration
- Mydriasis, nystagmus
- Painful nasal drip/ulcers in mouth (after insufflation)
- Insomnia, paranoia, anxiety, dysphoria, psychosis

http://theblackheartofgrahamquirk.blogspot.com/
Bath Salts the real picture
Long Term Affects of Bath Salts Use

- The long-term effects of bath salts include many serious side effects that can result in serious injury or death. Some of the most serious side effects include mood disorders, since these can result in attempts at suicide and severe depression. Self-mutilation and delirium are both common with the use of this drug over time. Death is also not uncommon with long-term use of bath salts.

- Some other potential side effects from the use of bath salts include:
  - Severe depression
  - Psychosis
  - A loss of coordination
  - Heart problems
Video
The controlled Analogue Enforcement Act of 1986 placed Synthetic Drugs as a Schedule I or Scheduled II Substance.

2010 Synthetic Cannaboids not controlled by any state or at the Federal Level

2012 The Synthetic Drug Abuse Prevention Act placed 26 types of Synthetic Cannaboids and stimulants in Schedule I of the Controlled Substance Act

2016 43 States take control to control one or more Synthetic Cannaboids.
Synthetic Drugs and the Law

- Each state has its own laws
- The sale of synthetic drugs is a misdemeanor in California under:
  - California Health and Safety Code 11357.5 (synthetic cannabis), and
  - California Health and Safety Code 11375.5 (synthetic stimulants).
- It is punishable by: up to six (6) months in county jail, and/or a fine of up to $1,000.
Synthetic Drugs and the Law

- Texas “just like Marijuana”. Synthetic marijuana brands fall under Penalty Group 2-A.
  - Less than 2 ounces – Class B Misdemeanor ($2,000 fine/6 months jail)
  - Between 2 ounces and 4 ounces – Class A Misdemeanor ($4,000 fine/1 year jail)
  - 4 ounces to 5lbs – State Jail Felony ($10,000 fine/6 months – 2 years jail)
  - 5lbs – 50lbs – 3rd Degree Felony ($10,000 fine/2 years – 10 years jail)
What Clinicians need to know

- Synthetic Drugs are on the rise and new creations are being developed each day.
- More and more young adults will enter treatment with Synthetic Drug Addiction projected in the next 10 years.
- More research on the effects of use is needed.
- Detox maybe needed for both all Synthetic Drugs.
- Medical and Mental Health Evaluations should be suggested if a client displays any signs of withdrawal.
- Always operate from a point of Safety; the use of Synthetic Drugs can cause immediate anger and other uncontrollable emotions.
- Have a list of specific programs in your area who provide treatment to clients addicted to Synthetic Drugs.
- Lastly, if the right treatment is provided clients can recover.
Questions/ Handout
References/ Brief Bibliography


References/ Brief Bibliography


- Bath Salts “The Deadly Facts”. FMS Productions 2011. DVD