# STIMULANTS

## COAST TO FOREST RESOURCES

 Thank you for exploring our fact sheet series. To learn more about substance use and mental health, check out our other <u>fact sheets</u>. To find local resources, check out the <u>Coast</u> <u>to Forest County-Specific Resource Guides</u>. For a variety of national and state-focused resources, please visit our <u>Helplines & Practical Tools page</u>.

## WHAT ARE STIMULANTS?

Stimulants (sometimes called psychostimulants) are a class of drugs that increase central nervous system activity.<sup>1</sup> Stimulants may be prescribed by a healthcare provider for attention deficit hyperactivity disorder (ADHD), narcolepsy, asthma, obesity, or nasal and sinus congestion. Some stimulants are controlled substances in the U.S., meaning that they are regulated by the government and have varying potential to be misused.<sup>2</sup> Examples of stimulants include:

- Amphetamines: Adderall® and Dexedrine®<sup>2</sup>
- Caffeine<sup>2</sup>
- Cocaine<sup>2</sup>
- Diet aids: Didrex®, Bontril®, Preludin®, Fastin®, Adipex P®, Ionomin®, and Meridia®<sup>2</sup>
- Khat<sup>6</sup>
- Methamphetamine<sup>2</sup>
- Methcathinone<sup>2</sup>
- Methylphenidate: Ritalin® and Concerta®<sup>2</sup>
- Nicotine<sup>6</sup>
- Synthetic cathinones<sup>2</sup>

Stimulants are increasingly being contaminated with a synthetic opioid known as fentanyl.<sup>9</sup> This is dangerous as people may be unaware that the stimulants they consume are contaminated. For more information about fentanyl, please check out our Fentanyl Fact Sheet.

# FACTS AND STATISTICS:

National:

- Between 1999 and 2020, overdose deaths involving stimulants increased from 547 to 23,837. These deaths were largely attributed to methamphetamine.<sup>9</sup>
- In 2019, the rate of stimulant-related overdose deaths was 1.4 times higher in rural counties compared to urban counties.<sup>10</sup>

#### Oregon:

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- From 2019-2020 Oregon had the highest rate of methamphetamine use in the United States.<sup>11</sup>
- In Oregon, methamphetamine is involved in 49% of overdose deaths.<sup>12</sup>

#### COMMON NAMES:

 Bennies, Black Beauties, Blue Pill, Cat, Coke, Crank, Crystal, Dexies, Flake, Ice, Lid Poppers, Pellets, Pep Pills, R-Ball, Red Dexies, Red Pep, Rids, Ritties, R Pop, Skippy, Smarties, Snow, Speed, Study Buddies, Uppers, Truck Drivers, Vitamin R, Wake-Ups<sup>2-3</sup>

### FORMS:

- Tablets, pills, capsules<sup>1</sup>
- Powder, chunks, or crystals ranging in color from white to brownish<sup>6</sup>
- Liquid that may be consumed orally, via injection or suppository<sup>5</sup>

#### HOW STIMULANTS WORK:

Stimulants work by increasing dopamine and norepinephrine activity in the brain.<sup>3</sup> An increase in dopamine can create a feeling of pleasure or euphoria, which can reinforce drug use.<sup>5</sup> An increase in norepinephrine can cause blood vessels to constrict and lead to an increase in blood pressure, heart rate, and blood glucose.<sup>7</sup>

#### SHORT TERM HEALTH EFFECTS:

- Feeling of euphoria or excitement<sup>5</sup>
- Sense of alertness<sup>5</sup>
- Increase in motor activity<sup>5</sup>
- Reduction in appetite<sup>5</sup>
- Insomnia<sup>5</sup>
- Increase in blood pressure and heart rate<sup>4</sup>
- Increase in breathing<sup>4</sup>
- Decrease in blood flow<sup>4</sup>
- Increase in blood sugar<sup>4</sup>
- Overdose<sup>2</sup>

### LONG TERM HEALTH EFFECTS:

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- Overdose<sup>2</sup>
- Paranoia<sup>5</sup>
- Psychosis<sup>5</sup>
- Depression<sup>5</sup>
- Suicidal ideation<sup>5</sup>
- Tolerance, dependence, and stimulant use disorder (StUD):
  - Tolerance: Reduced response to a substance with repeated use, meaning that larger amounts of a substance is needed to create the same effect.<sup>5</sup>
  - Dependence: Adaptation to a substance that produces symptoms of withdrawal when the substance use is halted.<sup>5</sup>
  - Stimulant use disorder: A type of substance use disorder characterized by a pattern of stimulant use that results in significant impairment.<sup>5</sup>

### WITHDRAWAL:

- Symptoms:
  - Fatigue, depression, suicidal ideation, irritability, hallucinations, mood swings, brain fog, sleep disturbances, decreased libido, and sexual dysfunction<sup>8</sup>
- Given the symptoms of withdrawal, a person may need medical supervision to ensure their safety during the process.<sup>14</sup>

## **OVERDOSE & OVERAMPING:**

- Overamping is a term used to describe the equivalent of a stimulant overdose.<sup>8</sup>
- Symptoms:
  - Physical: abnormal blood pressure (high or low), fever, heart attack, irregular heartbeat, muscle pains, nausea, overactive reflexes, rapid breathing, restlessness, seizures, tremors, and weakness<sup>4</sup>
  - Psychological: altered perception of reality, confusion, hallucinations, paranoia, protective behaviors (hypervigilance, fear of persecution, etc.), psychosis<sup>4, 8</sup>
- In the event of a suspected stimulant overdose/overamping:
  - o Call 911
  - o Administer naloxone
    - Given the increasing amount of fentanyl in the stimulant supply, administering naloxone can be an important step.<sup>13</sup> Please note that administering naloxone can only help and will not harm a person if they did not consume fentanyl or another opioid.
  - Administer CPR if breathing has stopped<sup>8</sup>

## STIMULANT USE DISORDER TREATMENT:

- Therapeutic interventions:
  - Cognitive behavioral therapy<sup>5</sup>

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- Contingency management<sup>5</sup>
- Community reinforcement approach<sup>5</sup>
- Motivational interviewing<sup>5</sup>
- Currently there are no medications specifically designed for the treatment of stimulant use disorder, but such medications are in development.<sup>5</sup>

#### NATIONAL RESOURCES:

#### SAMHSA National Helpline: 1-800-662-HELP

• SAMHSA's National Helpline is a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental and/or substance use disorders.

Alcohol and Drug Helpline: 800-923-4357

• A free, confidential 24/7 information and resources helpline. Text service is available Monday-Friday 2-6 pm PST, simply text "RecoveryNow" to 839863.

#### **County-Specific Resources in Oregon:**

For more information and to explore local resources, check out the <u>Coast to Forest County-Specific Resource Guides</u>.

## **REFERENCES:**

- 1. <u>Stimulants</u>
- 2. <u>Stimulants Drug Fact Sheet</u>
- 3. <u>Tips for Teens: The Truth About Stimulants</u>
- 4. <u>Prescription Stimulants DrugFacts</u>
- 5. <u>Treatment Improvement Protocol (TIP) 33: Treatment for Stimulant Use Disorders</u>
- 6. <u>What are stimulants?</u>
- 7. <u>Misuse of Prescription Drugs Research Report: What classes of prescription drugs are commonly misused?</u>
- 8. <u>Stimulants 101</u>
- 9. Drug Overdose Death Rates
- 10. Urban-Rural Differences in Drug Overdose Death Rates, 1999-2019
- 11. <u>2019-2020 National Survey on Drug Use and Health: Model-Based Prevalence Estimates (50</u> <u>States and the District of Columbia</u>)
- 12. <u>Unintentional Drug Overdose in Oregon: The Current and Potential Impacts of the COVID-19</u> <u>Pandemic</u>
- 13. Lifesaving Naloxone
- 14. What is withdrawal?

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