Appendix D outlines important facts about the following substances:

- Alcohol
- Cocaine
- GHB (gamma-hydroxybutyric acid)
- Heroin
- Inhalants
- Ketamine
- LSD (lysergic acid diethylamide)
- Marijuana (Cannabis)
- MDMA (Ecstasy)
- Mescaline (Peyote)
- Methamphetamine
- Over-the-counter Cough/Cold Medicines (Dextromethorphan or DXM)
- PCP (Phencyclidine)
- Prescription Opioids
- Prescription Sedatives (Tranquilizers, Depressants)
- Prescription Stimulants
- Psilocybin
- Rohypnol® (Flunitrazepam)
- Salvia
- Steroids (Anabolic)
- Synthetic Cannabinoids (“K2”/“Spice”)
- Synthetic Cathinones (“Bath Salts”)

APPENDIX D.
IMPORTANT FACTS ABOUT ALCOHOL AND DRUGS
Sources cited in this Appendix are:

- Drug Enforcement Administration’s Drug Facts Sheets
- Inhalant Addiction Treatment’s Dangers of Mixing Inhalants with Alcohol and Other Drugs
- National Institute on Alcohol Abuse and Alcoholism’s (NIAAA’s) Alcohol’s Effects on the Body
- National Institute on Drug Abuse’s (NIDA’s) Commonly Abused Drugs
- NIDA’s Treatment for Alcohol Problems: Finding and Getting Help
- National Institutes of Health (NIH) National Library of Medicine’s Alcohol Withdrawal
- Rohypnol Abuse Treatment FAQs
- Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) Keeping Youth Drug Free
- SAMHSA’s Center for Behavioral Health Statistics and Quality’s (CBHSQ’s) Results from the 2015 National Survey on Drug Use and Health: Detailed Tables

The substances that are considered controlled substances under the Controlled Substances Act (CSA) are divided into five schedules. An updated and complete list of the schedules is published annually in Title 21 Code of Federal Regulations (C.F.R.) §§ 1308.11 through 1308.15. Substances are placed in their respective schedules based on whether they have a currently accepted medical use in treatment in the United States, their relative abuse potential, and likelihood of causing dependence when abused. A description of each schedule is listed below.

- **Schedule I (I):** Substances in this schedule have no currently accepted medical use in the United States, a lack of accepted safety for use under medical supervision, and a high potential for abuse.
- **Schedule II/IIN (2/2N):** Substances in this schedule have a high potential for abuse which may lead to severe psychological or physical dependence.
- **Schedule III/IIN (3/3N):** Substances in this schedule have a potential for abuse less than substances in Schedules I or II and abuse may lead to moderate or low physical dependence or high psychological dependence.
- **Schedule IV (4):** Substances in this schedule have a low potential for abuse relative to substances in Schedule III.
- **Schedule V (5):** Substances in this schedule have a low potential for abuse relative to substances listed in Schedule IV and consist primarily of preparations containing limited quantities of certain narcotics.
Ethyl alcohol, or ethanol, is an intoxicating ingredient found in beer, wine, and liquor. Alcohol is produced by the fermentation of yeast, sugars, and starches.  

### Common Commercial Names

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
</table>
| Various                | Booze, Juice, Sauce, Brew | Beer, Wine, Liquor/ Spirits/Malt Beverages | Ingested by drinking | Not scheduled / Illegal for purchase or use by those under age 21  

### Uses & Possible Health Effects

#### Short-term Symptoms of Use

Injuries and risky behavior, memory and concentration problems, coma, breathing problems, slurred speech, confusion, impaired judgment and motor skills, drowsiness, nausea and vomiting, emotional volatility, loss of coordination, visual distortions, impaired memory, changes in mood and behavior, and depression. Impaired judgment can result in inappropriate sexual behavior, sexually transmitted infections, and reduced inhibitions.

#### Long-term Consequences of Use and Health Effects

Some studies have found benefits associated with moderate alcohol consumption, while other studies do not support a role for moderate alcohol consumption in providing health benefits. Studies have shown alcohol misuse use can lead to: an inability to control drinking; a high tolerance level; changes in mood and behavior; difficulty thinking clearly; impaired coordination; cardiovascular problems including heart muscle injury, irregular heartbeat, stroke, and high blood pressure; liver problems including steatosis (fatty liver), alcoholic hepatitis, fibrosis, and cirrhosis; pancreatitis; increased risk of various cancers (including of the mouth, esophagus, larynx, pharynx, liver, colon, and rectum); weakened immune system; depression; interference with personal relationships; coma, and death due to alcohol overdose. For breast cancer, even moderate drinking may increase the risk.

### Other Health-related Issues


### In Combination with Alcohol

N/A

### Withdrawal Symptoms

Alcohol withdrawal symptoms usually occur within 8 hours after the last drink, but can occur days later. Symptoms usually peak by 24 to 72 hours, but may go on for weeks. Common symptoms include: anxiety or nervousness, depression, fatigue, irritability, jumpiness or shakiness, mood swings, nightmares, and not thinking clearly. Other symptoms may include: clammy skin, enlarged (dilated) pupils, headache, insomnia, loss of appetite, nausea and vomiting, pallor, rapid heart rate, sweating, and tremor of the hands or other body parts. A severe form of alcohol withdrawal called delirium tremens can cause: agitation, fever, hallucinations, seizures, and severe confusion.

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ii. Most states prohibit possession and consumption of alcoholic beverages by those under age 21, though some make exceptions for possession or consumption in the presence, or with the consent, of family or on private property.

iii. Sources: NIDA, (2016) & NIAAA, (n.d.). The uses and possible health effects that are listed are illustrative examples and not exhaustive.


The U.S. Food and Drug Administration (FDA) has approved three medications for treating alcohol dependence, and others are being tested to determine if they are effective.

- Naltrexone can help people reduce heavy drinking.
- Acamprosate makes it easier to maintain abstinence.
- Disulfiram blocks the breakdown (metabolism) of alcohol by the body, causing unpleasant symptoms such as nausea and flushing of the skin. Those unpleasant effects can help some people avoid drinking while taking disulfiram.

Also known as alcohol counseling, behavioral treatments involve working with a health professional to identify and help change the behaviors that lead to heavy drinking. Behavioral treatments share certain features, which can include:

- Developing the skills needed to stop or reduce drinking
- Helping to build a strong social support system
- Working to set reachable goals
- Coping with or avoiding the triggers that might cause relapse

Statistics as of 2015

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Lifetime: 217 million persons (81.0%) aged 12 or older have used alcohol in their lifetime. Past Year: 176 million persons (65.7%) aged 12 or older have used alcohol in the past year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age of Initiation*</td>
<td>17.6</td>
</tr>
</tbody>
</table>

---

x. Average age of initiation (for all substances) is based on respondents aged 12 to 49 years old.
**Cocaine**

A *powerfully addictive stimulant drug made from the leaves of the coca plant native to South America.*

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocaine hydrochloride topical solution (anesthetic rarely used in medical procedures)</td>
<td>Cocaine: Blow, Bump, C, Candy, Charlie, Coke, Crack, Flake, Rock, Snow, Toot, Dust Crack cocaine: Crack, Rock, Base, Sugar Block, Rox/Roxanne</td>
<td>White powder, whitish rock crystal</td>
<td>Snorted, smoked, injected, orally, topically</td>
<td>Schedule II / Illegal, except for use in hospital settings (however it’s rarely used)</td>
</tr>
</tbody>
</table>

**Uses & Possible Health Effects**

| **Short-term Symptoms of Use** | Narrowed blood vessels; enlarged pupils; increased body temperature, heart rate, and blood pressure; headache; abdominal pain and nausea; euphoria; increased energy, alertness; insomnia; restlessness, irritability, anxiety; erratic and violent behavior; panic attacks, paranoia, psychosis; heart rhythm problems, heart attack; stroke, seizure, coma; and death from cardiac arrest, respiratory arrest, or suicide. |
| **Long-term Consequences of Use and Health Effects** | Loss of sense of smell, nosebleeds, nasal damage and trouble swallowing from snorting; infection and death of bowel tissue from decreased blood flow; poor nutrition and weight loss from decreased appetite; and severe depression. |
| **In Combination with Alcohol** | Greater risk of overdose and sudden death than from alcohol or cocaine alone. |
| **Withdrawal Symptoms** | Depression, tiredness, increased appetite, insomnia, vivid unpleasant dreams, slowed thinking and movement, restlessness. |
| **Medical Use** | Cocaine hydrochloride topical solution is indicated for the introduction of local (topical) anesthesia of accessible mucous membranes of the oral, laryngeal and nasal cavities. |

**Treatment Options**

| Medications | There are no FDA-approved medications to treat cocaine addiction. |
| Behavioral Therapies | • Cognitive-behavioral therapy (CBT) • Community reinforcement approach plus vouchers • Contingency management, or motivational incentives • The Matrix Model • 12-Step facilitation therapy |

---


iii. Neonatal abstinence syndrome is a group of problems that occur in a newborn who was exposed to addictive opioid drugs while in the mother’s womb. At birth, the baby is still dependent on the drug. Because the baby is no longer getting the drug after birth, symptoms of withdrawal may occur.11

Cocaine
Statistics as of 2015

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Lifetime:</th>
<th>Past Year:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Cocaine: 38.7 million persons (14.5%) aged 12 or older have used cocaine in their lifetime.</td>
<td>• Cocaine: 4.8 million persons (1.8%) aged 12 or older have used cocaine in the past year.</td>
</tr>
<tr>
<td></td>
<td>• Crack: 9.0 million persons (3.4%) aged 12 or older have used crack cocaine in their lifetime.</td>
<td>• Crack: 833,000 persons (0.3%) aged 12 or older have used crack cocaine in the past year.</td>
</tr>
</tbody>
</table>

| Average Age of Initiation | Cocaine: 21.5                                                                                               | Crack: 21.3                                                                                           |

# GHB (gamma-hydroxybutyric acid)

A depressant approved for use in the treatment of narcolepsy, a disorder that causes daytime “sleep attacks”.

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamma-hydroxybutyrate or sodium oxybate (Xyrem®)</td>
<td>G, Georgia Home Boy, Goop, Grievous Bodily Harm, Liquid Ecstasy, Liquid X, Soap, Scoop</td>
<td>Colorless liquid, white powder</td>
<td>Ingested (often combined with alcohol or other beverages)</td>
<td>Schedule I / Illegal; GHB products such as Xyrem®, are Schedule III substances</td>
</tr>
</tbody>
</table>

## Uses & Possible Health Effects

### Short-term Symptoms of Use
Euphoria, drowsiness, decreased anxiety, confusion, memory loss, hallucinations, excited and aggressive behavior, nausea, vomiting, unconsciousness, seizures, slowed heart rate and breathing, lower body temperature, coma, and death.

### Long-term Consequences of Use and Health Effects
Unknown.

### Other Health-related Issues
Sometimes used as a date rape drug.

### In Combination with Alcohol
Nausea, problems with breathing, greatly increased depressant effects.

### Withdrawal Symptoms
Insomnia, anxiety, tremors, sweating, increased heart rate and blood pressure, and psychosis.

### Medical Use
Sodium Osybate (Xyrem®) is approved for use in the treatment of narcolepsy, a disorder that causes daytime “sleep attacks.”

## Treatment Options

- **Medications**: Benzodiazepines
- **Behavioral Therapies**: More research is needed to determine if behavioral therapies can be used to treat GHB addiction.

## Statistics as of 2015

- **Prevalence**
  - Lifetime: 1.2 million persons (0.4%) aged 12 or older have used GHB in their lifetime.
  - Past Year: 136,000 persons (0.1%) aged 12 or older have used GHB in the past year.
- **Average Age of Initiation**
  - Sedatives in general: 28.3

---


iii. Sources: NIDA, (2016).

Heroin

An opioid drug made from morphine, a natural substance extracted from the seed pod of the Asian opium poppy plant.

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial uses</td>
<td>Brown sugar, China White, Dope, H, Horse, Junk, Skag, Skunk, Smack, White Horse With OTC cold medicine and antihistamine: Cheese</td>
<td>White or brownish powder, or black sticky substance known as “black tar heroin”</td>
<td>Injected, smoked, snorted</td>
<td>Schedule I / Illegal</td>
</tr>
</tbody>
</table>

Uses & Possible Health Effects

Short-term Symptoms of Use
Euphoria; warm flushing of skin; dry mouth; heavy feeling in the hands and feet; clouded thinking, impaired coordination; alternate wakeful and drowsy states; itching; nausea; vomiting; slowed breathing and heart rate; and fatal overdose.

Long-term Consequences of Use and Health Effects
Collapsed veins; abscesses (swollen tissue with pus); infection of the lining and valves in the heart (endocarditis); constipation and stomach cramps; liver or kidney disease; and pneumonia.

Other Health-related Issues

In Combination with Alcohol
Dangerous slowdown of heart rate and breathing, coma, and death.

Withdrawal Symptoms
Restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, and cold flashes with goose bumps.

Treatment Options

Medications
Methadone, Buprenorphine, and Naltrexone.

Behavioral Therapies
Contingency management, or motivational incentives
12-Step facilitation therapy

Statistics as of 2015

Prevalence
- Lifetime: 5.1 million persons (1.9%) aged 12 or older have used heroin in their lifetime.
- Heroin needle use: 2.2 million persons (0.8%)
- Smoked heroin: 2.0 million persons (0.7%)
- Sniffed or snorted heroin: 3.3 million persons (1.2%)
- Past Year: 828,000 persons (0.3%) aged 12 or older have used heroin in the past year.

Average Age of Initiation
25.4

---
iii. Sources: NIDA, (2016).
### Inhalants

Solvents, aerosols, and gases found in household products such as spray paints, markers, glues, and cleaning fluids; also nitrites (e.g., amyl nitrite), which are prescription medications for chest pain. Precise categorization of inhalants is difficult, however one classification system lists four general categories of inhalants — volatile solvents, aerosols, gases, and nitrites — based on the forms in which they are often found in household, industrial, and medical products.

<table>
<thead>
<tr>
<th>Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvents (paint thinners, gasoline, glues, organic solvents, nail polish remover); gases (butane, propane, aerosol propellants), nitrous oxide, hair spray; and nitrites (isoamyl, isobutyl, and cyclohexyl)</td>
<td>Poppers, snappers, whippets, laughing gas</td>
<td>Paint thinners or removers, degreasers, dry-cleaning fluids, gasoline, lighter fluids, correction fluids, permanent markers, electronics cleaners and freeze sprays, glue, spray paint, hair or deodorant sprays, fabric protector sprays, aerosol computer cleaning products, vegetable oil sprays, butane lighters, propane tanks, whipped cream aerosol containers, refrigerant gases, ether, chloroform, halothane, nitrous oxide</td>
<td>Inhaled through the nose or mouth</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Uses & Possible Health Effects

<table>
<thead>
<tr>
<th>Short-term Symptoms of Use</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>While symptoms vary by chemical, potential symptoms include: confusion; nausea or vomiting; slurred speech; loss of coordination; euphoria; dizziness; drowsiness; loss of inhibition, lightheadedness, hallucinations/delusions; headaches; sudden sniffing death due to heart failure (from butane, propane, and other chemicals in aerosols); death from asphyxiation, suffocation, convulsions or seizures, coma, or choking. Nitrites: Enlarged blood vessels, enhanced sexual pleasure, increased heart rate, brief sensation of heat and excitement, dizziness, and headache.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-term Consequences of Use and Health Effects</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver and kidney damage; damage to cardiovascular and nervous systems; bone marrow damage; nerve damage; and brain damage from lack of oxygen that can cause problems with thinking, movement, vision, and hearing. Nitrites: Increased risk of pneumonia.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Health-related Issues</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>In Combination with Alcohol</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensifies the toxic effects of inhalants; serious mental impairment can result, leading the user to engage in deadly behavior; and may lead to coma or death. Nitrites: dangerously low blood pressure.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Withdrawal Symptoms</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nausea, loss of appetite, sweating, tics, problems sleeping, and mood changes.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medical Use</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrous oxide only, for anesthesia: amyl nitrate indicated for rapid relief of angina pectoris.</td>
<td></td>
</tr>
</tbody>
</table>

### Treatment Options

Medications: There are no FDA-approved medications to treat inhalant addiction.

---

ii. Sources: NIDA, (2016).
iii. Source: Inhalant Addiction Treatment, (n.d.).
Inhalants

<table>
<thead>
<tr>
<th>Behavioral Therapies</th>
<th>More research is needed to determine if behavioral therapies can be used to treat inhalant addiction.</th>
</tr>
</thead>
</table>

**Statistics as of 2015**

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Lifetime: 25.8 million persons (9.6%) aged 12 or older have used inhalants in their lifetime.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Amyl Nitrite, Poppers, Locker Room Odorizers, or Rush: 7.4 million persons (2.8%)</td>
</tr>
<tr>
<td></td>
<td>• Computer Cleaner/Air Duster: 3.0 million persons (1.1 %)</td>
</tr>
<tr>
<td></td>
<td>• Correction Fluid, Degreaser, or Cleaning Fluid: 1.6 million persons (0.6%)</td>
</tr>
<tr>
<td></td>
<td>• Felt-Tip Pens, Felt-Tip Markers, or Magic Markers: 6.8 million persons (2.5 %)</td>
</tr>
<tr>
<td></td>
<td>• Gasoline or Lighter Fluid: 3.2 million persons (1.2%)</td>
</tr>
<tr>
<td></td>
<td>• Glue, Shoe Polish, or Toluene: 3.2 million persons (1.2%)</td>
</tr>
<tr>
<td></td>
<td>• Halothane, Ether, or Other Anesthetics: 809,000 persons (0.3%)</td>
</tr>
<tr>
<td></td>
<td>• Lacquer Thinner or Other Paint Solvents: 1.5 million persons (0.6%)</td>
</tr>
<tr>
<td></td>
<td>• Lighter Gases (Butane, Propane): 767,000 persons (0.3%)</td>
</tr>
<tr>
<td></td>
<td>• Nitrous Oxide or Whippits: 12.4 million persons (4.6%)</td>
</tr>
<tr>
<td></td>
<td>• Spray Paints: 1.9 million persons (0.7%)</td>
</tr>
<tr>
<td></td>
<td>• Other Aerosol Sprays: 1.5 million persons (0.6%)</td>
</tr>
<tr>
<td>Past Year:</td>
<td>1.8 million persons (0.7%) aged 12 or older have used inhalants in the past year.</td>
</tr>
</tbody>
</table>

| Average Age of Initiation | 17.4 |

---

# Ketamine

A **dissociative drug, hallucinogen, which causes the user to feel detached from reality.**

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ketalar</td>
<td>Cat Valium, K, Special K, Vitamin K</td>
<td>Liquid, white powder</td>
<td>Injected, snorted, smoked (powder added to tobacco or marijuana cigarettes), ingested</td>
<td>Schedule III / Legal by prescription only</td>
</tr>
</tbody>
</table>

## Uses & Possible Health Effects

### Short-term Symptoms of Use
- Problems with attention, learning, and memory; dreamlike states, hallucinations; sedation; confusion and problems speaking; memory loss; stiffening of the muscles and numbness; problems moving, to the point of being immobile; increased blood pressure; nausea; unconsciousness; slowed breathing (respiratory depression) that can lead to death.

### Long-term Consequences of Use and Health Effects
- Ulcers and pain in the bladder; kidney problems; stomach pain; depression; flashbacks; and poor memory.

### Other Health-related Issues
- Sometimes used as a date rape drug.
- Risk of HIV, hepatitis, and other infectious diseases from shared needles.

### In Combination with Alcohol
- Increased risk of adverse effects.

### Withdrawal Symptoms
- Unknown.

### Medical Use
- Used as an anesthetic agent.

## Treatment Options

### Medications
- There are no FDA-approved medications to treat addiction to ketamine or other dissociative drugs.

### Behavioral Therapies
- More research is needed to determine if behavioral therapies can be used to treat addiction to dissociative drugs.

## Statistics as of 2015

### Prevalence
- **Lifetime:** 3.0 million persons (1.1%) aged 12 or older have used ketamine in their lifetime.
- **Past Year:** Data not collected.

### Average Age of Initiation
- Hallucinogens in general: 19.6

---

# LSD (lysergic acid diethylamide)

A hallucinogen manufactured from lysergic acid, which is found in ergot, a fungus that grows on rye and other grains. LSD is an abbreviation of the scientific name *lysergic acid diethylamide*.\(^i\)

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial uses</td>
<td>Acid, Blotter, Blue Heaven, Cubes, Microdot, Yellow Sunshine, A, Windowpane</td>
<td>Tablet; capsule; clear liquid; small, decorated squares of absorbent paper that liquid has been added to</td>
<td>Ingested, absorbed through mouth tissues (paper squares)</td>
<td>Schedule I / Illegal</td>
</tr>
</tbody>
</table>

## Uses & Possible Health Effects\(^i\)

### Short-term Symptoms of Use
- Rapid mood swings; distortion of a person's ability to recognize reality, think rationally, or communicate with others; raised blood pressure, heart rate, body temperature; dizziness and insomnia; loss of appetite; dry mouth; sweating; numbness; weakness; tremors; enlarged pupils; and impulsive behavior.

### Long-term Consequences of Use and Health Effects
- Frightening flashbacks (called Hallucinogen Persisting Perception Disorder [HPPD]); ongoing visual disturbances, disorganized thinking, paranoia, mood swings; and prolonged depression.

### Other Health-related Issues
- Unknown.

### In Combination with Alcohol
- May decrease the perceived effects of alcohol.

### Withdrawal Symptoms
- Unknown.

## Treatment Options\(^i\)

### Medications
- There are no FDA-approved medications to treat addiction to LSD or other hallucinogens.

### Behavioral Therapies
- More research is needed to determine if behavioral therapies can be used to treat addiction to hallucinogens.

## Statistics as of 2015\(^iv\)

### Prevalence
- **Lifetime:** 25.3 million persons (9.5%) aged 12 or older have used LSD in their lifetime.
- **Past Year:** 1.5 million persons (0.6%) aged 12 or older have used LSD in the past year.

### Average Age of Initiation
- 19.6

---

\(^i\) Source: NIDA, (2016).
\(^iii\) Source: NIDA, (2016).
Marijuana (Cannabis)

Marijuana is Cannabis sativa, a plant with psychoactive properties. The main psychoactive (mind-altering) chemical in marijuana is delta-9-tetrahydrocannabinol, or THC.¹

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various brand names in states where the sale of marijuana is legal</td>
<td>Marijuana: Blunt, Bud, Dope, Ganja, Grass, Green, Herb, Joint, Mary Jane, Pot, Reefer, Sinsemilla, Skunk, Smoke, Trees, Weed Hashish: Boom, Gangster, Hash, Hemp, THC</td>
<td>Greenish-gray mixture of dried, shredded leaves, stems, seeds, and/or flowers; resin (hashish) or sticky, black liquid (hash oil)</td>
<td>Smoked, ingested (mixed in food or brewed as tea)</td>
<td>Schedule I / Illegal¹ for both marijuana and THC, the active ingredient in marijuana, which is listed separately from marijuana. Marinol®, containing THC as synthetically-derived dronabinol, is an FDA-approved drug product, controlled in Schedule III / Legal by prescription only</td>
</tr>
</tbody>
</table>

Uses & Possible Health Effects²

| Short-term Symptoms of Use | Enhanced sensory perception and euphoria followed by drowsiness/relaxation; disinhibition, increased sociability; dry mouth; slowed reaction time; time distortion; impaired balance and coordination; increased heart rate and appetite; decreased blood pressure; problems with learning and memory; heightened imagination, hallucinations and delusions; anxiety; panic attacks; and psychosis. |
| Long-term Consequences of Use and Health Effects | Mental health problems, chronic cough, frequent respiratory infections, increased risk for cancer, and suppression of the immune system. |
| Other Health-related Issues | Breathing problems and increased risk of cancer of the head, neck, lungs, and respiratory tract. Youth: Possible loss of IQ points when repeated use begins in adolescence. Pregnancy-related: Babies born with problems with attention, memory, and problem solving. |
| In Combination with Alcohol | Increased heart rate, blood pressure; further slowing of mental processing and reaction time. |
| Withdrawal Symptoms | Irritability, trouble sleeping, decreased appetite, anxiety. |
| Medical Uses | Marinol® is indicated for the treatment of:  
  • Anorexia associated with weight loss in patients with AIDS; and  
  • Nausea and vomiting associated with cancer chemotherapy in patients who have failed to respond adequately to conventional antiemetic treatments. |

Treatment Options³

| Medications | There are no FDA-approved medications to treat marijuana addiction. |
| Behavioral Therapies |  
  • Behavioral treatments tested with adolescents  
  • Cognitive-behavioral therapy (CBT)  
  • Contingency management, or motivational incentives  
  • Motivational Enhancement Therapy (MET) |
<table>
<thead>
<tr>
<th>Marijuana (Cannabis) Statistics as of 2015*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevalence</strong></td>
</tr>
<tr>
<td>Lifetime: 117.9 million persons (44.0%) aged 12 or older have used marijuana in their lifetime.</td>
</tr>
<tr>
<td>Past Year: 36.0 million persons (13.5%) aged 12 or older have used marijuana in the past year.</td>
</tr>
<tr>
<td><strong>Average Age of Initiation</strong></td>
</tr>
<tr>
<td>19.0</td>
</tr>
</tbody>
</table>


ii. As of this writing, 25 states and the District of Columbia have legalized medical marijuana use, four states have legalized retail marijuana sales, and the District of Columbia has legalized personal use and home cultivation (both medical and recreational). See Chapter 3 - Prevention Programs and Policies for more detail on this issue.


MDMA (Ecstasy)

**A synthetic, psychoactive drug that has similarities to both the stimulant amphetamine and the hallucinogen mescaline. MDMA is an abbreviation of the scientific name 3,4-methylenedioxy-methamphetamine.**

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial uses</td>
<td>Adam, Clarity, Eve, Lover’s Speed, Peace, Uppers, E, X, XTC, Molly</td>
<td>Colorful tablets with imprinted logos, capsules, powder, liquid</td>
<td>Ingested, snorted</td>
<td>Schedule I / Illegal</td>
</tr>
</tbody>
</table>

### Uses & Possible Health Effects

<table>
<thead>
<tr>
<th><strong>Short-term Symptoms of Use</strong></th>
<th>Lowered inhibition and coordination; sleep disturbances; enhanced sensory perception; confusion; depression; sleep problems; anxiety; increased heart rate and blood pressure; muscle tension; teeth clenching; increased motor activity, alertness; nausea; blurred vision; faintness; chills or sweating; sharp rise in body temperature leading to liver, kidney, or heart failure and death.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Long-term Consequences of Use and Health Effects</strong></td>
<td>Long-lasting confusion; depression; damage to the serotonin system; problems with attention, memory, and sleep; increased anxiety, impulsiveness, and aggression; loss of appetite; and less interest in sex.</td>
</tr>
<tr>
<td><strong>Other Health-related Issues</strong></td>
<td>Unknown.</td>
</tr>
<tr>
<td><strong>In Combination with Alcohol</strong></td>
<td>May increase the risk of cell and organ damage.</td>
</tr>
<tr>
<td><strong>Withdrawal Symptoms</strong></td>
<td>Fatigue, loss of appetite, depression, and trouble concentrating.</td>
</tr>
</tbody>
</table>

### Treatment Options

- **Medications**: There is conflicting evidence about whether MDMA is addictive. There are no FDA-approved medications to treat MDMA addiction.
- **Behavioral Therapies**: More research is needed to determine if behavioral therapies can be used to treat potential MDMA addiction.

### Statistics as of 2015

- **Prevalence**
  - **Lifetime**: 18.3 million persons (6.8%) aged 12 or older have used ecstasy in their lifetime.
  - **Past Year**: 2.6 million persons (1.0%) aged 12 or older have used ecstasy in the past year.

- **Average Age of Initiation**: 20.7

---

Mescaline (Peyote)

A hallucinogen found in disk-shaped “buttons” in the crown of several cacti, including peyote, and can also be created synthetically.

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial uses</td>
<td>Buttons, Cactus, Mesc, Peyote</td>
<td>Fresh or dried buttons, capsule</td>
<td>Ingested (chewed or soaked in water and drunk) or smoked</td>
<td>Schedule I / Illegal</td>
</tr>
</tbody>
</table>

**Uses & Possible Health Effects**

<table>
<thead>
<tr>
<th>Short-term Symptoms of Use</th>
<th>Enhanced perception and feeling; hallucinations; euphoria; anxiety; increased body temperature, heart rate, blood pressure; sweating; headaches; and impaired motor coordination.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Consequences of Use and Health Effects</td>
<td>Unknown.</td>
</tr>
<tr>
<td>Other Health-related Issues</td>
<td>Unknown.</td>
</tr>
<tr>
<td>In Combination with Alcohol</td>
<td>Unknown.</td>
</tr>
<tr>
<td>Withdrawal Symptoms</td>
<td>Unknown.</td>
</tr>
</tbody>
</table>

**Treatment Options**

- **Medications**: There are no FDA-approved medications to treat addiction to mescaline or other hallucinogens.
- **Behavioral Therapies**: More research is needed to determine if behavioral therapies can be used to treat addiction to hallucinogens.

**Statistics as of 2015**

- **Prevalence**:  
  - Lifetime: 8.0 million persons (3.0%) aged 12 or older have used mescaline in their lifetime.  
  - Peyote: 5.5 million persons (2.0%) aged 12 or older have used peyote in their lifetime.  
  - Past Year: 4.7 million persons (1.8%) aged 12 or older have used hallucinogens in the past year.

- **Average Age of Initiation**: Hallucinogens in general: 19.6

---

# Methamphetamine

An extremely addictive stimulant amphetamine drug.¹

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desoxyn®</td>
<td>Crank, Chalk, Crystal, Fire, Glass, Go Fast, Ice, Meth, Speed</td>
<td>White powder or pill; crystal meth looks like pieces of glass or shiny blue-white &quot;rocks&quot; of different sizes</td>
<td>Ingested, snorted, smoked, injected</td>
<td>Schedule II / Illegal (except for Desoxyn® by prescription only)</td>
</tr>
</tbody>
</table>

## Uses & Possible Health Effects

### Short-term Symptoms of Use
- Increased wakefulness and physical activity; decreased appetite; hyperthermia; increased breathing, heart rate, blood pressure, temperature; irregular heartbeat; and death from cardiac arrest, stroke, or suicide.

### Long-term Consequences of Use and Health Effects
- Anxiety, confusion, insomnia, mood problems, violent behavior, paranoia, hallucinations, delusions, weight loss, severe dental problems ("meth mouth"), memory loss, intense itching leading to skin sores from scratching and high-risk for addiction.

### Other Health-related Issues
- Sharing needles increases the risk of contracting infectious diseases like HIV and Hepatitis B and C.
- Pregnancy-related: premature delivery; separation of the placenta from the uterus; low birth weight; lethargy; heart and brain problems.

### In Combination with Alcohol
- Masks the depressant effect of alcohol, increasing risk of alcohol overdose; may increase blood pressure and jitters.

### Withdrawal Symptoms
- Depression, anxiety, tiredness.

### Medical Uses
- Desoxyn® is indicated for the treatment of:
  - Attention Deficit Disorder with Hyperactivity
  - Exogenous Obesity

## Treatment Options

### Medications
- There are no FDA-approved medications to treat methamphetamine addiction.

### Behavioral Therapies
- Cognitive-behavioral therapy (CBT)
- Contingency management or motivational incentives
- The Matrix Model
- 12-Step facilitation therapy

## Statistics as of 2015

### Prevalence
- Lifetime: 14.5 million persons (5.4%) aged 12 or older have used methamphetamine in their lifetime.
- Methamphetamine needle use: 1.9 million persons (0.7%)
- Past Year: 1.7 million persons (0.6%) aged 12 or older have used methamphetamine in the past year.

### Average Age of Initiation
- 25.8

---

¹ Source: NIDA, (2016).
Over-the-counter Cough/Cold Medicines (Dextromethorphan or DXM)

*Psychoactive when taken in higher-than-recommended amounts.*

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various (many brand names include “DM”)</td>
<td>Robotripping, Robo, Triple C</td>
<td>Suspension, capsule</td>
<td>Ingested</td>
<td>Cough medicines with codeine are Schedule V. DXM is not Scheduled and is an over-the-counter medication</td>
</tr>
</tbody>
</table>

**Uses & Possible Health Effects**

**Short-term Symptoms of Use**
- Euphoria; slurred speech; increased heart rate, blood pressure, and body temperature; numbness; dizziness; nausea; vomiting; confusion; hallucinations; paranoia; agitation; altered visual perceptions; loss of coordination, problems with movement; buildup of excess acid in body fluids; liver damage; seizures; and coma.

**Long-term Consequences of Use and Health Effects**
- Unknown.

**Other Health-related Issues**
- Breathing problems, seizures, and increased heart rate may occur from other ingredients in cough/cold medicines.

**In Combination with Alcohol**
- Increased risk of adverse effects.

**Withdrawal Symptoms**
- Unknown.

**Medical Use**
- Used for cough suppression.

**Treatment Options**

**Medications**
- There are no FDA-approved medications to treat addiction to over-the-counter cough/cold medicines.

**Behavioral Therapies**
- More research is needed to determine if behavioral therapies can be used to treat addiction to over-the-counter cough/cold medicines.

**Statistics as of 2015**

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Average Age of Initiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime: Data not collected.</td>
<td>Stimulants in general: 22.3</td>
</tr>
<tr>
<td>Past Year: Data not collected.</td>
<td></td>
</tr>
</tbody>
</table>

**PCP (Phencyclidine)**

*A dissociative drug developed as an intravenous anesthetic that has been discontinued due to serious adverse effects. Dissociative drugs are hallucinogens that cause the user to feel detached from reality.*

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial uses</td>
<td>Angel Dust, Boat, Hog, Love Boat, Peace Pill, Angel Mist</td>
<td>White or colored powder, tablet, or capsule; clear liquid</td>
<td>Injected, snorted, ingested, smoked (powder added to mint, parsley, oregano, or marijuana)</td>
<td>Schedule I, II / Illegal</td>
</tr>
</tbody>
</table>

**Uses & Possible Health Effects**

**Short-term Symptoms of Use**
- Delusions, hallucinations, paranoia, problems thinking, a sense of distance from one’s environment, anxiety.
- **Low doses:** slight increase in pulse and breathing rate; increased blood pressure and heart rate; shallow breathing; face redness and sweating; numbness of the hands or feet; and loss of coordination.
- **High doses:** lowered blood pressure, heart rate, and breathing; nausea; vomiting; blurred vision; flicking up and down of the eyes; drooling; loss of balance; dizziness; violence; suicidal thoughts; seizures, coma, and death.

**Long-term Consequences of Use and Health Effects**
- Memory loss, problems with speech and thinking, depression, psychosis, weight loss, anxiety.

**Other Health-related Issues**
- PCP has been linked to self-injury.
- Risk of HIV, hepatitis, and other infectious diseases from shared needles.

**In Combination with Alcohol**
- Increased risk of coma.

**Withdrawal Symptoms**
- Headaches and sweating.

**Treatment Options**

**Medications**
- There are no FDA-approved medications to treat addiction to PCP or other dissociative drugs.

**Behavioral Therapies**
- More research is needed to determine if behavioral therapies can be used to treat addiction to dissociative drugs.

**Statistics as of 2015**

**Prevalence**
- *Lifetime:* 6.3 million persons (2.4%) aged 12 or older have used PCP in their lifetime.
- *Past Year:* 120,000 persons (<0.1%) aged 12 or older have used PCP in the past year.

**Average Age of Initiation**
- 15.3

---

Prescription Opioids

*Pain relievers with an origin similar to that of heroin. Opioids can cause euphoria and are sometimes used nonmedically, leading to overdose deaths.*

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine (various brand names)</td>
<td>Captain Cody, Cody, Lean, Schoolboy, Sizzurp, Purple Drank With glutethimide: Doors &amp; Fours, Loads, Pancakes and Syrup</td>
<td>Tablet, capsule, liquid</td>
<td>Injected, ingested (often mixed with soda and flavorings)</td>
<td>Schedule II, III, V / Legal by prescription only</td>
</tr>
<tr>
<td>Fentanyl (Actiq®, Duragesic®, Sublimaze®)</td>
<td>Apache, China Girl, China White, Dance Fever, Friend, Goodfella, Jackpot, Murder 8, Tango and Cash, TNT</td>
<td>Lozenge, sublingual tablet, film, buccal tablet</td>
<td>Injected, smoked, snorted</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
<tr>
<td>Hydrocodone or dihydrocodeinone (Vicodin®, Lortab®, Lorcet®, and others)</td>
<td>Vike, Watson-387</td>
<td>Capsule, liquid, tablet</td>
<td>Ingested, snorted, injected</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
<tr>
<td>Hydromorphone (Dilaudid®)</td>
<td>D, Dillies, Footballs, Juice, Smack</td>
<td>Liquid, suppository</td>
<td>Injected, rectally inserted</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
<tr>
<td>Meperidine (Demerol®)</td>
<td>Demmies, Pain Killer</td>
<td>Tablet, liquid</td>
<td>Ingested, snorted, injected</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
<tr>
<td>Methadone (Dolophine®)</td>
<td>Amidone, Fizzes With MDMA: Chocolate Chip Cookies</td>
<td>Tablet</td>
<td>Ingested, injected</td>
<td>Schedule II / Legal by prescription only for pain indication</td>
</tr>
<tr>
<td>Morphine, various brand names</td>
<td>M, Miss Emma, Monkey, White Stuff</td>
<td>Tablet, liquid, capsule, suppository</td>
<td>Ingested, injected, smoked</td>
<td>Schedule II, III / Legal by prescription only</td>
</tr>
<tr>
<td>Oxycodone (OxyContin®, Percodan®, Percocet®, and others)</td>
<td>O.C., Oxycet, Oxycotton, Oxy, Hillbilly Heroin, Percs</td>
<td>Capsule, liquid, tablet</td>
<td>Ingested, snorted, injected</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
<tr>
<td>Oxymorphone (Opana®)</td>
<td>Biscuits, Blue Heaven, Blues, Mrs. O, O Bomb, Octagons, Stop Signs</td>
<td>Tablet</td>
<td>Ingested, snorted, injected</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
</tbody>
</table>

# Prescription Opioids

## Uses & Possible Health Effects

### Short-term Symptoms of Use
- Pain relief, drowsiness, nausea, constipation, altered judgment and decision making, sedation, euphoria, confusion, clammy skin, muscle weakness, slowed breathing, lowered heart rate and blood pressure, coma, heart failure, and death.
- For oxycodone specifically: Pain relief, sedation, respiratory depression, constipation, papillary constriction, and cough suppression.
- For fentanyl specifically: Fentanyl is about 100 times more potent than morphine as an analgesic and results in frequent overdoses.

### Long-term Consequences of Use and Health Effects
- Heart or respiratory problems. Extended or chronic use of oxycodone containing acetaminophen may cause severe liver damage. Abuse of opioid medications can lead to psychological dependence.

### Other Health-related Issues
- Pregnancy-related: Miscarriage, low birth weight, neonatal abstinence syndrome.
- Older adults: higher risk of accidental misuse or abuse because many older adults have multiple prescriptions, increasing the risk of drug-drug interactions, and breakdown of drugs slows with age; also, many older adults are treated with prescription medications for pain.
- Risk of HIV, hepatitis, and other infectious diseases from shared needles.

### In Combination with Alcohol
- Dangerous slowing of heart rate and breathing leading to coma or death.

### Withdrawal Symptoms
- Restlessness, anxiety, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes with goose bumps, and muscle tremors.

### Medical Use
- Used for pain relief. Methadone is also used to treat opioid use disorders.

## Treatment Options

### Medications
- Methadone
- Buprenorphine
- Naltrexone (oral and extended-release injectable)

### Behavioral Therapies
- Behavioral therapies that have helped treat addiction to heroin may be useful in treating prescription opioid addiction.

## Statistics as of 2015

### Prevalence
- **Lifetime:** 36 million persons (13.6%) aged 12 or older have misused pain relievers in their lifetime.
- **Past Year:** 12.5 million persons (4.7%) aged 12 or older have misused pain relievers in the past year.
  - **OxyContin®:** 1.7 million persons (0.7%) aged 12 or older have used OxyContin® non-medically in the past year.

### Average Age of Initiation
- Prescription Opioids: 25.8

---

**Sources:**
- NIDA, (2016).
### Prescription Sedatives (Tranquilizers, Depressants)

*Medications that slow brain activity, which makes them useful for treating anxiety and sleep problems.*

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbiturates: pentobarbital (Nembutal®), phenobarbital (Luminal®)</td>
<td>Barbs, Phennies, Red Birds, Reds, Tooies, Yellow Jackets, Yellows</td>
<td>Pill, capsule, liquid</td>
<td>Ingested, injected</td>
<td>Schedule II, III, IV / Legal by prescription only</td>
</tr>
<tr>
<td>Benzodiazepines: alprazolam (Xanax®), chlorodiazepoxide (Limbitor®), diazepam (Valium®), lorazepam (Ativan®), triazolam (Halcon®)</td>
<td>Candy, Downers, Sleeping Pills, Tranks</td>
<td>Pill, capsule, liquid</td>
<td>Ingested, snorted</td>
<td>Schedule IV / Legal by prescription only</td>
</tr>
<tr>
<td>Sleep Medications: eszopiclone (Lunesta®), zaleplon (Sonata®), zolpidem (Ambien®)</td>
<td>Forget-me Pill, Mexican Valium, R2, Roche, Roofies, Roofinol, Rope, Rophies</td>
<td>Pill, capsule, liquid</td>
<td>Ingested, snorted</td>
<td>Schedule IV / Legal by prescription only</td>
</tr>
</tbody>
</table>

### Uses & Possible Health Effects

#### Short-term Symptoms of Use
- Drowsiness, sedation; slurred speech; poor concentration, confusion, dizziness; clammy skin; impaired judgment, coordination and memory; reduced anxiety; lowered blood pressure; slowed breathing and central nervous system; coma, and death.

#### Long-term Consequences of Use and Health Effects
- Increased risk of respiratory distress.

#### Other Health-related Issues
- Sleep medications are sometimes used as date rape drugs.
- Risk of HIV, hepatitis, and other infectious diseases from shared needles.

#### In Combination with Alcohol
- Dangerous slowdown of heart rate and breathing, coma, and death.

#### Withdrawal Symptoms
- Must be discussed with a health care professional; barbiturate withdrawal can cause a serious abstinence syndrome that may even include seizures.

#### Medical Use
- For tranquilization, sedation, and sleep.

### Treatment Options

#### Medications
- There are no FDA-approved medications to treat addiction to prescription sedatives; lowering the dose over time must be done with the help of a health care professional.

#### Behavioral Therapies
- More research is needed to determine if behavioral therapies can be used to treat addiction to prescription sedatives.

### Statistics as of 2015

#### Prevalence
- **Lifetime:** Data not collected.
- **Past Year:**
  - 1.5 million persons (0.6%) aged 12 or older have misused sedatives in the past year.
  - 6.1 million persons (2.3%) aged 12 or older have misused tranquilizers in the past year.

#### Average Age of Initiation
- Sedatives: 28.3
- Tranquilizers: 25.9

---

Prescription Stimulants

Medications that increase alertness, attention, energy, blood pressure, heart rate, and breathing rate.\(^1\)

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amphetamine (Adderall®, Benzedrine®)</td>
<td>Bennies, Black Beauties, Crosses, Hearts, LA Turnaround, Speed, Truck Drivers, Uppers</td>
<td>Tablet, capsule</td>
<td>Ingested, snorted, smoked, injected</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
<tr>
<td>Methylphenidate (Concerta®, Ritalin®)</td>
<td>JIF, MPH, R-ball, Skippy, The Smart Drug, Vitamin R</td>
<td>Liquid, tablet, chewable tablet, capsule</td>
<td>Ingested, snorted, smoked, injected, chewed</td>
<td>Schedule II / Legal by prescription only</td>
</tr>
</tbody>
</table>

Uses & Possible Health Effects\(^i\)

**Short-term Symptoms of Use**
- Increased alertness, attention, energy; euphoria; insomnia, wakefulness; increased blood pressure and body temperature, metabolism, and heart rate; narrowed blood vessels; increased blood sugar; agitation; opened-up breathing passages; and violent and erratic behavior.
- High doses: dangerously high body temperature and irregular heartbeat; seizures; and death from heart failure or suicide.
- For amphetamines specifically: Paranoia, picking at the skin, preoccupation with one’s own thoughts, and auditory and visual hallucinations.

**Long-term Consequences of Use and Health Effects**
- Heart problems, psychosis, anger, paranoia, addiction, and chronic sleep problems.

**Other Health-related Issues**
- Risk of HIV, hepatitis, and other infectious diseases from shared needles.

**In Combination with Alcohol**
- Masks the depressant action of alcohol, increasing risk of alcohol overdose; may increase blood pressure and jitters.

**Withdrawal Symptoms**
- Depression, tiredness, and sleep problems.

**Medical Use\(^ii\)**
- For narcolepsy, obesity, and hyperkinesis.

**Treatment Options\(^iv\)**
- Medications: There are no FDA-approved medications to treat stimulant addiction.
- Behavioral Therapies: Behavioral therapies that have helped treat addiction to cocaine or methamphetamine may be useful in treating prescription stimulant addiction.

**Statistics as of 2015\(^v\)**
- **Prevalence**
  - *Lifetime:* Data not collected.
  - *Past Year:* 5.3 million (2.0%) aged 12 or older have misused stimulants in the past year.
- **Average Age of Initiation**
  - Stimulants in general: 22.3

---

\(^i\) Source: NIDA, (2016).


\(^iv\) Source: NIDA, (2016).

Psilocybin
A hallucinogen in certain types of mushrooms that grow in parts of South America, Mexico, and the United States.\(^i\)

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial uses</td>
<td>Little Smoke, Magic Mushrooms, Purple Passion, Shrooms</td>
<td>Fresh or dried mushrooms with long, slender stems topped by caps with dark gills</td>
<td>Ingested (eaten, brewed as tea, or added to other foods)</td>
<td>Schedule I / Illegal</td>
</tr>
</tbody>
</table>

**Uses & Possible Health Effects\(^i\)**

<table>
<thead>
<tr>
<th>Short-term Symptoms of Use</th>
<th>Hallucinations, altered perception of time, inability to tell fantasy from reality, panic, muscle relaxation or weakness, loss of coordination, enlarged pupils, nausea, vomiting, and drowsiness.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Consequences of Use and Health Effects</td>
<td>Risk of flashbacks, psychosis, and memory problems.</td>
</tr>
<tr>
<td>Other Health-related Issues</td>
<td>Risk of poisoning if a poisonous mushroom is accidentally used.</td>
</tr>
<tr>
<td>In Combination with Alcohol</td>
<td>May decrease the perceived effects of alcohol.</td>
</tr>
<tr>
<td>Withdrawal Symptoms</td>
<td>Unknown.</td>
</tr>
</tbody>
</table>

**Treatment Options\(^i\)**

<table>
<thead>
<tr>
<th>Medications</th>
<th>It is not known whether psilocybin is addictive. There are no FDA-approved medications to treat addiction to psilocybin or other hallucinogens.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Therapies</td>
<td>More research is needed to determine if psilocybin is addictive and whether behavioral therapies can be used to treat addiction to this or other hallucinogens.</td>
</tr>
</tbody>
</table>

**Statistics as of 2014\(^iv\)**

<table>
<thead>
<tr>
<th>Prevalence</th>
<th><em>Lifetime</em>: 22.8 million persons (8.5%) aged 12 or older have used psilocybin in their lifetime.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Past Year</em>: Data not collected.</td>
</tr>
<tr>
<td>Average Age of Initiation</td>
<td>Hallucinogens in general: 19.6</td>
</tr>
</tbody>
</table>

\(^i\) Source: NIDA, (2016).


\(^iii\) Source: NIDA, (2016).

**Rohypnol® (Flunitrazepam)**

A benzodiazepine chemically similar to prescription sedatives such as Valium® and Xanax®. Teens and young adults tend to abuse this drug at bars, nightclubs, concerts, and parties. It has been used to commit sexual assaults due to its ability to sedate and incapacitate unsuspecting victims.¹

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flunitrazepam, Rohypnol®</td>
<td>Circles, Date Rape Drug, Forget Pill, Forget-Me Pill, La Rocha, Lunch Money, Mexican Valium, Mind Eraser, Pingus, R2, Reynolds, Rib, Roach, Roach 2, Roaches, Roachies, Roapies, Rochas Dos, Roofies, Rope, Rophies, Row-Shay, Ruffies, Trip-and-Fall, Wolfies</td>
<td>Tablet</td>
<td>Ingested (as a pill or as dissolved in a drink), snorted</td>
<td>Schedule IV / Rohypnol® is not approved for medical use in the United States; it is available as a prescription sleep aid in other countries</td>
</tr>
</tbody>
</table>

### Uses & Possible Health Effects

#### Short-term Symptoms of Use

Drowsiness, sedation, sleep; amnesia, blackout; decreased anxiety; muscle relaxation, impaired reaction time and motor coordination; impaired mental functioning and judgment; confusion; aggression; excitability; slurred speech; headache; slowed breathing and heart rate.

#### Long-term Consequences of Use and Health Effects

Physical and psychological dependence; cardiovascular collapse; and death

#### Other Health-related Issues

Sometimes used as a date rape drug.

#### In Combination with Alcohol

Exaggerated intoxication, severe sedation, unconsciousness, and slowed heart rate and breathing, which can lead to death.

#### Withdrawal Symptoms

Headache; muscle pain; extreme anxiety, tension, restlessness, confusion, irritability; numbness and tingling of hands or feet; hallucinations, delirium, convulsions, seizures, or shock.

### Treatment Options

- **Medications**: There are no FDA-approved medications to treat addiction to Rohypnol® or other prescription sedatives.
- **Behavioral Therapies**: More research is needed to determine if behavioral therapies can be used to treat addiction to Rohypnol® or other prescription sedatives.

### Statistics as of 2015

- **Prevalence**
  - Lifetime: Data not collected.
  - Past Year: Data not collected.

- **Average Age of Initiation**
  - Sedatives in general: 23.4

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¹ Source: NIDA, (2016).


³ Source: Rohypnol Abuse Treatment, (n.d.).

⁴ Source: NIDA, (2016).

A dissociative drug (Salvia divinorum) that is an herb in the mint family native to southern Mexico. Dissociative drugs are hallucinogens that cause the user to feel detached from reality.¹

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sold legally in most states as Salvia divinorum</td>
<td>Magic mint, Maria Pastora, Sally-D, Shepherdess’s Herb, Diviner’s Sage</td>
<td>Fresh or dried leaves</td>
<td>Smoked, chewed, or brewed as tea</td>
<td>Not scheduled; labeled drug of concern by DEA / Illegal in some states</td>
</tr>
</tbody>
</table>

### Uses & Possible Health Effects²

<table>
<thead>
<tr>
<th>Short-term Symptoms of Use</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-lived but intense hallucinations; loss of coordination, dizziness, slurred speech; altered visual perception, mood, body sensations; mood swings, feelings of detachment from one’s body; sweating; uncontrollable laughter; and paranoia.</td>
<td>Uses &amp; Possible Health Effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-term Consequences of Use and Health Effects</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown.</td>
<td>Uses &amp; Possible Health Effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Health-related Issues</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown.</td>
<td>Uses &amp; Possible Health Effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>In Combination with Alcohol</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown.</td>
<td>Uses &amp; Possible Health Effects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Withdrawal Symptoms</th>
<th>Uses &amp; Possible Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown.</td>
<td>Uses &amp; Possible Health Effects</td>
</tr>
</tbody>
</table>

### Treatment Options³

<table>
<thead>
<tr>
<th>Medications</th>
<th>Treatment Options³</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is not known whether salvia is addictive. There are no FDA-approved medications to treat addiction to salvia or other dissociative drugs.</td>
<td>Treatment Options³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavioral Therapies</th>
<th>Treatment Options³</th>
</tr>
</thead>
<tbody>
<tr>
<td>More research is needed to determine if salvia is addictive, but behavioral therapies can be used to treat addiction to dissociative drugs.</td>
<td>Treatment Options³</td>
</tr>
</tbody>
</table>

### Statistics as of 2015⁴

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Statistics as of 2015⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime: 5.1 million persons (1.9%) aged 12 or older have used salvia in their lifetime. Past Year: Data not collected.</td>
<td>Statistics as of 2015⁴</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average Age of Initiation</th>
<th>Statistics as of 2015⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hallucinogens in general: 19.6</td>
<td>Statistics as of 2015⁴</td>
</tr>
</tbody>
</table>

---

Steroids (Anabolic)

*Man-made substances used to treat conditions caused by low levels of steroid hormones in the body and abused to enhance athletic and sexual performance and physical appearance.*

<table>
<thead>
<tr>
<th>Common Commercial Names</th>
<th>Street Names</th>
<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nandrolone (Oxandrin®), oxandrolone (Anadrol®), oxymetholone (Winstrol®), stanozolol (Durabolin®), testosterone cypionate (Depo-testosterone®)</td>
<td>Juice, Gym Candy, Pumpers, Roids</td>
<td>Tablet, capsule, liquid drops, gel, cream, patch, injectable solution</td>
<td>Injected, ingested, applied to skin</td>
<td>Schedule III / Legal by prescription only</td>
</tr>
</tbody>
</table>

**Uses & Possible Health Effects**

<table>
<thead>
<tr>
<th><strong>Short-term Symptoms of Use</strong></th>
<th><strong>Long-term Consequences of Use and Health Effects</strong></th>
<th><strong>Other Health-related Issues</strong></th>
<th><strong>In Combination with Alcohol</strong></th>
<th><strong>Withdrawal Symptoms</strong></th>
<th><strong>Medical Use</strong></th>
<th><strong>Treatment Options</strong></th>
</tr>
</thead>
</table>
| Headache, acne, fluid retention (especially in the hands and feet), oily skin, yellowing of the skin and whites of the eyes, and infection at the injection site. | Kidney damage or failure; liver damage; high blood pressure, enlarged heart, or changes in cholesterol leading to increased risk of stroke or heart attack, even in young people; hostility and aggression; extreme mood swings; anger (“roid rage”); paranoid jealousy; extreme irritability; delusions; impaired judgment. | Risk of HIV, hepatitis, and other infectious diseases from shared needles.  
*Males*: shrunken testicles, lowered sperm count, infertility, baldness, development of breasts, increased risk for prostate cancer.  
*Females*: facial hair, male-pattern baldness, menstrual cycle changes, enlargement of the clitoris, deepened voice.  
*Adolescents*: stunted growth. | Increased risk of violent behavior. | Mood swings; tiredness; restlessness; loss of appetite; insomnia; lowered sex drive; depression, sometimes leading to suicide attempts. | Used to treat conditions caused by low levels of steroid hormones in the body. | Hormone therapy  
More research is needed to determine if behavioral therapies can be used to treat steroid addiction. |

**Statistics as of 2015**

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Data not collected.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age of Initiation</td>
<td>Data not collected.</td>
</tr>
</tbody>
</table>

---


Synthetic Cannabinoids ("K2"/"Spice")

A wide variety of herbal mixtures containing man-made cannabinoid chemicals related to THC in marijuana but often much stronger and more dangerous. Sometimes misleadingly called “synthetic marijuana” and marketed as a “natural,” “safe,” legal alternative to marijuana.

<table>
<thead>
<tr>
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<th>Common Forms</th>
<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial uses</td>
<td>K2, Spice, Black Mamba, Bliss, Bombay Blue, Fake Weed, Fire, Genie, Moon Rocks, Skunk, Smacked, Yucatan, Zohai</td>
<td>Dried, shredded plant material that looks like potpourri and is sometimes sold as “incense”</td>
<td>Smoked, ingested (brewed as tea)</td>
<td>Schedule I</td>
</tr>
</tbody>
</table>

Uses & Possible Health Effects

<table>
<thead>
<tr>
<th>Short-term Symptoms of Use</th>
<th>Increased heart rate and blood pressure; vomiting; agitation; confusion; hallucinations, anxiety, paranoia; euphoria, relaxation; headache; numbness and tingling; reduced blood supply to the heart; heart attack; and seizures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term Consequences of Use and Health Effects</td>
<td>Kidney damage and psychosis.</td>
</tr>
<tr>
<td>Other Health-related Issues</td>
<td>Use of synthetic cannabinoids has led to an increase in emergency department visits in certain areas.</td>
</tr>
<tr>
<td>In Combination with Alcohol</td>
<td>Unknown.</td>
</tr>
<tr>
<td>Withdrawal Symptoms</td>
<td>Headaches, anxiety, depression, irritability.</td>
</tr>
</tbody>
</table>

Treatment Options

<table>
<thead>
<tr>
<th>Medications</th>
<th>There are no FDA-approved medications to treat K2/Spice addiction.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Therapies</td>
<td>More research is needed to determine if behavioral therapies can be used to treat synthetic cannabinoid addiction.</td>
</tr>
</tbody>
</table>

Statistics as of 2015

<table>
<thead>
<tr>
<th>Prevalence</th>
<th>Data not collected.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Age of Initiation</td>
<td>Data not collected.</td>
</tr>
</tbody>
</table>

---


**Synthetic Cathinones (“Bath Salts”)**

An emerging family of drugs containing one or more synthetic chemicals related to cathinone, a stimulant found naturally in the khat plant. Examples of such chemicals include mephedrone, methylone, and 3,4-methylenedioxyamphetamine (MDPV).[^i]

<table>
<thead>
<tr>
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<th>Common Ways Taken</th>
<th>DEA Schedule / Legal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>No commercial names for “bath salts”</td>
<td>Bloom, Cloud Nine, Cosmic Blast, Ivory Wave, Lunar Wave, Scarface, Vanilla Sky, White Lightning MDPV and mephedrone: Meow meow, MCAT, drone, plant feeder, bubbles, bliss, blue silk, cloud nine, energy-1, ivory wave, lunar wave, ocean burst, pure ivory, purple wave, red dove, snow leopard, stardust, vanilla sky, white dove, white night, and white lightning</td>
<td>White or brown crystalline powder sold in small plastic or foil packages labeled “not for human consumption” and sometimes sold as jewelry cleaner; tablet, capsule, liquid</td>
<td>Ingested, snorted, injected, ingested, smoked</td>
<td>Schedule I</td>
</tr>
</tbody>
</table>

**Uses & Possible Health Effects[^ii]**

**Short-term Symptoms of Use**

- Increased heart rate and blood pressure; euphoria; increased sociability and sex drive; paranoia, agitation, and hallucinations; psychotic and violent behavior; nosebleeds; sweating; headaches; teeth grinding; nausea, vomiting; insomnia; irritability; dizziness; depression; suicidal thoughts; panic attacks; reduced motor control; and cloudy thinking.

**Long-term Consequences of Use and Health Effects**

- Breakdown of skeletal muscle tissue, kidney failure, psychosis, and death.

**Other Health-related Issues**

- Risk of HIV, hepatitis, and other infectious diseases from injecting with shared needles.

**In Combination with Alcohol**

- Unknown.

**Withdrawal Symptoms**

- Depression, anxiety, problems sleeping, tremors, paranoia.

**Treatment Options[^iii]**

- **Medications**
  - There are no FDA-approved medications to treat addiction to bath salts.

- **Behavioral Therapies**
  - Behavioral treatments geared to teens
  - Cognitive-behavioral therapy (CBT)
  - Contingency management, or motivational incentives
  - Motivational Enhancement Therapy (MET)

**Statistics as of 2015[^iv]**

- **Prevalence**
  - Data not collected.

- **Average Age of Initiation**
  - Data not collected.

---

[^i]: Source: NIDA, (2016).
[^iii]: Source: NIDA, (2016).
References


