National Institutes of Health DrugAbuse.gov



Prescription Stimulant Medications (Amphetamines)

Street names: Skippy, Speed, Uppers

EXPAND ALL

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What is prescription stimulant (amphetamine) misuse?



Also known as: Bennies, Black Beauties, Hearts, Roses, Skippy, Speed, Study Drugs, The Smart Drug, Uppers, and Vitamin R

Prescription stimulants increase—or "stimulate"—activities and processes in the body. This increased activity can boost alertness, attention, and energy. It also can raise your blood pressure and make your heart beat faster. When prescribed by a doctor for a specific health condition, they can be relatively safe and effective. However, dependence and addiction are still potential risks when taking prescription stimulants. These risks increase when these drugs are misused. Taking someone else's prescription drugs or taking the drugs to get "high" can have serious health risks.

There are two commonly misused types of stimulants: amphetamines (e.g., Adderall) and methylphenidate (e.g., Ritalin). In the past, stimulants were used to treat a variety of conditions, including asthma and other breathing problems, obesity, and health problems that affect your nervous system. Now, because the risk for misuse and addiction is better understood, doctors prescribe them less often and only for a few health conditions. They are still prescribed for attention deficit hyperactivity disorder (ADHD), narcolepsy (a sleep disorder), and, in some instances, depression that has not responded to other treatments.

Stimulants

Туре	Conditions They Treat		
Amphetamines (Adderall and Dexedrine)	• ADHD		
Methylphenidate (Ritalin and Concerta)	 Narcolepsy (sleep disorder) 		
	 Depression 		

Read more about <u>prescription drugs</u> and what happens to the brain and body when someone misuses them.

How Stimulants Are Misused

Prescription stimulants are normally taken in pill form, but some people who misuse them to get "high" crush the tablets and snort or inject them. This can be dangerous because ingredients in the tablets can block small blood vessels, damaging the heart and other organs.

Some teens are prescribed stimulants to manage their ADHD. But if they share their medication with friends, it is considered misuse. People misuse stimulants by taking them in a way that is not intended, such as:

- Taking someone else's prescription stimulant medication.
- Taking a prescription stimulant medication in a way other than prescribed.
- Taking the prescription stimulant to get high.
- Mixing them with alcohol and certain other drugs. A pharmacist can tell you which drugs are not safe to mix with stimulants.

Stimulants have been misused as an "academic performance enhancer," (for example, to stay awake all night to cram for an exam). That's why people sometimes refer to them as "study drugs." However, studies have found that stimulants do not increase learning or thinking ability when taken by people who have not been diagnosed with a medical condition like ADHD.

What happens to your brain when you use prescription stimulants?

The brain is made up of nerve cells that send messages to each other by releasing chemicals called neurotransmitters. Common stimulants, such as amphetamines and methylphenidate, have chemical structures that are similar to certain key brain neurotransmitters including dopamine and norepinephrine. Stimulants boost the effects of these chemicals in the brain and body.

When doctors prescribe stimulants for a medical condition, they start with low doses and increase them slowly until they find the dose that works best. However, when taken in amounts or ways other than prescribed, like snorting or injecting, stimulants can increase the dopamine in the brain very quickly. This changes the normal communication between brain cells, producing a 'high' while also increasing the risk for dangerous side effects. Over time, this can lead to <u>addiction</u>, which is when you continue to use the drug despite negative consequences.

Learn more about how the brain works and what happens when a person miuses drugs.

What happens to your body when you use prescription stimulants?

Stimulant use can have side effects, even when prescribed by a doctor. Misuing them can be especially dangerous. Taking high doses of a stimulant can cause:

- increased blood pressure
- irregular heartbeat
- dangerously high body temperatures
- decreased sleep
- lack of interest in eating, which can lead to poor nutrition
- intense anger or paranoia (feeling like someone is going to harm you even though they aren't)
- risk for seizures and stroke at high doses

Can you overdose or die if you use prescription stimulants?

Yes, it is possible to die from stimulant misuse. Taking high doses of a stimulant can raise a person's body temperature and blood pressure to dangerous levels and make the heart beat irregularly. This can lead to seizures, heart failure, and death. Stimulants should not be mixed with medicines used to treat depression or over-the-counter medicines that contain decongestants.

Deaths from an overdose of prescription drugs have been on the rise since the early 1990s. Learn more about <u>drug overdoses in youth</u>.

Are prescription stimulants addictive?

Yes, misusing stimulants can lead to addiction. Addiction is when you continue to seek out and take the drug even though you know it is damaging you health and life, even ruining your relationships and causing you problems in school or at work.

When a person who regularly misuses stimulants stops taking them, they may experience withdrawal symptoms. Stimulant withdrawal can cause:

- an inability to feel pleasure
- thoughts of suicide

- anxiety and irritability
- feeling very tired, lack of energy, and changes in sleep patterns
- intense drug cravings

People who have these symptoms should seek medical help.

How many teens use prescription stimulants?

Below is a chart showing the percentage of teens who misuse common stimulants.

Monitoring the Future Study: Trends in Prevalence of Various Drugs for 8th Graders, 10th Graders, and 12th Graders; 2016 (in percent)*

Drug	Time Period	8th Graders	10th Graders	12th Graders
Amphetamine	Lifetime	[5.70]	8.80	10.00
	Past Year	3.50	6.10	6.70
	Past Month	1.70	2.70	3.00
Adderall	Past Year	1.50	4.20	6.20
Ritalin	Past Year	0.80	1.20	[1.20]

^{*} Data in brackets indicate statistically significant change from the previous year.

For the most recent statistics on teen drug use, see results from <u>NIDA's Monitoring the Future</u> <u>study</u>.

What should I do if someone I know needs help?

If you see or hear about someone misusing opioids, talk to a coach, teacher, or other trusted adult.

If you, or a friend, are in crisis and need to speak with someone now, please call:

• National Suicide Prevention Lifeline at 1-800-273-TALK (they don't just talk about suicide—they cover a lot of issues and will help put you in touch with someone close by).

If you need information on treatment and where you can find it, you can call:

• Substance Abuse Treatment Facility Locator at 1-800-662-HELP or visit www.findtreatment.samhsa.gov.

For more information on how to help a friend or loved one, visit our <u>Have a Drug Problem</u>, <u>Need Help? page</u>.

Where can I get more information?

Drug Facts

NIDA:

- Commonly Abused Prescription Drugs Chart
- <u>DrugFacts: Prescription and Over-the-Counter Medications</u>
- <u>DrugFacts: Stimulant ADHD Medications Methylphenidate and Amphetamines</u>
- Research Report Series: Misuse of Prescription Drugs

Statistics and Trends

NIDA:

• DrugFacts: High School and Youth Trends

Monitoring the Future (University of Michigan):

• Monitoring the Future

Substance Abuse and Mental Health Services Administration:

• National Survey on Drug Use and Health

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