METHAMPHETAMINE

WHAT YOU NEED TO KNOW ABOUT SPEED, ICE, CRYSTAL, BASE AND METH

Australian Government
Department of Health

WHAT IS METHAMPHETAMINE?

Methamphetamine is a stimulant drug. It is usually sold in points (0.1g) or grams and comes in three main forms, as described below:[1]

Form	Usual appearance	Also known as	Potency	Mainly used by**
Ice/Crystal Meth	Translucent crystals, sometimes shards	Meth, shabu, Tina, glass	High	Smoking (e.g. with a glass pipe), injecting
Base	Dampish, 'gluggy' substance. Colour varies from white to brown	Pure, point, wax, meth	Medium to high	Swallowing, injecting
Speed*	White or off-white powder	Goey, meth	Low to medium	Snorting, swallowing, injecting

**May occasionally be amphetamine sulphate*[2]
***All three are also sometimes swallowed (ingested) and injected*[1, 3]

Methamphetamine has been available in Australia since the late 1990s. Prior to this time, amphetamine was more common (sold on the illicit drug market as 'speed' or 'amphetamines'). Methamphetamine and amphetamine have very similar properties (although methamphetamine is stronger than amphetamine), so they are often collectively referred to as 'amphetamines'.

All forms of methamphetamine can be cut (mixed) with other substances, which reduces the purity. Usually these substances do not have a psychoactive (mind-altering) effect (e.g. sugars or dietary supplements, but may occasionally contain harmful substances).[4, 5] Methamphetamine is also often contained in pills sold on the illicit drug market as ecstasy.[4]

Ice/crystal meth can have slightly different effects to speed and base because it's usually more pure; it gives a stronger and longer lasting 'high'. It also has more potent side effects during use and in the 'comedown' or 'crash' phase. It also has a greater potential for the user to develop dependence (addiction), psychosis, as well as long-term physical and mental health problems.[6, 7]

HOW MANY PEOPLE USE METHAMPHETAMINE?

According to the 2010 National Drug Strategy Household Survey, fewer than three in every one hundred (2.1%) Australians (aged 14 or over) have used at least one form of methamphetamine in the last 12 months.[8]

WHAT ARE THE EFFECTS?

Methamphetamine takes effect quickly (within minutes if smoked or injected, or around half an hour if snorted or swallowed).[9] Depending on how much methamphetamine is consumed, the effect can last between 4–12 hours, although it can take 1–2 days for the drug to completely leave the body.[9]

Methamphetamine stimulates the release of two neurotransmitters (brain chemicals) called dopamine and noradrenaline. These particular chemicals are responsible for making us feel excited, alert and euphoric.[10] Consistent, heavy use of methamphetamine can deplete these chemicals, and possibly damage or destroy their receptors in the brain — sometimes to a point where users no longer feel normal without having methamphetamine in their system.[11, 12]

People take methamphetamine because it initially makes them feel euphoric, confident and gives them lots of energy. The drug also reduces appetite and staves off sleep.[13]

Signs of intoxication include:[14]

- **Dilated (enlarged) pupils**
- **Talkativeness**
- **Restlessness and agitation**
- **Increased confidence**

Common side-effects from intoxication can include:[14]

- **Jaw clenching and teeth grinding**
- **Dry mouth**
- **Sweaty/clammy skin**
- **Increased heart rate (tachycardia) and faster breathing**
- **Anxiety and panic attacks**
- **Irritability, aggressiveness, and paranoia (feeling extremely suspicious and frightened)**
- **Less commonly, psychosis (a serious mental illness that causes people to misinterpret or confuse reality)**

WHAT IS THE 'COMEDOWN' PHASE OR 'CRASH'?

Users often experience a 'comedown' phase, or 'crash', when the drug starts to wear off. These feelings can last a few days and symptoms can include:[14]

- **Feeling down or depressed**
- **Exhaustion**
- **Irritability**
- **Increased need for sleep**
- **Decreased appetite**

Methamphetamine is more addictive than most other drugs, especially when taken in crystal form. People who are dependent on (addicted to) methamphetamine may experience unpleasant symptoms for longer. These are called withdrawals (see further on in factsheet). Methampetamine use is also associated with increase risk of mental health problems (depression, anxiety, psychosis), violent behaviour, and brain damage (see next page: Impact on Mental Health).

WHAT ARE THE RISKS?

Methamphetamine use, particularly heavy or regular use, is associated with a number of problems, including:[11, 13]

Physical health risks:

- **Dental issues such as increased sensitivity, cracked teeth, cavities and gum disease**
- **Cardiovascular (heart) problems (e.g. chest pain, irregular heartbeat, shortness of breath, heart failure). Serious problems such as heart failure are rare and more likely among people who are already at risk (e.g. smokers and people with high blood pressure or heart disease)**
- **Increased chances of having unprotected sex, which may result in a sexually transmitted infection (STI) or an unintended pregnancy**
- **If injected, methamphetamine use is associated with vein problems, abscesses (swollen pus-filled areas of body tissue), bacterial infections such as endocarditis (a life-threatening infection of the heart and its valves), and increased risk of catching blood-borne viral infections such as hepatitis C and HIV**
- **Weight loss, dehydration, malnutrition, exhaustion**
- **Kidney problems, including kidney failure, particularly if the person has a pre-existing condition**
- **Lung problems**
- **Stroke**

Methamphetamine is a very unpredictable drug. Toxic (and sometimes fatal) reactions can occur regardless of the amount used, whether the person is a first-time, occasional or regular user.

Other problems can include:

- **Social issues, such as family and relationship trouble; losing friends, losing jobs, doing badly at school or study, and homelessness. For some people, these are reasons that led them to use, but for many users these can remain a problem or get worse once they start using**
- **Financial issues if the user becomes dependent on the drug; the risk of getting into trouble with the law for dealing or committing other illegal acts to support a habit**

IMPACT ON MENTAL HEALTH

Using methamphetamine can bring on symptoms of mental health problems such as anxiety, depression and psychosis — either while using or during the comedown/crash phase. These effects can last a few days to a few weeks after the person stops using.[15]

DEPRESSION

People often feel depressed when they are 'coming down' from methamphetamine. These feelings can last a few hours to a few days. Some people who use methamphetamine also feel depressed when they are not using the drug. People who have experienced depression before can find that the use of methamphetamine makes depression worse in the long run. This is because using methamphetamine can deplete chemicals in the brain that make the user feel good.

ANXIETY

People often feel nervous and agitated when using methamphetamine or coming down from it. Being on methamphetamine increases heart rate and can leave users short of breath. It can also lead to feelings of paranoia. These elements can trigger panic attacks, causing users to suddenly feel very afraid or anxious for no reason.

METHAMPHETAMINE PSYCHOSIS

Methamphetamine can cause a short-lived psychotic reaction in some people.[16] This is more common with heavy, prolonged use.[7] These problems normally go away within a few hours to days after the person stops using, although for a small number of people, symptoms can continue for longer and may be related to an underlying psychotic disorder, such as schizophrenia.[15]

Common symptoms of methamphetamine psychosis are:[14]

- **Having unusual thoughts (e.g. the user may feel that other people are reading his/her mind or stealing their thoughts)**
- **Feeling suspicious (e.g. the user may feel as though he/she is being watched, picked on or that people are 'out to get' him/her)**
- **Hallucinations (hearing or seeing things that don't exist)**

Other symptoms of psychosis include:[14]

- **Repetitive compulsive behaviour**
- **Tactile hallucinations (e.g. where the person feels like they have bugs under their skin)**
- **Olfactory hallucinations (e.g. smelling things that aren't there, such as rotting flesh)**
- **Muddled thoughts, incoherent speech and going off on tangents**

More common, milder, symptoms include:[14]

- **Seeing shadows or lights in the corner of his/her eye**
- **Hearing someone calling his/her name when nobody is around**
- **Feeling self conscious as though people are watching him/her**
- **Feeling like ordinary everyday things have special importance or meaning**
- **Imagining things are changing shape or moving when they're not**

These milder symptoms are less likely to impact on a person's functioning, but they may be the early signs of a full-blown psychotic episode.[14]

METHAMPHETAMINE AND VIOLENCE

Methamphetamine is notoriously associated with violence. Using the drug increases the 'fight or flight' reaction, which can make people respond more aggressively to situations where they feel threatened. They often experience heightened confidence, strength and stamina in these situations, making them more threatening to other people.

These situations can be triggered by paranoia that is brought on by the drug, which can also affect people's judgement, leading them to respond impulsively and irrationally.[17, 18] There is some evidence that chronic methamphetamine use can increase irritability and aggression by depleting serotonin levels in the brain.[18, 19]

METHAMPHETAMINE AND BRAIN DAMAGE

If someone uses methamphetamine heavily, the brain adapts, and this can lead to changes in the balance of chemicals and the functioning of different brain systems. High doses of the drug can also damage nerve cells (neurons) in the brain.[20]

Research into the long-term effects of methamphetamine use has looked at whether it can lead to problems in cognitive (brain) functions such as attention, memory and decision-making. However, the evidence is not clear. Some reductions in ability to focus attention and to remember things have been found in people who used methamphetamine for a long time, although this may not always be a dramatic change. The relationship between methamphetamine and brain functioning is hard to assess because methamphetamine users often use other drugs too (this makes it is hard to know which drug/s caused the problems). Lifestyle factors are also likely to play a part.[20]

METHAMPHETAMINE AND DEPENDENCE

It is possible to become dependent on (addicted to) methamphetamine,[21] particularly if the person uses a lot or regularly. If they smoke or inject, the effects are more powerful.[14]

People who are dependent on methamphetamine develop tolerance to the drug. This means that they need to take more of the drug to get the same effect.[14] They might also find that using the drug becomes far more important than other aspects of their lives, such as work, sport, socialising or study. They crave the drug and find it very difficult to stop using it.[21]

METHAMPHETAMINE WITHDRAWAL

People who use methamphetamine frequently and become dependent on it may experience withdrawal symptoms when they stop using it.[22] These symptoms last longer than the crash or comedown, often lasting a few weeks. Withdrawal symptoms from methamphetamine are more psychological than for heroin or alcohol withdrawal, for example:[14]

- Mood swings
- Irritability
- Strong cravings
- Changes in appetite
- Disturbed sleep patterns
- Depression
- Fatigue

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FOR MORE INFORMATION

We have listed some of the national telephone helplines and websites below.

Australian Drug Foundation
Provides information about drugs and links to services in each state and territory
www.adf.org.au

DrugInfo Line
Provides information about drugs and alcohol. Open 9am–5pm, Monday to Friday
1300 85 85 84 or **03 8672 5983**. Or visit **www.druginfo.adf.org.au**

Just Ask Us
Provides information about drugs, alcohol, health and well-being
www.justaskus.org.au

Kids Helpline
Free, private and confidential telephone and online counselling service for young people aged 5–25 years
Open 24 Hours **1800 55 1800**

Lifeline
24 hour crisis line **131114**
Also available is one-on-one chatlines for crisis support, visit
www.lifeline.org.au/Find-Help/Online-Services/crisis-chat

Counselling Online
Free, confidential counselling service for people using drugs, their families and friends
www.counsellingonline.org.au

National Drugs Campaign
Australian Government website provides information about illicit drugs and campaign resources.
www.australia.gov.au/drugs

Family Drug Support
For families and friends of people who use drugs or alcohol
1300 368 186

Some state and territory based helplines are listed below.

Alcohol and Drug Information Service (ADIS)(free, confidential advice about drugs and alcohol).
Some services operate 24 hours.

State/Territory	City contact	Regional/Rural contact (free call from landline)
New South Wales ADIS	02 9361 8000	1800 422 599
Queensland ADIS	1800 177 833	1800 177 833
Victoria Directline	1800 888 236	1800 888 236
Western Australia ADIS	08 9442 5000 08 9442 5050 (for parents)	1800 198 024 1800 653 203
Australian Capital Territory Alcohol & Drug Program	02 6207 9977	
Northern Territory Alcohol & Other Drug Services	08 8922 8399 (Darwin) 08 8951 7580 (Alice Springs)	1800 131 350
Tasmania ADIS	1800 811 994	1800 811 994
South Australia ADIS	1300 131 340	1300 131 340

Callers in Victoria can also contact the Youth Substance Abuse Service (YSAS) on 1800 014 446
(24 hour toll free service)

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