

Fact sheets 2025

What are nitazenes?

Nitazenes are a type of emerging drug that are classified as a new psychoactive substance (NPS). They are a group highly potent synthetic opioids and are up to 1000 times more potent than morphine.

By the beginning of 2024, more than a dozen different nitazene analogues (e.g., protonitazene and isotonitazene) had been identified around the world, but new forms of the drug are continually being identified.

What are the effects?

The physical effects of nitazenes are similar to other opioids. These include:

- Feeling of euphoria or of being in a 'dreamlike' state
- Sedation
- Temporary relief of pain, stress, or low mood
- Itchiness
- Severe nausea and/or vomiting
- Slowed and/or difficulty breathing
- Blue lips or fingertips
- Cold and clammy skin
- Pinpoint (tiny) pupils
- Becoming unresponsive and/or losing consciousness.

What are the risks?

The potency of nitazenes varies greatly between drugs in the class. They can range from levels similar to heroin, to a lot stronger than fentanyl. Given this, taking nitazenes presents a high risk of overdose.

Reports indicate that nitazenes have been presented and taken as non-opioid drugs, such as MDMA, ketamine and benzodiazepines. This creates a risk of opioid overdose in non-opioid using people.

Fentanyl strips will not detect nitazenes. Drug checking services can be used to detect nitazenes.

Dozens of overdose deaths involving nitazenes have been reported in Australia since 2021.

Nitazenes



Toxicity and overdose

Nitazene toxicity presents similarly to other opioids with respiratory depression and a decreased level of consciousness. If the dose is too high, you might overdose.

Naloxone is effective in the reversal of nitazene toxicity, and multiple doses may be necessary.

Call an ambulance straight away by dialling Triple Zero (000) if you or someone you are with has any of these symptoms:

- Slow/shallow breathing
- Blue/grey lips and complexion
- The person is unconscious and cannot be woken up.

Ambulance officers do not have to involve the police.

Mixing nitazenes with other drugs

As with all opioids, mixing nitazenes with other drugs increases the risk of overdose, especially depressant drugs like other opioids, alcohol, benzodiazepines, GHB and ketamine.

Dependence and withdrawal

Opioids have the highest dependence liability of all illicit drugs, and nitazenes are no exception.

Opioid withdrawal syndrome has both physical and psychological symptoms. It is generally characterised as a flu-like illness.

Signs and symptoms of opioid withdrawal syndrome include:

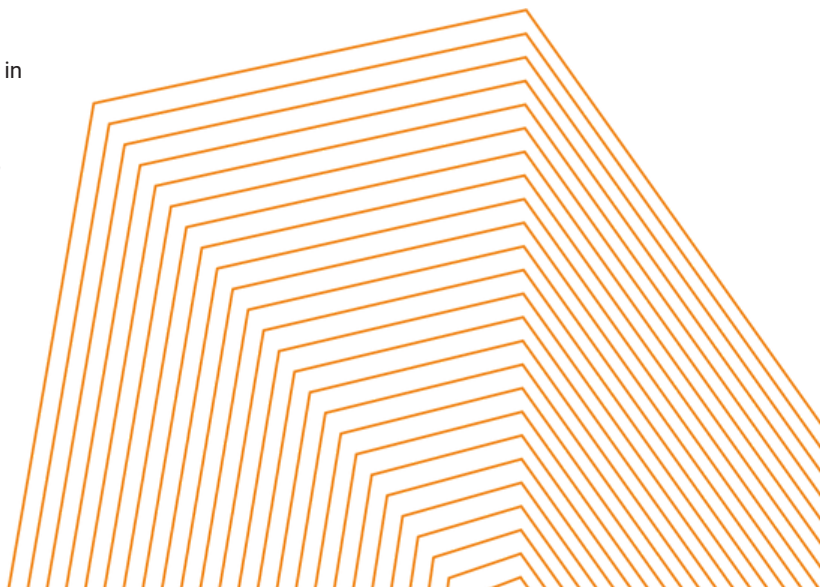
- Sweating, watery eyes, runny nose
- Diarrhoea, nausea, vomiting, abdominal cramps
- Muscle spasm resulting in headaches, backaches, leg cramps
- Goosebumps, dilated pupils
- Elevated blood pressure, increased heart rate
- Anxiety, irritability, dysphoria, sleep disturbance
- Craving for opioids.

Treatment

One of the more common treatments for opioid dependence is opioid substitution treatment. The evidence demonstrating the effectiveness of opioid substitution treatment for opioid dependence is well established.

Opioid substitution treatment is also called medication-assisted treatment of opioid dependence. The most common medicines used in Australia are methadone, buprenorphine and naltrexone.

Other options include residential rehabilitation, a drug-free treatment, requiring residence in the treatment agency after having undertaken detoxification. Programs may be short (approximately one month) or longer (at least three to six months). Counselling and withdrawal-management are also available.



Nitazenes trends in Australia

Due to the emerging nature of this drug, no data exists of how many people use nitazenes. But there have been many reports of nitazene toxicity in Australia as well as public health alerts about nitazenes being presented as other substances such as MDMA and ketamine.

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

Alcohol and Drug Foundation (2024). Nitazenes. Retrieved from: adf.org.au/drug-facts/nitazenes/

Coroners Court of Victoria. Victorian Overdose Deaths 2013–2022. Retrieved from: coronerscourt.vic.gov.au/victorian-overdose-deaths-2013-2022

Darke, S., Dufrou, J., Farrell, M., Lappin, J. & Peacock, A. (2024) Emergence of deaths due to nitazene toxicity in Australia. Drug and Alcohol Review. doi/10.1111/dar.13920

High Alert: Drug Information and Alerts Aetearoa New Zealand (2024). What are nitazenes? Retrieved from: highalert.org.nz/articles/what-are-nitazenes

Montanari, E., Madeo, G., Pichini, S., et. al. (2022). "Acute Intoxications and Fatalities Associated With Benzimidazole Opioid (Nitazene Analog) Use: A Systematic Review." Therapeutic Drug Monitoring, vol. 44, no. 4, pp. 494–510.

National Centre for Clinical Research on Emerging Drugs (2024). Emerging drug briefing: Increasing reports of nitazene toxicity in Australia. Retrieved from: nccred.org.au/wp-content/uploads/2024/04/Nitazenes-Emerging-Drug-Briefing.pdf

Vandeputte, M., Krotulski, A., Walther, D., et al (2022). "Pharmacological evaluation and forensic case series of N-pyrrolidino etonitazene (etonitazepine), a newly emerging 2-benzylbenzimidazole 'nitazene' synthetic opioid." Archives of Toxicology. Vol. 96, no. 6, pp. 1845–63.

Clifford, B., Peacock, A., Siefried, K.J., Gobeil, J., Smith, J.L., Ezard, N. (2025). "Responding to reports of nitazene toxicity in Australia." Medical Journal of Australia. Vol. 222, no.5, pp. 216–219.



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