What You Need to Know About Youth & Stimulants

WHAT ARE STIMULANTS?
Stimulants are a class of drugs that speed up the communication pathways between the brain and body. They can be both prescription drugs such as amphetamines (such as Adderall), methylphenidate (Ritalin) and diet aids as well as illicit drugs such as methamphetamine (commonly called meth), cocaine (crack and powder cocaine, known as coke, being the most common forms), MDMA and synthetic cathinones (e.g., “bath salts”). Caffeine and nicotine are the two most commonly used stimulants. To learn the common slang terms and code words for stimulants, check out the Drug Enforcement Administration’s full list.

HOW ARE STIMULANTS USED?
Stimulants can be snorted, swallowed, smoked or injected, depending on their form, which can be pills, powder, rocks and injectable liquids. Stimulants are commonly used in combination with other substances such as alcohol and marijuana.

WHAT ARE THE EFFECTS OF STIMULANTS?
Stimulants are sometimes called “uppers” because they can make a person feel more awake, alert, energetic and confident and can reverse feelings of mental and physical fatigue. Stimulant use, even in small amounts, can cause feelings of euphoria, increased heart rate and blood pressure, increased alertness, talkativeness, reduced appetite, headaches, stomachaches and nausea. Large doses can cause anxiety, panic, depression, paranoia, aggression, heart palpitations and chest pain, high fever, seizures and coma. The effects of stimulants might be felt more strongly based upon the amount taken, if an individual is using other substances at the same time, if they have other health issues, or if they are smaller in size or weight. Stimulants are also very addictive because of their appeal for enhancing energy and euphoria and how quickly tolerance can develop and lead to higher levels of use, increasing risk for a substance use disorder.

ARE THERE OTHER RISKS FROM USING STIMULANTS?
Yes. Stimulants affect the body’s cardiovascular and temperature-regulating systems. Thus, physical exertion, such as intense workouts, dancing or physical labor, can increase the hazards of stimulant use, putting an individual at risk for heart failure, which may precede death. In fact, one in five overdoses in the United States involves cocaine, and this number continues to grow each year. The risk of overdose increases when stimulants are taken in combination with other drugs such as benzodiazepines. Lacing or cutting – contaminating one substance with another – of stimulants is becoming more common, particularly with fentanyl, an opioid that is 50 times more potent than heroin. The contamination of the substance is often unknown to the individual taking it and significantly increases the risk for overdose. Overdoses from stimulants increased by 46% in 2020 due to lacing of substances with fentanyl.
CAN STIMULANTS BE TAKEN SAFELY?
Prescription stimulants prescribed and overseen by a medical professional and taken by the individual only as directed for a specific health condition can be consumed safely.¹

WHAT ARE BATH SALTS?
“Bath salts” are a slang term for synthetic cathinones. They are a crystal-like stimulant that causes extreme wakefulness, increased heart rate and elevating breathing rate.⁹ Similarly to other stimulants, bath salts can be swallowed, snorted, inhaled or injected.⁹ They are not the same as products such as Epsom salts added to bath water.

HOW COMMON IS STIMULANT USE AMONG YOUTH?

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th graders</td>
<td>5.3%</td>
</tr>
<tr>
<td>12th graders</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Use of amphetamines is more prevalent among youth populations than use of other stimulants, as some middle and high school students have prescriptions to manage their attention deficient hyperactivity disorder (ADHD) and then share and/or sell pills to friends and classmates.⁶⁻⁷ Past year amphetamine use increased from 3.5% of 8th graders in 2017 reporting use to 5.3% in 2020,⁶ though this slightly decreased from 5.9% to 4.3% for 12th grade students in the same time period.⁷

REFERENCES

This project is supported by the Centers for Disease Control and Prevention (CDC) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling $2,000,000 with 100% funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by CDC/HHS or the U.S. Government.