

Cychlorphine (syeh-KLOR-feen)

Reason for this information sheet

- Cychlorphine (also called N-propionitrile chlorphine) is one of a new class of laboratory-made opioids known as orphines.
- Cychlorphine is rare now but may become more common.

What we know about cychlorphine

- Cychlorphine is an opioid, which is a class of substances that reduce pain, cause euphoria, and can slow or stop breathing.
- Cychlorphine is thought to be approximately **10x more potent than fentanyl**.
- Cychlorphine has never been tested in humans, and not all its effects are known.

In the unregulated drug supply:

- Cychlorphine has been found in counterfeit (fake) pills that looked like prescribed opioid medication such as oxycodone.
- Cychlorphine can be identified by Fourier Transform Infrared Spectroscopy (FTIR) in community drug checking, but there might not be enough in a sample for it to be detected, so it may not be identified.
- There are currently no test strips that work to detect cychlorphine.
- It is not detected as part of a standard urine drug screen.

How cychlorphine may affect people

- Cychlorphine can cause sedation, slow or stopped breathing, and lead to an opioid poisoning (overdose).
- Other reported experiences with high doses include nausea, vomiting, and sweating.
- Early studies suggest cychlorphine is a long-acting opioid. Effects may last up to 48 hours.

How cychlorphine interacts with other substances

- Cychlorphine will add to the effects of other opioids if used together.
- Using cychlorphine with benzodiazepines can cause dangerous breathing problems.
- Using cychlorphine with other sedatives, like medetomidine or xylazine, makes sedation much stronger and can make someone extremely drowsy or unresponsive.
- Drug poisonings caused by cychlorphine may require higher doses of naloxone to reverse.

Drug poisoning response and orphines

Responders should:

- Call 911
- Check breathing: give breaths (1 every 5 seconds) if not breathing normally (<12 breaths/min or unusual breathing sounds like gurgling or snoring)
- Check pulse: if no pulse start chest compressions; use AED if available
- Give naloxone if not breathing normally
- Continue with rescue breaths and give oxygen if available and trained to do so
- Encourage transfer to hospital for monitoring and assessment

Other information

- While cychlorphine is currently of concern, there is the potential for other similar and extremely potent orphine drugs in the future.
- Orphines have the same basic structure so many similar drugs can be created by changing a few atoms attached to that foundation.
- Because orphines are opioids, opioid agonist therapy (like methadone and buprenorphine) should be effective to treat withdrawal from cychlorphine and other orphines.

Cychlorphine is a potent synthetic opioid found in the unregulated drug supply. It can quickly slow or stop breathing, leading to life-threatening drug poisoning. Always give naloxone if opioid poisoning is suspected and call 9-1-1.

Sources

1. BC Centre for Disease Control. (2022). *Surveillance of benzimidazole opioids in British Columbia*. http://www.bccdc.ca/resource-gallery/Documents/Statistics%20and%20Research/Statistics%20and%20Reports/Overdose/surveillance-of-benzimidazole-opioids-in-bc-2022-05-25-2_904.pdf
2. British Columbia Centre on Substance Use. (2025). *Drug checking BC: September 2025*.
3. Colombo Plan Drug Advisory Programme. (2026). *Orphine alert* (Version 3).
4. Dugues, P., Robin, T., Bellouard, M., Chenorhokian, S., Triguel, M., Pfau, G., Feng, C., Cherki, S., Herbette, G., Alvarez, J. C., & Larabi, I. A. (2025). Multi-analytical identification of the synthetic opioids cychlorphine and methiodone (IC-26) in drug seizures: First detection in Europe. *Clinical Chemistry and Laboratory Medicine*. Advance online publication. <https://doi.org/10.1515/cclm-2025-1428>
5. Krotulski, A. J., Papsun, D. M., Stang, B. N., Walton, S. E., & Logan, B. K. (2026). *Increase in fatal overdoses linked to novel synthetic opioid N-propionitrile chlorphine (cychlorphine)*. Center for Forensic Science Research and Education.
6. Toronto's Drug Checking Service. (2025). *103 samples checked: October 18–31, 2025*.
7. Sprague, J. E., Toms, J. A., & Ratermann, C. F. (2026). Non-fatal opioid overdose associated predominantly with the benzimidazolone, cychlorphine. *Clinical Toxicology*, *64*(2), 146-147.