

Unregulated Drug Supply

Substance Information Sheet - August 2025

CARFENTANIL (kar-FEN-tuh-nil)

Reason for this information sheet

- Carfentanil is showing up more often in BC. At the same time, the number of people needing emergency help because of overdoses is increasing again.
- Carfentanil is extremely toxic (20 - 100 times more toxic than fentanyl). Even a tiny amount can be dangerous, which makes overdose and death more likely.

What we know about carfentanil

Carfentanil is a human-made opioid that's so toxic that it's only legal for use by vets on large animals like elephants—not for people.

In the unregulated drug supply:

- Carfentanil is often mixed with fentanyl, benzodiazepines, xylazine, or other drugs that slow down the body's respiratory system and can stop you from breathing altogether.
- Carfentanil can look like other drugs. Samples of carfentanil have shown up in various colours and forms and may not appear different from other drugs containing fentanyl.
- Small amounts of carfentanil might not show up in all drug checking instruments but can still cause an overdose. Drug checking sites can help people access specialized drug checking to test for carfentanil.
- Drug checking technologies may not always be able to identify carfentanil in a sample. Carfentanil may not always be detected by fentanyl test strips commonly used in community settings.

How carfentanil may affect people

Carfentanil is so toxic that even a tiny bit can cause an overdose that may lead to death. Even people who use opioids regularly can overdose on carfentanil.

Effects include:

- Quickly causing heavy sedation (sleepiness) or unconsciousness
- Breathing slows down or stops suddenly
- Blue or grey skin because of low oxygen
- Heart rate or blood pressure can drop too low
- Loss of consciousness, coma, and death

Drug poisoning response and carfentanil

Carfentanil dramatically increases the risk of fatal overdose.

- Carfentanil overdoses require immediate intervention because of how toxic it is and how quickly it affects the body.
- More than one dose of naloxone might be needed to help someone start breathing again.

How carfentanil interacts with other substances

Does naloxone work on carfentanil?

Yes, naloxone can reverse carfentanil, but:

- Larger than normal or repeated doses may sometimes be required to restart breathing.
- The overdose can come back after naloxone wears off.
- It is critical to **call 911 and provide rescue breathing** as needed.

Responders should:

- Call 911
- Check breathing: give 1 breath every 5 seconds if needed (<12 breaths/min or unusual breathing sounds like gurgling or snoring)
- Check pulse: start chest compressions if no pulse, use AED if available
- Give naloxone every 3 minutes if breathing doesn't improve
- Give oxygen if available and trained to do so
- Ensure transfer to hospital for monitoring and assessment

Other information

- Carfentanil may be sold to people who believe they are using fentanyl or other opioids without them knowing.
- Drug checking and toxic drug alerts are tools to help know if carfentanil is in the local supply. Text the word JOIN to 253787 (ALERTS) to sign up for drug alerts in your health region.

Carfentanil is one of the most potent opioids in the unregulated supply. Even a tiny amount can cause overdose and death.

Sources

1. BC Coroners Service. Illicit Drug Toxicity Type and Top Substances Data 2019–2024. Accessed July 2025. <https://www2.gov.bc.ca/gov/content/life-events/death/coroners-service/statistical-reports>
2. BC Coroners Service Death Review Panel. A Review of Illicit Drug Toxicity Deaths: Building a coordinated response to the toxic drug crisis. Government of British Columbia. March 2022. https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/review_of_illicit_drug_toxicity_deaths_2022.pdf
3. Government of British Columbia. Lethal drugs are circulating: Be drug smart. Accessed July 2025. <https://www2.gov.bc.ca/gov/content/overdose/lethal-drugs-are-circulating>
4. BCCDC Drug Alert Portal. Recent Alerts involving Carfentanil. Accessed July 2025. <https://towardtheheart.com/alerts>
5. BCCSU. Carfentanil: What We Know (Substance Profile). 2023. Accessed July 2025. <https://www.bccsu.ca/harm-reduction-substance-profiles/>
6. Public Health Agency of Canada. Apparent Opioid and Stimulant Toxicity Deaths in Canada. Q1 2024 Report. <https://health-infobase.canada.ca/substance-related-harms/opioids/>
7. Kleinman RA, et al. Fentanyl, carfentanil and other fentanyl analogues in Canada's illicit opioid supply: A cross-sectional study. *Drug and Alcohol Dependence Reports*. 2024 May 23;12:100240. doi:10.1016/j.dadr.2024.100240
8. Leen JL, Juurlink DN. Carfentanil: a narrative review of its pharmacology and public health concerns. *Canadian Journal of Anesthesia*. 2019 May;66(5):437–444. <https://pubmed.ncbi.nlm.nih.gov/30666589/>
9. Zawilska JB, Kuczyńska K, Kosmal W, Markiewicz K, Adamowicz P. Carfentanil – from an animal anesthetic to a deadly illicit drug. *Forensic Science International*. 2021 Mar;320:110715. doi:10.1016/j.forsciint.2021.110715