
Amphetamines

Summary

- Amphetamines are psychostimulant drugs that abnormally speed up the functions of the brain and body.
 - It is illegal to make or sell amphetamines, and to possess or use them unless under medical supervision.
 - Long-term amphetamine misuse can damage the brain and the cardiovascular system and may lead to psychosis, malnutrition and erratic behaviour.
 - Call an ambulance if you think someone has overdosed after taking any drugs, including amphetamines.
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Amphetamines are synthetic psychostimulant drugs, which means they speed up the workings of the brain. There are legal (prescribed by a doctor) and illegal amphetamines. Long-term misuse of amphetamines can lead to serious problems, including brain and cardiovascular damage, malnutrition and psychosis.

Legal and illegal amphetamines

Amphetamines are used in the treatment of disorders such as narcolepsy and Attention Deficit Hyperactivity Disorder (ADHD). While these are legal forms of amphetamine, the misuse or recreational use of these medications is common, and is illegal.

Illegal amphetamines are made and sold illegally. Their quality and purity is questionable – they can be a mix of drugs, binding agents, caffeine and sugar.

The most common amphetamine in Australia is methamphetamine, which comes in three forms:

- **speed** – usually comes in the form of a powder
- **base** – is an oily, sticky or waxy paste
- **ice (crystal methamphetamine)** – is a crystal or crystalline powder, and is a stronger form of methamphetamine. It is also known as ‘crystal meth’, ‘shabu’ shard or ‘glass’.

Common slang terms for amphetamines include ‘speed’, ‘goey’, ‘crank’ and ‘whiz’. They can be injected, snorted, smoked or swallowed.

According to the National Drug Strategy Household Survey in 2016, recent use of meth/amphetamine had significantly declined. Ice was the most commonly used form of amphetamine (57 per cent of amphetamine users). The use of powder continued to significantly decline, from 51 per cent in 2010, to 29 per cent in 2013 and 20 per cent in 2016.

It is illegal to make or sell amphetamines. It is also illegal to possess or use amphetamines, unless they have been prescribed by a doctor for medical reasons.

Ecstasy

Ecstasy is a drug that contains *methylenedioxymethamphetamine* (MDMA). Many pills sold as ecstasy contain only small amounts of MDMA, or sometimes none at all. Pills sold as ecstasy can contain materials used as ‘fillers’ such as household cleaning products. These types of variations mean that it is difficult to know what reactions to expect after taking ecstasy, and how bad the side effects will be.

The effects of ecstasy vary depending on an individual’s size, weight and health. The response is similar to amphetamines.

Synthetic amphetamines

In recent years, a wide range of synthetic products, claiming to have similar effects to amphetamines, have also been available in Australia. The active ingredient in these products can potentially be a number of chemicals, such

as *methylenedioxypropylamphetamine* (MDPV), but it is difficult to know what exactly they contain, and as a result, they can have more unpredictable effects and are potentially more harmful than amphetamines.

How amphetamines work

Amphetamines prompt the brain to initiate a 'fight or flight' response.

These changes include:

- the release of adrenalin and other stress hormones
- increased heart rate and blood pressure
- increased blood flow to the peripheral muscles (such as in the arms and legs). In small doses, amphetamines can banish tiredness and make the user feel alert and refreshed, although this effect is often short lived.

Amphetamines can prompt quite intense withdrawal symptoms, often referred to as a 'speed crash'. Symptoms can include feeling nauseous, irritable, depressed and extremely exhausted.

Effects of amphetamines

The effects of amphetamines, and how long the effects last, depend on the strength of the dose, the blend of chemicals, and individual factors such as body size, health status and previous use.

Some of the immediate effects of amphetamines include:

- a burst of energy, making the user talkative, restless and excited
- accelerated heart rate and breathing
- high-blood pressure
- dry mouth and jaw clenching
- sweating
- dilated pupils
- loss of appetite.

Even if the effects of the amphetamines have worn off, there may still be amphetamines in your system. As a rough guide, methamphetamines can be detected in the blood for around four to eight hours after use, and in the urine for around two to five days after use.

Symptoms of high doses of amphetamines

In high doses, amphetamines can make the user feel extremely nervous, anxious, confused and irritable. In some people, this state of mind can lead to hostility, aggression and violence. Unpleasant physical symptoms include heart palpitations, headaches, dizziness, blurred vision and loss of coordination.

Overdose is usually due to taking amphetamines with other drugs, especially depressant drugs such as sleeping pills, alcohol, cannabis, opiates, benzodiazepines and antidepressants. The consequences of overdose include collapse, seizure, heart failure, stroke or death. Amphetamine use can also impair judgement and contribute to accidents, such as road accidents.

Amphetamine dependence, tolerance and withdrawal

It is possible to build up a tolerance to amphetamines, which means the person using the drug needs to take larger doses to achieve the same effect. Over time, the body may come to depend on amphetamines just to function normally. The person craves the drug and their psychological dependence makes them anxious if access is denied, even temporarily.

Amphetamine withdrawal symptoms can include tiredness, panic attacks, crankiness, extreme hunger, depression and nightmares.

Some people experience a pattern of 'binge crash' amphetamine use. They use amphetamines continuously for several days without sleep. When this period ends, the person 'crashes', and experiences a period of heavy sleeping.

Physical effects of long-term amphetamine use

Using amphetamines on a regular basis can lead to significant health problems, including:

- risk of damage to brain cells
- amphetamine psychosis, which includes hallucinations, paranoia and other symptoms similar to schizophrenia. This can lead to behaviour dangerous to the person and to others
- malnutrition, because the drug suppresses appetite
- reduced immunity, due to malnutrition and lack of sleep
- mood swings, depression and panic attacks
- the need to use other drugs, such as sleeping tablets, to balance the effects of amphetamines
- aggression and increased susceptibility to violent rages
- heart and kidney complications.

Social effects of long-term amphetamine use

People who regularly use speed can also experience problems with:

- relationships – such as arguments and break-ups
- work or study – including trouble concentrating and reduced performance
- the law – being arrested for possession and use, violence or crimes committed to support use
- finances – such as debt because of an inability to hold down a job or from spending money on amphetamines.

Responding to amphetamine overdose

Dial triple zero (000) to call an ambulance immediately if someone who has taken amphetamines is experiencing:

- seizures
- chest pain
- high temperature
- extreme anxiety
- hallucinations
- paranoid delusions.

If someone who has taken drugs is experiencing these or any other significant symptoms, **this is a medical emergency**.

Where to get help

- In an emergency, call triple zero (000)
- Your **GP (doctor)**
- **DrugInfo** Tel. **1300 85 85 84**
- **DirectLine** Tel. **1800 888 236** – for 24-hour confidential drug and alcohol telephone counselling, information and referral
- **Family Drug Help** Tel. **1300 660 068** – for information and support for people concerned about a relative or friend using drugs

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Alcohol and Drug Foundation

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