# **Amphetamines**

### What are amphetamines?

Amphetamines are stimulants that are often used to reduce fatigue and depression and increase concentration and alertness. Amphetamines include illegal drugs such as methamphetamine (meth), and improperly used legal drugs such as Ritalin. Amphetamines come in the form of brown or white powder, as red liquid in capsules, or in tablet form. They can be snorted, injected, or taken orally. "Crystal meth" or "ice" is the crystallized form of methamphetamine and can be smoked.

Most amphetamines are produced and sold illegally, the most prevalent of which are methamphetamine and ecstasy. Ritalin, used for treating attention-deficit/hyperactivity disorder (ADHD) and narcolepsy (a sleep disorder), is a legally sold and produced amphetamine. It can also be used illegally.

#### What are physical consequences of amphetamine use?

Because they increase blood pressure and heart rate, amphetamines can lead to heart-related problems or stroke. Other symptoms include irritability, dilated pupils, aggression, and difficulty sleeping. In large doses, amphetamines can result in visual and auditory hallucinations, anxiety, paranoia, and distorted perceptions.

The American Psychiatric Association (APA) uses the term "stimulant use disorder" to define a pattern of amphetamine or other stimulant use that leads to significant physical, interpersonal, medical, or work problems. Stimulant use disorder is rated as mild, moderate, or severe based on how many criteria are met. A person diagnosed with stimulant use disorder can also be classified as in remission, or what is commonly referred to as "in recovery." Those with stimulant use disorder should receive treatment, and those who identify themselves as addicts often find the skills and support to stay sober through peer support groups like Narcotics Anonymous.

Addiction is considered a brain-based disease characterized by abnormal drug-seeking behavior that leads to impaired control over one's drug use. Addiction means a person will continue using alcohol or other drugs despite the harm it

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does to his or her health, family, work or school, and relationships. An addict may experience withdrawal symptoms (physical pain, fatigue, depression, trouble sleeping, irritability) if he or she stops using, and may need to keep using just to feel normal. "Curing" addiction is not a matter of willpower or moral strength any more than is curing diabetes or cancer. Like diabetes and cancer, addiction is considered a chronic disease which is beyond one's control and fatal if left untreated.

# How does amphetamine use affect a co-occurring mental health disorder?

Co-occurring disorders, or dual disorders, occur when a mental health disorder, like depression or schizophrenia, is present along with addiction, alcoholism, or other substance use disorders. Screening for co-occurring disorders should be part of any good assessment or treatment plan.

Many people with a mental health problem turn to substances to feel better. For example, a person who is depressed may turn to amphetamines to feel more animated. Such substance-related solutions often develop into substance-related disorders and fail to treat the mental health problem. What's more, they also prevent people from developing the coping skills to have a fulfilling life, experience satisfying relationships, and feel comfortable in their own skin.

Abuse of amphetamines can result in possible psychosis, inconsistency in mood, mania, paranoid delusions, anxiety, auditory and visual disturbances, and loss of appetite. Amphetamine withdrawal symptoms include depression, loss of pleasure, sleep difficulties, paranoia, and violent behavior.

## How does amphetamine use affect the brain?

The role of brain chemistry in substance use disorders is a relatively new finding in the treatment field, but a rapidly growing body of evidence supports it. The human brain is similar to a computer. Every time you feel something, millions of nerve cells, or neurons, are firing messages to each other. When you use drugs, you are basically introducing a virus into the computer, and the effects distort your emotional, physical, and mental life.

Each classification of drugs affects a different brain chemical or neurotransmitter. Amphetamines affect dopamine, which is believed to release chemicals that allow us to feel pleasure. Amphetamine use is similar to flooding a

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computer with stimulation—data, images, music, videos, games, etc. After the flurry of activity, the computer drastically slows down and the user experiences a "crash," leading to fatigue and depression as the brain and body deal with the sudden drop in stimulation.

### Is amphetamine addiction treatable?

Yes. Detoxification and withdrawal from amphetamines can take several weeks, especially with methamphetamine. People who use amphetamines often lose their appetite and as a result may get malnourished and dehydrated. Medical treatment for amphetamine addiction addresses several needs: nutrition, dental care, behavior modification, coping skills, and continuing care support such as Twelve Step groups. Antipsychotic medication may also be required. It is recommended that amphetamine users seek medical supervision to help them quit.

Addiction won't go away, like a cold or the flu. It is a chronic disease, meaning you have it all your life. However, by staying sober and getting ongoing support, recovering people can live normal, healthy, productive lives.

#### Web resources

There are many resources out there. The websites for the following organizations were chosen for their usefulness and user friendliness.

#### National Institute on Drug Abuse (NIDA)

This government organization is dedicated to addiction research and education. Through its website you can access up-to-date publications about many different drugs of abuse as well as emerging trends.

#### Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA is part of the U.S. Department of Health and Human Services. Its mission is to reduce the impact of substance abuse and mental illness on America's communities. Its website offers information and resources about preventing and treating addiction and mental illness.