

Nitazenes (ny-TAH-zeens)

Reason for this information sheet

- Nitazenes are in the drug supply in BC. Different nitazenes have different levels of strength, and some are much stronger than fentanyl. Even small amounts can make overdose and death more likely.
- Many people use nitazenes accidentally when they use opioids (down), tablets or other drugs. Nitazenes can be missed by drug checking equipment and cannot be detected by fentanyl test strips.
- Naloxone should work on overdoses caused by nitazenes. Multiple doses of naloxone might be needed. Because the drug supply is so unpredictable, people who use drugs should follow harm reduction best practice: use with a buddy, know the signs of overdose, and carry naloxone.

What we know about nitazene

Nitazenes are a type of pain killer that was created in the 1950s. Nitazenes were never approved for human use because of concerns about safety.

In the unregulated drug supply:

- Nitazenes are often mixed in with fentanyl, down, benzos, and other drugs that slow down the body's lungs and heart. Especially when mixed with nitazenes, these drugs can stop you from breathing all together.
- Nitazenes can be pressed into tablets to make them look like prescription medications. They can also be found in powder form or, rarely, as a liquid.
- Nitazenes are not detected by fentanyl test strips. Drug checking equipment can detect nitazenes in larger quantities, but can miss small amounts that are still enough to cause an overdose.

How nitazenes may affect people

Nitazenes in the drug supply increases the risk of overdose and death. Nitazene overdoses can feel and look the same as an overdose caused by fentanyl or another opioid. People who use fentanyl can overdose on nitazenes, especially when using other drugs at the same time.

Effects include:

- Heavy sedation (sleepiness) or unconsciousness (not responding)
- Feeling uncoordinated, confused, or dizzy
- Slow breathing, possibly for long periods, or breathing stopping all together
- Skin tone turning blue or grey because their body isn't getting enough oxygen
- Heart rate or blood pressure dropping too low
- Seizures, coma, or death

How to respond to a drug poisoning with nitazene

Does naloxone work on nitazenes?

Yes, naloxone should temporarily reverse nitazene overdoses, but:

- Multiple doses may be needed to restart breathing.
- The overdose can come back after naloxone wears off.
- It is critical to call 911 and give rescue breaths if needed.

Responders should:

- Call 911
- Check breathing: If the person is taking less than 12 breaths in a minute or making unusual breathing sounds like gurgling or snoring, give 1 breath every 5 seconds.
- Check pulse: if there is no pulse, start chest compressions or use an AED if available.
- Keep checking if their breathing goes back to normal, and give naloxone every 3 minutes if breathing doesn't get better.
- Give oxygen if available and trained to do so.
- Encourage the person to go to the hospital for monitoring and assessment.

¹ Toward the Heart. [16608487262Ny4wL0NKvQcQgcGTYFFsWNZAVRYlhqh4p57BZV.pdf](https://www.towardtheheart.com/16608487262Ny4wL0NKvQcQgcGTYFFsWNZAVRYlhqh4p57BZV.pdf)

Nitazenes are potent opioids in the unregulated drug supply. Like all opioids, they can cause overdose. Fentanyl test strips cannot detect nitazenes.

More information

Text the word JOIN to 253787 (ALERTS) to sign up for drug alerts in your health region.

References

1. Amaducci, A., Aldy, K., Campleman, S. L., Li, S., Meyn, A., Abston, S., Culbreth, R. E., Krotulski, A. J., Logan, B. K., Wax, P., Brent, J., & Manini, A. F. (2023). Naloxone use in novel potent opioid and fentanyl overdoses in emergency department patients. *JAMA Network Open*, 6(8), e2331264. <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2808868>
2. BC Centre for Disease Control. (n.d.). Unregulated drug poisoning emergency dashboard. <https://www.bccdc.ca/health-professionals/data-reports/substance-use-harm-reduction-dashboard>
3. CCENDU Drug Alert – Nitazenes. (2022). https://www.ccsa.ca/sites/default/files/2022-03/CCSA-CCENDU-Drug-Alert-Nitazenes-2022-en_0.pdf
4. Drug Checking BC. (2022, March). Drug checking results: Vancouver Coastal Health – March 2022. British Columbia Centre on Substance Use. https://drugcheckingbc.ca/wp-content/uploads/sites/4/2022/04/Drug_Checking_VCH_Mar_2022.pdf?utm_source=copilot.com
5. Health Canada. (2024). Fentanyl. Government of Canada. <https://www.canada.ca/en/health-canada/services/substance-use/controlled-illegal-drugs/fentanyl.html>

6. Inter-American Drug Abuse Control Commission. (2024). Information bulletin: The emergence of nitazenes in the Americas. Organization of American States, p. 7.
<https://www.oas.org/ext/DesktopModules/MVC/OASDnnModules/Views/Item/Download.aspx?type=1&id=1045&lang=1>
7. Ottawa Public Health. (n.d.). Nitazenes. https://www.ottawapublichealth.ca/en/public-health-topics/resources/Documents/Nitazenes_FactSheet_EN.pdf
8. Pereira, J. R. P., Quintas, A., & Neng, N. R. (2025). Nitazenes: The Emergence of a Potent Synthetic Opioid Threat. *Molecules* (Basel, Switzerland), 30(19), 3890.
<https://www.mdpi.com/1420-3049/30/19/3890>
9. Robinson, D. (2025, June 18). Nitazenes: Novel non fentanyl synthetic opioids in today's drug supply. Substance Drug Checking (University of Victoria).
<https://substance.uvic.ca/blog/nitazenes-novel-non-fentanyl-synthetic-opioids-in-todays-drug-supply/>
10. Schwarz, E. S., Dicker, F., Lothet, E., Spungen, H., & Levine, M. (2025). Nitazenes: An Old Drug Class Causing New Problems. *Missouri medicine*, 122(4), 329–333.
https://pmc.ncbi.nlm.nih.gov/articles/PMC12331301/%23b27-ms122_p0329
11. Stangeland, M., Dale, O., & Skulberg, A. K. (2025). Nitazenes: review of comparative pharmacology and antagonist action. *Clinical Toxicology*, 63(6), 393–406. [Full article: Nitazenes: review of comparative pharmacology and antagonist action](#)
12. Toronto's Drug Checking Service. (2024). Nitazene opioids in Toronto opioid samples that are not expected to contain high-potency opioids. <https://drugchecking.community/drug-information/nitazene-opioids/>
13. Toward the Heart. (2022). The Basics: Nitazenes.
<https://towardtheheart.com/assets/uploads/16608487262Ny4wL0NKvQcQgcGTYFFsWNZAVRYlhqh4p57BZV.pdf>
14. Ujváry, I., Christie, R., Evans-Brown, M., Gallegos, A., Jorge, R., de Moraes, J., & Sedefov, R. (2021). DARK Classics in Chemical Neuroscience: Etonitazene and Related Benzimidazoles. *ACS chemical neuroscience*, 12(7), 1072–1092.
<https://pubs.acs.org/doi/10.1021/acscchemneuro.1c00037>