

GUIDANCE: RESPONDING TO SUSPECTED KETAMINE OVERDOSE

Ketamine use has become increasingly common in both recreational and coping contexts, particularly among young people and those managing trauma or distress. While many people perceive ketamine as relatively low-risk, overdose and harm can still occur – especially when individuals misjudge doses, return to use after a break, or unknowingly consume contaminated substances. As frontline staff, it's vital to understand the signs of ketamine-related overdose, respond calmly and effectively, and offer follow-up support in ways that are trauma-informed, practical, and free from stigma.

What Happens in an Overdose?

A ketamine overdose occurs when too much of the drug is taken for the body to safely process, resulting in disruption to multiple body systems – especially the central nervous system (CNS) and the cardiovascular system.

1. Central Nervous System Depression

- ❑ High doses of ketamine can lead to profound sedation, unconsciousness, or coma.
- ❑ It may impair breathing reflexes, though ketamine alone typically doesn't stop breathing entirely (unlike opioids).
- ❑ However, airway obstruction can occur if someone becomes unresponsive while lying on their back, or if vomit blocks the airway.

2. Dissociation and Loss of Motor Control

- ❑ Overdose can result in catatonia-like states, where the person appears frozen, non-verbal, or unaware of their surroundings.
- ❑ Individuals may fall, seize, or injure themselves unintentionally due to loss of coordination and detachment from reality.

3. Cardiovascular Effects

- ❑ Ketamine stimulates the sympathetic nervous system, which increases heart rate and blood pressure.
- ❑ At very high doses or in combination with other depressants, this can lead to arrhythmias, chest pain, or cardiac distress, especially in vulnerable individuals.

The Danger of Polysubstance Use and Contamination

While a fatal overdose from ketamine alone is relatively rare, the risk increases significantly when:

- ❑ It's combined with other depressants such as alcohol, benzodiazepines, GHB, or opioids – which can suppress breathing and reduce consciousness.
- ❑ It's contaminated with synthetic opioids (like fentanyl or nitazenes), which are extremely potent and can cause respiratory arrest even in minute doses.

This is especially dangerous because users may not know their ketamine is laced with these substances – particularly when bought online or through unknown sources.

Pharmacological Mechanisms in Summary

System	Effect of Ketamine Overdose
Brain	NMDA receptor blockade → extreme dissociation, hallucinations, unconsciousness
Lungs	Possible airway obstruction or impaired breathing reflex (esp. if unconscious)
Heart	Increased heart rate & blood pressure → potential arrhythmia or cardiac strain
Muscles	Loss of motor control, risk of collapse or injury
Risk escalators	Alcohol, benzos, opioids, contamination with fentanyl/nitazenes

Why Ketamine Overdose Happens

- Dose misjudgement is common. Because ketamine is active at very low doses (sometimes less than 100mg), it's easy to take too much—where purity varies and small mg differences can produce wildly different effects.
- Tolerance and setting matter: People new to ketamine, or returning after a break, may misjudge their tolerance.
- Mixing substances

Signs of a Ketamine Overdose

- Loss of consciousness / unresponsiveness
- Shallow or stopped breathing
- Muscle rigidity or limpness
- Bluish lips or fingertips (cyanosis)
- Seizure-like movements or confusion
- Hallucinations, panic, or extreme agitation followed by collapse

Immediate Staff Actions (On the Scene)

1. Assess Safety and Responsiveness

- Approach calmly.
- Check if the person is awake and breathing.
- Speak their name, gently shake or tap their shoulder.

2. Call Emergency Services if:

- The person is unresponsive or unconscious
- They are not breathing or breathing irregularly
- You suspect opioid contamination (especially if naloxone is needed)

Call 999 and say what you suspect (e.g., "Possible ketamine overdose, possible opioid involvement").

3. Administer Naloxone (if trained and available)

- ❑ If there's any chance the ketamine was mixed with opioids, give naloxone.
- ❑ It won't harm someone who hasn't taken opioids but can reverse respiratory depression if fentanyl or similar drugs are involved.
- ❑ Continue to monitor and be prepared to give multiple doses.

4. Place in the Recovery Position

- ❑ If they are breathing but unconscious, place them on their side with their airway open.
- ❑ Keep them warm and stay with them until help arrives.

5. Stay Calm and Supportive

- ❑ If the person regains consciousness:
 - *Reassure them.*
 - *Let them know help is on the way.*
 - *Avoid judgement or confrontation – they may be confused, frightened, or paranoid.*

Follow-Up Actions After a Ketamine Overdose

1. **Seek Medical Review** – Encourage or support the person to be seen by a GP or specialist for aftercare and further health screening.
2. **Offer Harm Reduction Support:**
 - *Talk about test dosing, spacing out use, and avoiding use alone.*
 - *Discuss risks of using with alcohol or benzos (which suppress breathing).*
 - *Encourage them to never use alone and to carry naloxone if contamination is a risk.*
3. **Refer or Signpost:**
 - *Consider detox/inpatient procedures.*
 - *Mental health support if trauma, dissociation, or suicidal thoughts are linked to ketamine use.*
 - *Sexual health services if use is linked to chemsex or high-risk behaviour.*
4. **Reflect as a Team:**
 - *Debrief staff, review what went well and what could be improved.*
 - *Ensure support is available for any staff affected by the incident.*

Key Messages for Staff

- ❑ Ketamine overdoses rarely cause death in isolation but can be serious – especially when mixed or contaminated.
- ❑ Contamination with synthetic opioids is an emerging and deadly risk.
- ❑ Naloxone is safe and can save lives even if opioids weren't intentionally used.
- ❑ Compassionate, non-judgemental responses build trust and increase the likelihood of future help-seeking.

Responding to a suspected ketamine overdose can feel intense, but your calm, informed actions can make all the difference. By recognising the signs, knowing when to call for emergency support, and offering ongoing care that centres safety and dignity, staff can play a critical role in reducing harm and strengthening trust. As drug trends evolve, staying curious, connected, and compassionate will remain at the heart of effective, trauma-informed practice.