

Fact Sheet: Ketamine

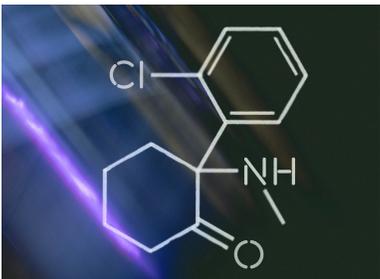
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What Is Ketamine?

Ketamine, a general anesthetic developed in the 1960s, is used in medicine to relieve pain and has gained recent attention for its antidepressant effects (Li & Vlisides, 2016). It has pain-relieving properties and produces dissociative effects among users (Drug Enforcement Administration [DEA], 2020). Ketamine is a Schedule III substance, meaning there is a risk of strong psychological dependency and potential physical dependency (DEA, 2020; National Institute on Drug Abuse [NIDA], 2024; Preuss et al., 2023).



Medical Uses for Ketamine

Ketamine is approved by the Food and Drug Administration (FDA) as a general anesthetic that can be used alone or in combination with other medicines to assist during and prior to surgeries (DEA, 2020; Goordeen et al., 2022; Mayo Clinic, 2025; NIDA, 2024). Ketamine is widely used for its sedation capabilities and ability to relieve acute and chronic pain (DEA, 2020; Goordeen et al., 2022; Orhurhu et al., 2023a). Additionally, ketamine in low dosages is being explored as a treatment for addressing severe depression and decreasing pain caused from long-term opioid use (Ezquerro-Romano et al., 2018; Goordeen et al., 2022; Matveychuk et al., 2020; Orhurhu et al., 2023a). Ketamine's antidepressant

and anti-suicidal properties make it a promising option for addressing serious mood disorders and treatment-resistant depression (Matveychuk et al., 2020).

Ketamine Street Names

According to the Addiction Center (2025) and DEA (2020), ketamine street names include:

- Special K
- Super K
- Vitamin K
- Cat valium
- Dorothy
- Purple
- Kit Kat

Impact of Recreational Ketamine Use

Ketamine is also used recreationally for its hallucinogenic and dissociative properties, as it allows users to feel detached from their surroundings and self (Addiction Center, 2025; DEA, 2020; NIDA, 2024). At smaller doses, this can leave a person feeling happy or like they are dreaming/floating, but at larger doses, it can lead to confusion or inability to move or speak (NIDA, 2024). Recreationally used ketamine takes the form of a clear liquid that is injected into the bloodstream or mixed into drinks or a white powder that can be inhaled or smoked (DEA, 2020). The "ketamine street names" box lists common terms for ketamine.

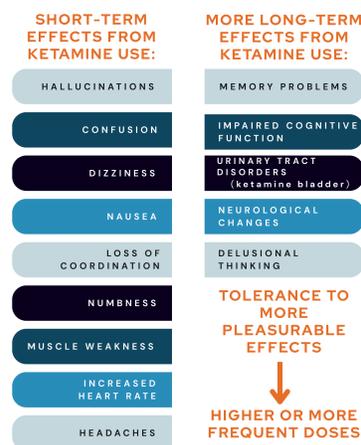


Figure 1. Short- and Long-Term Signs and Symptoms of Ketamine Use

Sources: Geo#rion, 2024; Leaver, 2019; NIDA, 2024; Srirangam & Mercer, 2012

Ketamine has a short-duration full-body buzz (or high) but produces a quick tolerance, leading the user to increase

the quantity to reach the same initial effect (Addiction Center, 2025). Ketamine's potency poses a risk of forming a moderate to low physical dependency or a high psychological dependency (DEA, 2020; Orhurhu et al., 2023b). Figure 1 shows the short- and long-term effects of ketamine use, such as dizziness, headaches, memory problems and impaired cognitive and urinary function.

Risk of Overdose and "K-Hole"

Higher doses of ketamine can cause what is known as "k-hole," where an individual undergoes an out-of-body experience and is completely detached; this can feel like a near-death experience (Addiction Center, 2025). K-hole can be described as taking too much ketamine, resulting in users feeling completely numb or disconnected from the body (San Francisco Aids Foundation, n.d.).

SIGNS OF OVERDOSE

- Severe confusion or agitation
- Extreme drowsiness or unconsciousness
- Difficulty breathing or respiratory failure
- High blood pressure
- Irregular heart rhythms
- Vomiting
- Inability to move
- Convulsions
- Chest pain
- Hallucinations

Figure 2. Signs of a

Ketamine Overdose

Sources: Addiction Center, 2025; San Francisco

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It can be unpredictable and difficult to gauge ketamine quantity, and in some cases, overdose may occur, leading to life-threatening situations and, sometimes, death (Addiction Center, 2025; San Francisco AIDS Foundation, n.d.). Users attempting to reach the "k-hole" may accidentally overdose—especially if other substances and alcohol are also ingested (Addiction Center, 2025).

An individual can experience an overdose even with a small dose of ketamine (Addiction Center, 2025), so it's important to call 9-1-1 immediately and identify the symptoms to the operator if you suspect someone is experiencing an overdose on ketamine. Signs might include severe confusion, drowsiness or unconsciousness, high blood pressure, irregular heartbeat or chest pain, vomiting, and convulsions or hallucinations (Figure 2). You can turn the individual onto their side into the recovery

position to keep their airway open and unblocked in case of possible choking.

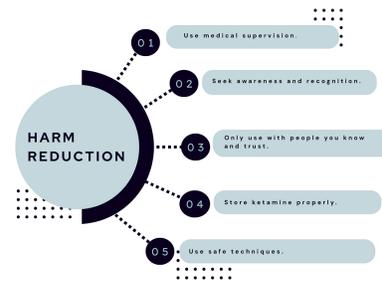


Figure 3. Harm Reduction

Strategies

Source: San Francisco AIDS Foundation, n.d.

Prevention and Harm Reduction

Harm reduction approaches for substance use are strategies that limit fatal overdoses. Figure 3 displays several harm reduction strategies when using ketamine, including:

- **Use medical supervision.** Always use ketamine under the guidance of a qualified medical provider and ensure it is obtained from a regulated, trustworthy source.
- **Seek awareness and recognition.** Be aware of the signs and symptoms of misuse and ketamine overdose. Seek emergency medical help immediately if you suspect someone has overdosed.
- **Only use with people you know and trust.** Use ketamine with trusted people and ensure it doesn't accidentally get in the hands of someone who is not intending to consume or ingest it.
- **Store ketamine properly.** Ensure that ketamine is properly stored and kept out of reach of others (particularly children) to prevent accidental ingestion.
- **Use safe techniques.** Stay hydrated with lots of water or electrolyte drinks prior to use, use only your prepared drink(s), avoid sharing needles, inject into a muscle only, and avoid sharing devices with others.

Finding Resources and Learning More

- [Responding to a Ketamine Overdose](#) (BOCA Recovery Center, 2024).
- [SAMHSA's National Helpline: 1-800-662-HELP \(4357\)](#) (Substance Abuse and Mental Health Services Administration, 2023).

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