

Drugs of Abuse

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A dark blue diagonal gradient bar that starts from the bottom left corner and extends towards the top right corner, covering the lower half of the slide.

Controlled Substances Act

- Places substances regulated by federal government in one of 5 scheduled classes
- Based on potential for abuse, medical use, and safety or dependence liability

Controlled Substances Schedules

- Schedule I
 - High potential for abuse, no medical use
 - Examples: gamma hydroxybutyric acid (GHB), lysergic acid diethylimide (LSD)
- Schedule II
 - High potential for abuse/ dependence, accepted medical use
 - Examples: morphine, cocaine, fentanyl
- Schedule III
 - Lower abuse/ dependence potential than I or II, accepted medical use
 - Examples: Anabolic steroids, Codeine in combination with tylenol or ASA
- Schedule IV
 - Lower abuse/dependence potential than III, accepted medical use
 - Examples: Alprazolam, Tramadol
- Schedule V
 - Low potential for abuse, accepted medical use
 - Examples: Cough medicine with Codeine

Non - Controlled Substances

- Other drugs with physical/ physiological dependence and abuse potential which are not considered controlled
 - Alcohol
 - Caffeine
 - Nicotine

Caffeine

- Most used psychoactive drug in the world
- Psychostimulant, induces arousal, motor stimulation, and reinforcing effects
- Can induce dependence, along with withdrawal
- Debate about whether it is a 'drug of abuse'
- Potential for overdose
- Used frequently in combination with other drugs, potentiates effects and increases risk of overdose



Nicotine

- Nicotine cause euphoria, though briefer than other drugs of abuse
- Uptake in the lungs is rapid, peak levels achieved 10 seconds after inhalation
- Dependence is physical and physiological
- Withdrawal is difficult, peaking in a few days but lasting weeks
- Only 6% of people who try to quit smoking are successful at 1 year



Nicotine continued

- Among people aged 12 and older
 - 20.7% (57.3 million) admitted to using tobacco products or vaping nicotine in past 30 days
 - 15% (41.4 million) admitted to smoking cigarettes in past 30 days
- Among young people
 - 9.4% of 8th graders, 15.7% of 10th graders, and 24.6% of 12th graders reported any tobacco products or vaping in last 30 days
 - 7.6% of 8th graders, 13.1% of 10th graders, and 19.6% of 12th graders reported vaping nicotine in last 30 days

Alcohol

Alcohol Use in the United States



85.6 percent
of people ages 18 and
older reported that they
drank alcohol at some
point in their lifetime.

Source: 2019 NSDUH

Learn more at
[RethinkingDrinking.niaaa.nih.gov](https://www.rethinkingdrinking.niaaa.nih.gov)

NIH National Institute
on Alcohol Abuse
and Alcoholism

Alcohol

Binge Drinking in the United States



In 2019,
25.8 percent
of people ages 18 and
older reported that they
engaged in binge drinking
in the past month.

Source: 2019 NSDUH

Learn more at
[RethinkingDrinking.niaaa.nih.gov](https://www.rethinkingdrinking.niaaa.nih.gov)



National Institute
on Alcohol Abuse
and Alcoholism

Alcohol

- High Intensity Drinking:
 - Emerging trend
 - 2 or more times the gender specific binge drinking thresholds
 - 2x threshold, 70x more likely to lead to ED visit
 - 3x threshold, 93x more likely to lead to ED visit

Alcohol

Alcohol Use Disorder (AUD) in the United States

14.5 million

people ages 12 and older had AUD in 2019.



Source: 2019 NSDUH

Learn more at
[RethinkingDrinking.niaaa.nih.gov](https://www.rethinkingdrinking.niaaa.nih.gov)

NIH National Institute
on Alcohol Abuse
and Alcoholism

Alcohol

Less than
10% of people

with past-year alcohol use disorder
receive any treatment.



Source: 2019 NSDUH

Learn more at
[RethinkingDrinking.niaaa.nih.gov](https://www.rethinkingdrinking.niaaa.nih.gov)



Alcohol

Alcohol-Related Deaths in the United States

95,000

people die from alcohol-related
causes annually.

Source: CDC

Learn more at
RethinkingDrinking.niaaa.nih.gov



National Institute
on Alcohol Abuse
and Alcoholism

Alcohol

U.S. Children Living With Parent / Caregiver With Alcohol Use Disorder (AUD)

More than 10 percent of U.S. children ages 17
and younger live with a parent with AUD.



Source: SAMHSA

Learn more at
[RethinkingDrinking.niaaa.nih.gov](https://www.rethinkingdrinking.niaaa.nih.gov)



Marijuana

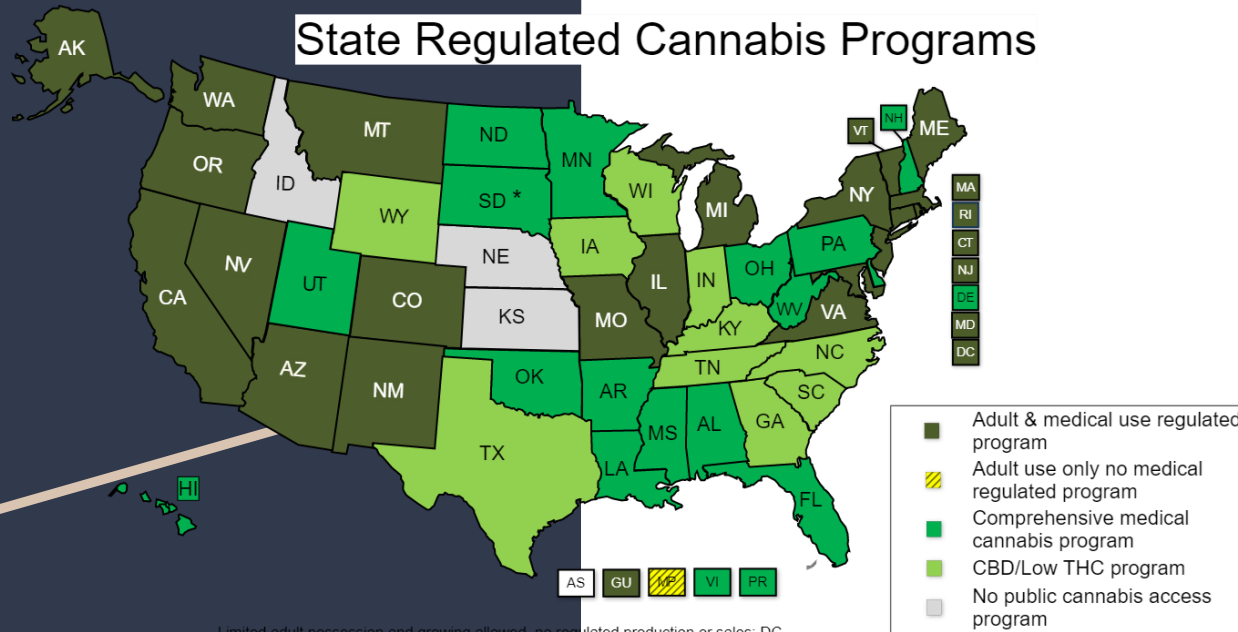


Marijuana

- In PA: 343,634 patients on medical marijuana
- 48.2 million(18%) people used in the US in 2019
- Most commonly used federally illegal drug in the US
- Long term use associated with schizophrenia, psychosis
- Use during pregnancy associated with increased risk of complications

Marijuana

- Marijuana use legal for recreational use in 21 states
- Legal for medical use in 39 states



Opioids

THE OPIOID EPIDEMIC BY THE NUMBERS



70,630

people died from drug overdose in 2019²



10.1 million

people misused prescription opioids in the past year¹



1.6 million

people had an opioid use disorder in the past year¹



2 million

people used methamphetamine in the past year²



745,000

people used heroin in the past year¹



50,000

people used heroin for the first time¹



1.6 million

people misused prescription pain relievers for the first time¹



14,480

deaths attributed to overdosing on heroin (in 12-month period ending June 2020)³



48,006

deaths attributed to overdosing on synthetic opioids other than methadone (in 12-month period ending June 2020)³

SOURCES

1. 2019 National Survey on Drug Use and Health, 2020.
2. NCHS Data Brief No. 394, December 2020.
3. NCHS, National Vital Statistics System. Provisional drug overdose death counts.

Opioids

Risk factors for opioid abuse:

- Poverty
- Unemployment
- Family history of substance use disorder
- Personal history of substance use disorder
- Young age
- History of criminal activity (including DUI)
- Regular contact with high risk people/ situations
- Problems with past employers, family members, and friends
- Risk taking/ thrill seeking
- Heavy tobacco use
- Poorly controlled anxiety, depression
- Stress
- Prior drug/ alcohol rehab

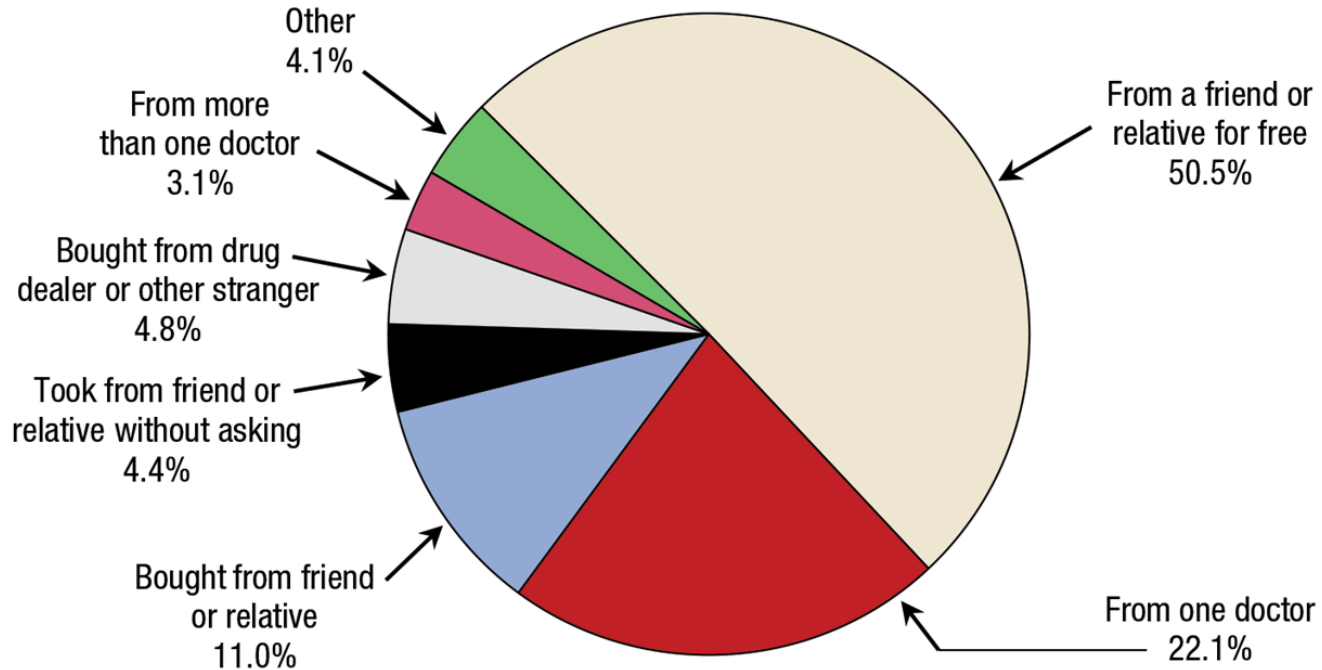
Opioids

How do people use opioids?

- Oral
- Transdermal
- Intravenous
- Inhalation (SMOKE IT! Program)



Opioids



Opioids: Fentanyl



Cocaine



Cocaine

SIGNS OF COCAINE USE DISORDER



YOU OVERHEAR
THEM SAY
"SNOW" OR "BLOW"



TRACES OF WHITE
POWDER LEFT
AROUND THE NOSE



HIGH LEVELS OF
UNEXPLAINED HAPPINESS
OR EXCITEMENT



INCREASED
SELF-CONFIDENCE TO
(OVERCONFIDENCE)



PUPIL DILATION
AND SENSITIVITY
TO LIGHT



WITHDRAWAL
AND ISOLATION



PARANOIA AND/OR
VIOLENCE



FREQUENT
DISAPPEARANCES



DEPRESSION



LACK OF APPETITE
AND WEIGHT LOSS

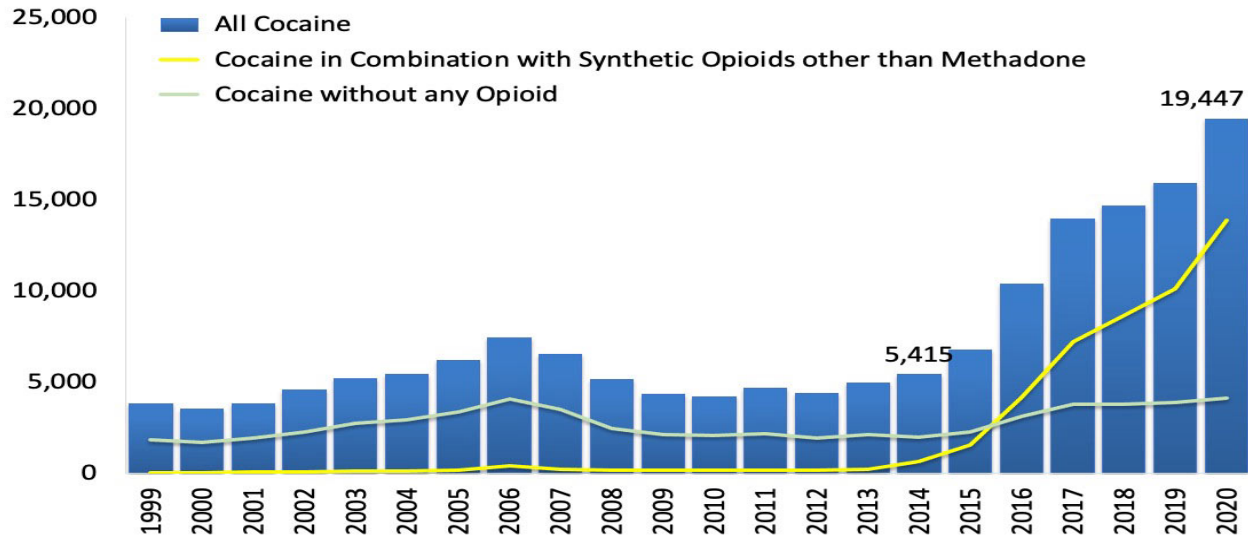
Cocaine

How do people use cocaine?

- Oral “chewing”
- Intranasal “snorting”
- Intravenous “mainlining”
- Inhalation “smoking”

Cocaine

Figure 7. National Drug Overdose Deaths Involving Cocaine*, by Opioid Involvement, Number Among All Ages, 1999-2020



*Among deaths with drug overdose as the underlying cause, the cocaine category was determined by the T40.5 ICD-10 multiple cause-of-death code. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2020 on CDC WONDER Online Database, released 12/2021.

Methamphetamine

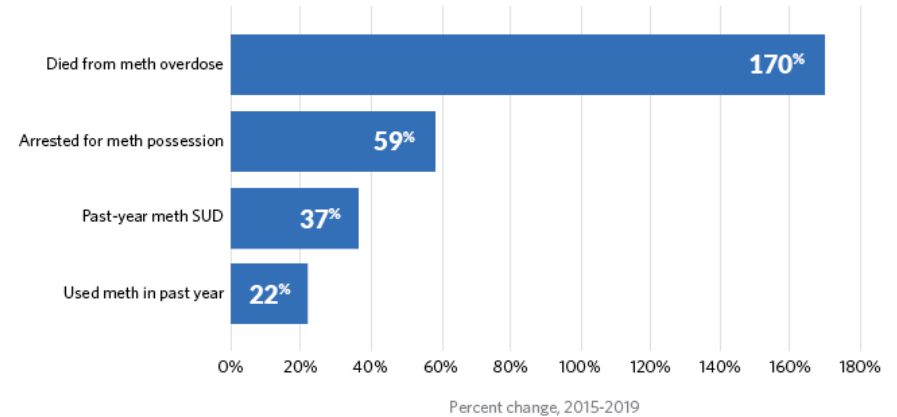


Methamphetamine

Figure 1

Surge in Methamphetamine Public Health Harms From 2015-2019 Despite Heightened Law Enforcement Response

Change in number of annual overdose deaths, possession arrests, meth-related substance use disorders, and meth use



Sources: Centers for Disease Control and Prevention and National Center for Health Statistics, "CDC WONDER Database, Multiple Cause of Death" (1999-2019), (March 4, 2021), <https://wonder.cdc.gov/mcd-icd10.html>; Federal Bureau of Investigation, "Crime Data Explorer," <https://crime-data-explorer.app.cloud.gov/pages/home>; Substance Abuse and Mental Health Data Archive, "National Survey on Drug Use and Health Crosstab Creator" (2015-2019), <https://pdas.samhsa.gov/#/>

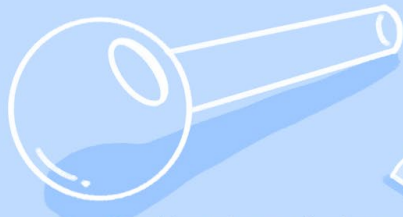
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Methamphetamine

Common Methods of Methamphetamine Use and Their Risks



Ingestion via pill form

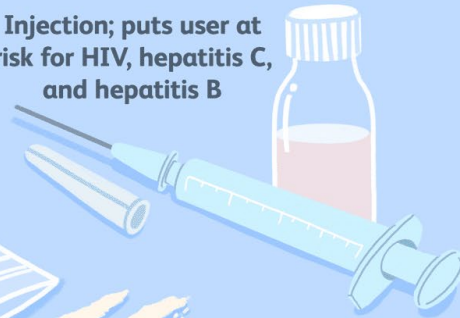


Smoking via meth pipe;
can result in corroded
teeth and gums



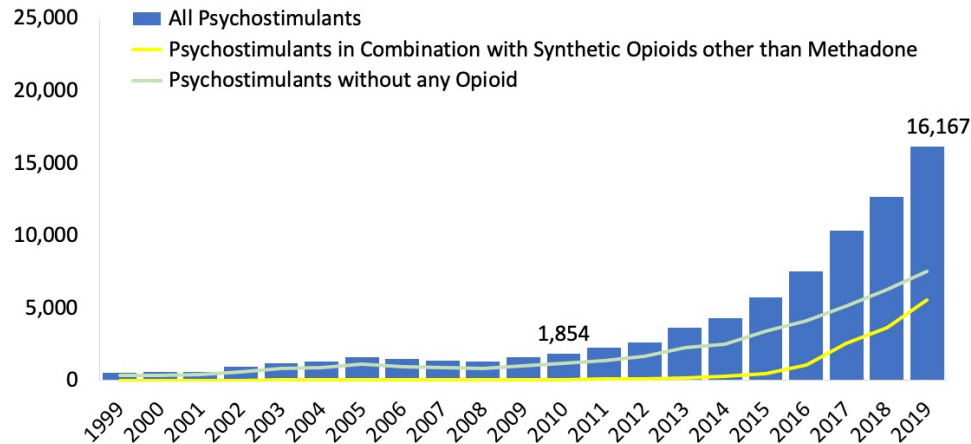
Snorting; risking damage
to sinus cavities

Injection; puts user at
risk for HIV, hepatitis C,
and hepatitis B



Methamphetamine

**Figure 6. National Drug Overdose Deaths Involving Psychostimulants with Abuse Potential (Primarily Methamphetamine)*, by Opioid Involvement
Number Among All Ages, 1999-2019**



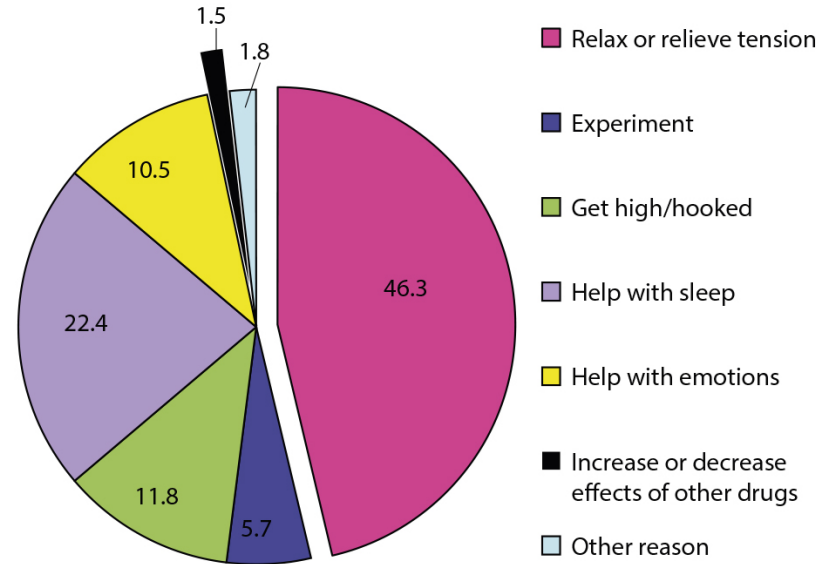
*Among deaths with drug overdose as the underlying cause, the psychostimulants with abuse potential (primarily methamphetamine) category was determined by the T43.6 ICD-10 multiple cause-of-death code. Abbreviated to *psychostimulants* in the bar chart above. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2019 on CDC WONDER Online Database, released 12/2020.

Benzodiazepine



Benzodiazepine

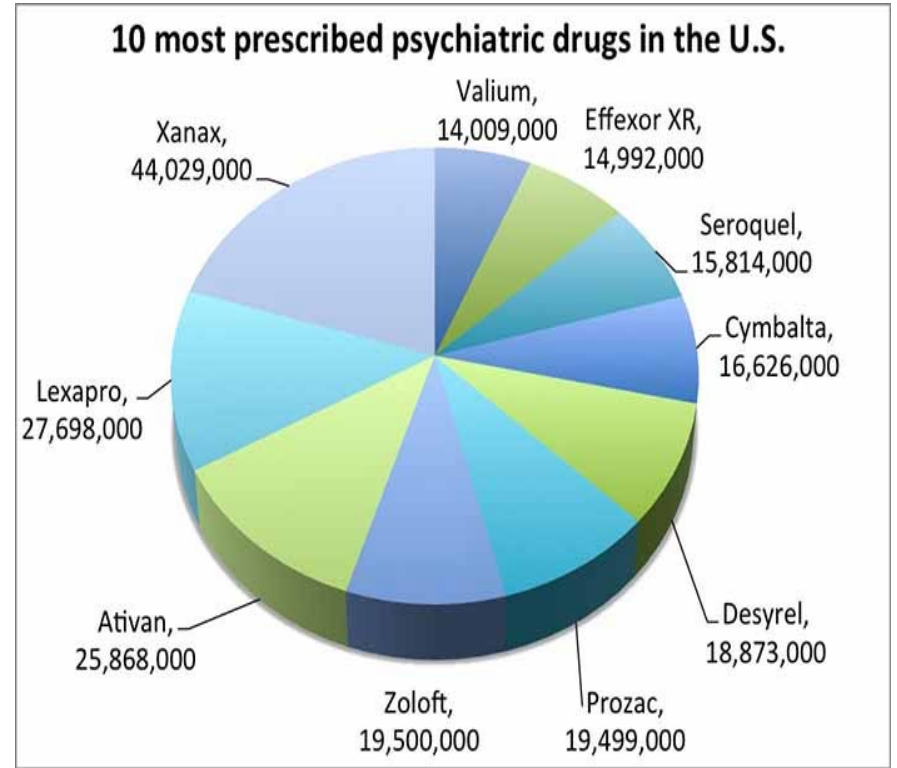
Figure 2. Main Reason for Misusing Benzodiazepine the Most Recent Time in the Past Year Among US Adults With Past-Year Benzodiazepine Misuse Whose Last Prescription Tranquilizer or Sedative Misuse Was Benzodiazepine, 2015–2016, Annual Average Weighted Percentage (n = 2,900)



5.2 Million adults with past-year benzodiazepine misuse

<https://www.psychiatrist.com/jcp/anxiety/panic-disorder/benzodiazepine-use-misuse-and-use-disorders-in-the-us/>

Benzodiazepine



Benzodiazepine

How do people use benzodiazepines?

- Orally
- Injecting
- Snorting
- Taking through a blotter paper
- Mixing with other drugs

Psilocybin Mushrooms

Side Effects of Magic Mushrooms

Physical

- Dilated pupils
- Drowsiness
- Headaches
- Increased heart rate, blood pressure, and temperature
- Lack of coordination
- Nausea

Mental

- Distorted sense of time, place, and reality
- Euphoria
- Hallucinations (visual or auditory)
- Having introspective (spiritual) experiences
- Panic reactions
- Paranoia

Other Drugs of Abuse

- Amphetamine (Both Rx and nonRx)
- LSD
- MDMA(club drugs)
- Inhalents
- GHB
- Kratom
- Mescaline (Peyote)
- OTC Drugs (Dextromethorphan, Loperamide)
- PCP
- Salvia
- Steroids
- Synthetic cannabinoids (K2, Spice)
- Synthetic cathinones (bath salts, Flakka)

**YOU HAVE A
QUESTION**

**I HAVE AN
ANSWER.**