

Amphetamines

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 damage, malnutrition and psychosis.

Legal and illegal amphetamines

Legal amphetamines, like dexamphetamine and methylphenidate, are manufactured by pharmaceutical companies and are usually only prescribed for particular disorders such as narcolepsy or attention deficit hyperactivity disorder (ADHD).

Illegal amphetamines are manufactured in secret laboratories and 'cut' (diluted) with different substances to boost profits. This means the person using the drug has no idea if the dose will be strong or weak, or whether it contains dangerous fillers such as talcum powder or quinine.

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

- **Speed** – is the most common amphetamine and 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' or 'glass'.

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

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

How amphetamines work

When we are stressed or under threat, the central nervous system prepares us for physical action by creating particular physiological changes. Amphetamines prompt the brain to initiate this 'fight or flight' response. These changes include:

- The release of adrenalin and other stress hormones
- Increased heart rate and blood pressure
- Redirected blood flow into the muscles and away from the gut.

In small doses amphetamines can banish tiredness and make the user feel alert and refreshed. However, the burst of energy comes at a price. A 'speed crash' always follows the high and may leave the person feeling nauseous, irritable, depressed and extremely exhausted.

Common 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 the physical make-up and state of mind of the person taking the drug.

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 three to four days after use.

Ecstasy

Ecstasy ('eckie', 'e' or 'Xtc') is the street term for a range of drugs that are similar in structure to MDMA (methylenedioxymethamphetamine), a hallucinogenic amphetamine. Ecstasy has a similar effect to other amphetamines and is usually taken orally in tablet form. Tablets sold as 'ecstasy' in Melbourne often contain a cocktail of other drugs such as methamphetamine and pharmaceutical drugs.

Symptoms and consequences 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, cannabis or alcohol. The consequences of overdose include collapse, seizure, heart failure, stroke or death. Amphetamine use can also impair judgement and contribute to accidents – for example, 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 might come to depend on amphetamines just to function normally. The person craves the drug and their psychological dependence makes them panic if access is denied, even temporarily.

Withdrawal symptoms can include tiredness, panic attacks, crankiness, extreme hunger, depression and nightmares. Some people experience a pattern of 'binge crash' characterised by using continuously for several days without sleep, followed by 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.

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.

Recognising and responding to amphetamine overdose

Medical help should be sought if someone who has taken amphetamines is experiencing seizures, chest pain, high temperature, extreme anxiety, hallucinations or paranoid delusions.

If someone who has taken drugs is not responding when you talk to them, is snoring loudly or making gurgling noises, it may mean that they are in a coma and may be dying. Do not assume that they are just 'sleeping off' the effects. This is a medical emergency. If you can't wake them, call an ambulance immediately. Dial triple zero (000).

Where to get help

- In an emergency call triple zero (000)
- Your doctor – for information or referral to a drug treatment service.
- Alcohol and drug treatment services – for help with addiction, detoxification, individual counselling and group therapy
- 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

Things to remember

- 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 may lead to psychosis, malnutrition and violent behaviour.
- Call an ambulance if you think someone has overdosed after taking any drugs, including amphetamines.

This page has been produced in consultation with, and approved by:

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