

Fact sheets 2025

What is ketamine?

Ketamine is a dissociative general anaesthetic, classed as a hallucinogen when used illegally as a recreational drug.

Doctors and vets use ketamine because it produces analgesia (pain relief) and amnesia. It is also sometimes described as a horse tranquiliser due to its use in veterinary medicine.

When sold illegally, ketamine usually comes as a white crystalline powder, but it can also be made into tablets or dissolved in a liquid. It is usually snorted through a small glass nasal inhaler (a 'bumper'), but can also be swallowed, smoked or injected.

What are the effects?

The effects of ketamine may be experienced within 30 seconds if injected, five to 10 minutes if snorted, and up to 20 minutes if swallowed. The effects of ketamine can last for around an hour, and an individual's coordination or senses may be affected for up to 24 hours after initial use.

Short-term effects include:

- A sense of euphoria and well-being
- Hallucinations
- Increased libido
- Dissociation or a sense of floating
- Drowsiness
- Nausea and vomiting.

Long-term effects include:

- Headaches
- Flashbacks
- Poor sense of smell (from snorting)
- Mood and personality changes, depression
- Poor memory, thinking and concentration
- Ketamine bladder syndrome – a painful condition which can cause ulceration of the bladder
- Abdominal pain
- Needing to use more to get the same effect (tolerance)
- Dependence.

The day following ketamine use, a person may experience:

- Memory loss
- Impaired judgement
- Disorientation
- Clumsiness
- Aches and pains
- Anxiety.

Ketamine

special K, K, ket, kitkat, super k
or horse trunk



Medicinal uses of ketamine

Clinical trials and studies have assessed ketamine as a treatment for depression. Currently, ketamine (esketamine hydrochloride) in the form of a nasal spray is available for treatment-resistant depression in Australia.

Toxicity and overdose

There have been deaths associated with ketamine overdose, but they have been predominantly attributed to polydrug use. Signs of overdose include:

- Fast heart rate (tachycardia)
- Hyperthermia
- Nausea
- Blurred vision
- Tremors
- Confusion
- Delusions
- Anxiety
- Severe agitation.

Mixing ketamine with other drugs

The effects of using ketamine with other drugs, including over-the-counter or prescription medications, is highly unpredictable.

The use of ketamine with psychostimulants (e.g., amphetamine, ecstasy and methamphetamine) can put enormous strain on the heart, increasing the risk of a cardiovascular event.

The toxic effect of ketamine use is a psychosis-like state, sometimes referred to as a 'k hole'.

Dependence and withdrawal

There is an established ketamine dependence and withdrawal syndrome. Withdrawal symptoms usually last between four and six days. These include:

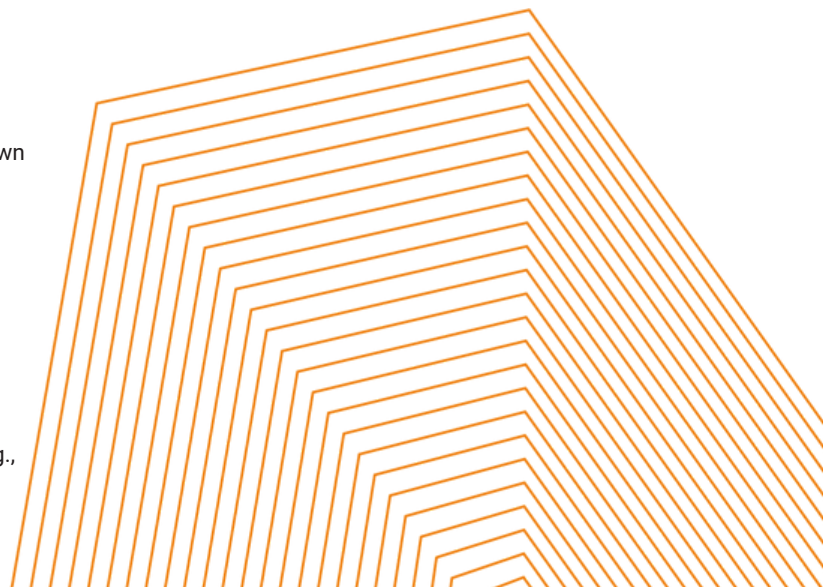
- Anxiety
- Sweating
- Heart palpitations
- Cravings for ketamine
- No appetite
- Tiredness
- Restlessness
- Tremors.

Mental health

Hallucinogens can give rise to psychotic symptoms, sometimes known as a 'bad trip'. It has been found that following a single dose, healthy volunteers can experience both positive and negative psychotic symptoms.

Daily users of ketamine experience psychotic symptoms, especially among people who have a history of mental illness, including:

- Delusions
- Dissociation
- Anxiety or panic attacks
- Psychotic symptoms, which can be triggered in some people (e.g., those with schizophrenia).





Treatment

There is a lack of research on the treatment of hallucinogen dependence. Some treatments for other drugs like psychostimulants may be appropriate. The effectiveness for cognitive behavioural therapy for the treatment of psychostimulant and cannabis dependence suggests that it might be useful for ketamine dependence.

Ketamine trends in Australia

According to the Australian Institute of Health and Welfare's National Drug Strategy Household Survey, use of ketamine in the previous 12 months increased from 0.9% in 2019 to 1.4% in 2022-2023.

The increase in recent use was largely driven by people in their 30s, from 0.5% in 2019 to 2.5% in 2022–2023. However, it was people in their 20s who were most likely to have used ketamine in the previous 12 months, with 4.2% having done so.

Emergency info

If you, or someone around you, is experiencing undesired or distressing psychological or physical symptoms from the intake of alcohol or other drugs please seek immediate medical attention.

If you need urgent help from ambulance services call Triple Zero (000). If a person has been mixing drugs with alcohol or other drugs, tell the paramedic exactly what has been taken.

Services

For free and confidential advice about alcohol and other drugs, call the National Alcohol and Other Drug hotline on 1800 250 015.

The hotline will automatically direct you to the Alcohol and Drug Information Service in your state or territory.

More resources

The Illicit Drug Reporting System (IDRS) is an Australian monitoring system run by the National Drug and Alcohol Research Centre (NDARC) at UNSW Sydney that identifies emerging trends of local and national concern in illicit drug markets. Visit unsw.to/IDRS

The Ecstasy and Related Drugs Reporting System (EDRS) is an Australian monitoring system run by NDARC that identifies emerging trends of local and national interest in ecstasy and related drug use, markets and harms. Visit unsw.to/EDRS

The Pocket Guide to Drugs and Health is a publication authored by experts from NDARC that provides information for health professionals on the impact of drug use. Visit silverbackpublishing.org/products/the-pocket-guide-to-drugs-and-health

The Australian Institute of Health and Welfare collects information on alcohol and tobacco consumption, and illicit drug use among the general population in Australia. Visit aihw.gov.au

The Australian Bureau of Statistics is Australia's national statistical agency, providing official statistics on a range of economic, social, population and environmental matters of importance to Australia. Visit abs.gov.au

Sources

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