

Naloxone: Treating opioid poisoning (overdose)

What are opioids?

Opioids are a class of drug or medication that includes morphine, heroin, methadone, fentanyl, and oxycodone. Opioids can be prescribed by a health care provider or sold through the unregulated drug supply. Opioids are usually prescribed for pain relief and are generally safe when used as prescribed by a health care provider. Opioids from the unregulated drug supply contain a potent (very strong) type of opioid called fentanyl and can be unsafe. Fentanyl in the unregulated drug supply can cause opioid poisoning.

What is an opioid poisoning?

An opioid poisoning (or overdose) happens when a person's body is overwhelmed by the amount of opioids, causing potentially life-threatening harms. During an opioid poisoning, breathing becomes irregular, slows, or stops, and the person may be difficult to wake up. If someone cannot breathe or is not breathing enough, they will not be getting enough oxygen into their body. This can lead to brain injury, cardiac arrest and death. An opioid poisoning is a medical emergency. Call **9-1-1** if you think someone is experiencing an opioid poisoning. Give naloxone if you have a Take Home Naloxone kit.

Why is opioid poisoning an important public health issue?

Since 2016, B.C. has experienced an increase in the number of people dying from drug poisoning. This increase in deaths led to the declaration of a public health emergency in 2016 that is still ongoing today. The deaths are largely due to a highly potent opioid called fentanyl, and its related drugs, in the unregulated drug supply. Drug poisoning fatalities are now the leading cause of unnatural deaths in B.C. among people between the ages of 10 and 59 years.

What is naloxone?

Naloxone is a drug that can save a person's life if they are having an opioid poisoning. It is available in injectable and nasal spray (or "intranasal") formulations.

Naloxone temporarily reverses the effects of opioid drugs. It binds to the same sites (receptors) in the brain as opioids. When naloxone is given, it pushes the opioid from the receptor to temporarily restore normal breathing.

Naloxone starts to work within minutes. A second dose of naloxone may be needed if the first dose does not restore normal breathing after 3 minutes. Naloxone can be given every 3 minutes until the person is breathing normally. It is important to give rescue breaths along with naloxone to make sure the person's body gets oxygen.

The effects of naloxone are temporary and only last for 30 minutes to 2 hours. If the naloxone wears off and opioids are still present in the body, a person can experience another opioid poisoning. Additional doses of naloxone will be needed if the person's breathing slows or stops again. It is important to call **9-1-1 as soon as possible**, stay with the person and be ready to provide another dose of naloxone every 3 minutes until the person is breathing normally.

Is naloxone safe?

Yes, naloxone is safe. It has been used by health care providers, emergency responders and members of the community to reverse countless opioid poisonings.

Naloxone has no effect on a person who has not taken opioids. If a person has a physical tolerance to opioids, high doses of naloxone may cause uncomfortable withdrawal symptoms. While uncomfortable, these withdrawal symptoms are not life-threatening. Responders can try to avoid giving too much naloxone by giving rescue breaths, allowing naloxone 3 minutes to work and only giving

naloxone when breathing is not normal. In rare cases, some people may have an allergy to naloxone.

What is B.C.'s Take Home Naloxone (THN) program?

In August 2012, B.C.'s Take Home Naloxone (THN) program was introduced to reduce the harms and deaths associated with opioid poisoning. The THN program provides people with training to prevent, recognize and respond to an opioid poisoning with naloxone and rescue breaths while waiting for paramedics to arrive.

Does naloxone lead to more drug use?

No. Studies have shown that providing naloxone to people who use opioids does not lead to increased substance use.

Who is eligible to receive a naloxone kit?

The THN program provides injectable naloxone kits and training at no-cost to people who are likely to witness an opioid poisoning. This includes people who use substances and their friends and family. You do not need a prescription to get naloxone.

Staff members of non-profit and community-based organizations have access to naloxone through the Facility Overdose Response Box (FORB) Program <https://towardtheheart.com/forb>.

Injectable and nasal spray forms of naloxone are available at no-cost to First Nations people in B.C. at community pharmacies through the First Nation Health Benefits plan.

What is involved in THN training?

Training provides you with valuable knowledge and tools to save a life. It will teach you how to:

- Identify the signs of an opioid poisoning
- Respond to an opioid poisoning, including how to provide rescue breaths

- Use a BCCDC Take Home Naloxone kit, including how to inject naloxone
- Care for someone immediately after giving naloxone

Where can you get THN training?

You can complete in-person training at a registered THN distribution site. Online training is also available on the Toward the Heart Naloxone Training site www.naloxonetraining.com. Anyone can complete the online training and get a certificate to take to a pharmacy or other site to get a kit.

Where can I find naloxone?

You can find THN kits at over 2300 sites registered by the BC THN program including community pharmacies. To find a BC THN distribution site near you, visit Toward the Heart <https://towardtheheart.com/site-finder>.

For more information

For more information about harm reduction, visit the following HealthLinkBC Files:

- [HealthLinkBC File #102a Understanding harm reduction: Substance use](#)
- [HealthLinkBC File #102b Harm reduction for families, caregivers and friends of people who use substances](#)

For more information about overdose recognition and prevention, the BC THN program and FNHA's nasal naloxone program, visit the following websites:

- Toward the Heart: <https://towardtheheart.com>
- Government of British Columbia: Overdose prevention and response www2.gov.bc.ca/gov/content/overdose
- First Nations Health Authority: Naloxone www.fnha.ca/what-we-do/mental-wellness-and-substance-use/harm-reduction-and-the-toxic-drug-crisis/naloxone



BC Centre for Disease Control
Provincial Health Services Authority

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/healthfiles or your local public health unit. For non-emergency health information and advice in B.C. visit www.HealthLinkBC.ca or call **8-1-1** (toll-free). For the deaf and hard of hearing, call **7-1-1**. Translation services are available in more than 130 languages on request.