

# Naloxone FAQ

## What is naloxone?

Naloxone is substance that temporarily reverses (antidote) the effect of opioids in the CNS. **Naloxone restores breathing** that is slowed or stopped by opioids (e.g. dilaudid, morphine, heroin, methadone, fentanyl etc.) Naloxone temporarily reverses the effect of opioids and restores breathing; this prevents longer-term brain injury and death.

## How does naloxone work?

The Central Nervous System (CNS) is made up of the brain and spinal cord. This is the centre that controls many functions, including breathing. The CNS sends and receives messages between the brain and body through a diverse network of receptors. When an opioid substance attaches to a receptor it ‘unlocks’ the effects of the opioid. The effects of substances are felt through these receptors (e.g., euphoria, relaxation, pain relief).

This means that when an opioid is consumed it can temporarily alter the function of the brain and body.

Naloxone knocks the opioids off receptors, which blocks and reverses the opioid effect on breathing. The person starts breathing normally after enough opioids are knocked off receptors.

Naloxone does not work for non-opioid poisonings such as benzos, xylazine, cocaine, ecstasy, GHB or alcohol.



However, if a drug poisoning involves multiple substances, including opioids, naloxone helps by temporarily removing the opioid from the equation. Naloxone is not harmful and is safe to give if you are unsure what someone has taken. Stop giving naloxone when the person is breathing normally.

## How is naloxone given?

You can give naloxone by injection (into a muscle, vein, or under the skin) or intranasally (sprayed into the nose). The BCCDC Take Home Naloxone program provides both provides formulations. Intramuscular (injectable) take home naloxone kits contain 3 doses of naloxone in a glass ampoule formulation. Intranasal (nasal) kits contain 2 doses of naloxone in a nasal spray device.

## Can anyone use naloxone?

It is very important to get training on how to **recognize and respond** to a drug poisoning, including how to give naloxone. Anyone can receive training and anyone likely to experience or witness a drug poisoning is eligible for BC Take Home Naloxone kit.

Refer to our training resources: [www.towardtheheart.com/naloxone-training](http://www.towardtheheart.com/naloxone-training)

## How long does naloxone last?

Naloxone does not destroy the opioids so when naloxone starts to wear off, it releases from receptors and opioids poisoning can return. This is called secondary poisoning. Naloxone lasts for **30-120 minutes** (up to 2 hours).

Formulation	1 Dose	Timing
Intramuscular	0.4mg/1ml	Every 3 minutes
Intranasal	4mg/0.1ml	Every 3 minutes

If large doses of highly toxic opioids (e.g., fentanyl), or long-acting opioids (e.g., methadone) are involved, more doses of naloxone may be needed. In BC, the Take Home Naloxone program supplies injectable naloxone. It is important that anyone obtaining a naloxone kit be trained in how to use it. Refer to our training resources: [www.towardtheheart.com/naloxone-training](http://www.towardtheheart.com/naloxone-training)

## Does naloxone work on all drugs?

Naloxone does not work for non-opioid drug poisonings, such as cocaine, ecstasy, GHB or alcohol. However, if a drug poisoning involves multiple substances including opioids, naloxone helps by temporarily removing the opioid from the equation. **When in doubt, give naloxone.**

## Can naloxone cause harm?

Naloxone is not harmful and **will have no effect in someone who has not taken opioids**. Naloxone is safe to give even if unsure what substance someone has taken.

For individuals who regularly use opioids, naloxone may cause withdrawal symptoms so it is important to start with one dose and follow the [SAVE ME steps](#) to determine if an additional dose is needed.

In very rare cases, naloxone can cause pulmonary edema or anaphylaxis from an allergic reaction. **Call 9-1-1** and get help if you notice difficulty breathing, shortness of breath, seizure, or other serious reaction. The naloxone provided in BC Take Home Naloxone kits is preservative-free.

If you suspect someone is experiencing a drug poisoning and you are uncertain about what substances a person has consumed, including alcohol, **call 9-1-1** and follow the [SAVE ME steps](#). Naloxone is **safe to give to children and people who are pregnant. Always call 9-1-1.**

## Can naloxone be pre-loaded into syringes?

Pre-loading naloxone into the syringes provided in a THN kit is **not recommended** for the following reasons:

- Potential risk of infection
- Exposed naloxone must be discarded if not used within 24 hours
- Potential to give the wrong medication
- Naloxone exposed to light can become less potent.

## Why call 9-1-1?

A drug poisoning is a medical emergency. Even if naloxone is given, escalating emergency care is an important part of responding to an opioid poisoning event. This is because the effects of an opioid can last in the body longer than naloxone. When the naloxone wears off, the poisoning can return, and more naloxone is needed. There may also be other medical issues that look like drug poisoning and need treatment, such as brain or spinal injury, low blood sugar, seizure, and others.

## Why give breaths?

Rescue breaths can save a person's life by giving life-saving oxygen. Opioid poisoning slows or stops breathing, which means the brain and heart don't get enough oxygen. This can cause brain injury and stop the heart from beating in just a few minutes.

If the person is not breathing normally, rescue breaths provide the body with oxygen. Even if you don't have naloxone, giving rescue breaths can keep someone alive until naloxone starts to work or help arrives.

If a person's heart is not beating, rescue breaths alone is not enough. The person needs CPR. Naloxone will not move to the brain if the person's heart is not beating and CPR is not being provided. CPR involves chest compressions and rescue breaths.

### Breathing normally means:

- Taking 12 or more breaths per minute,
- Breathing on their own, and
- No unusual breathing sounds (e.g., snoring, gurgling)

## What should I do if I am responding to a witnessed drug poisoning but don't have naloxone?

Follow the **SAVE ME** steps:

- Call 9-1-1 immediately and follow the directions provided by the emergency call-taker,
- Tell the emergency call-taker if you suspect drug poisoning
- Give rescue breaths (1 breath every 5 seconds). If you are trained, check for a pulse. If you cannot find a pulse in 10 seconds, begin CPR and chest compressions.
- If you do not have naloxone or if you are unable to administer naloxone, continue providing rescue breaths and, if necessary, CPR until help arrives.

# What should I do if I am responding to a witnessed drug poisoning and only have intramuscular (injectable) naloxone, but am not able to administer it intramuscularly?

Follow the **SAVE ME** steps:

- Call 9-1-1 immediately and follow the directions provided by the emergency call-taker.
- Give rescue breaths (1 breath every 5 seconds). If you are trained, check for a pulse. If you cannot find a pulse in 10 seconds, begin CPR and chest compressions.
- If you have intramuscular naloxone but are unable to inject it do not have intranasal naloxone either, you may pour the medication into the person's nose. Although less naloxone may be absorbed this way compared to administering by injection or administration via a intranasal device, it can provide some benefit as an emergency option until help arrives.
- Remain with the person. Continue to provide rescue breaths and, if necessary, CPR until help arrives.

## Can I use expired naloxone?

Naloxone lasts about 2 years. Check the expiry dates of the naloxone periodically. If the naloxone gets close to the expiry date, individuals can return the kit to a **Take Home Naloxone site** to replace the naloxone drug, or the whole kit if necessary. The expiry date can be found on the outside of a kit or on the naloxone ampoule.

**If the only naloxone available is expired, use it.** It is safe but may be less effective. **Always call 9-1-1.**

## How should naloxone be stored?

Naloxone should be stored in a cool place or at room temperature and ampoules should be kept out of direct sunlight. Naloxone, including THN kits should not be stored in backpacks outside or in cars where temperatures may reach extreme hot or cold temperatures for extended periods.

For injectable naloxone, temporary spikes up to 40°C are OK if they do not exceed 24 hours. If the only naloxone available is known to have been outside recommended temperatures, use it. It is safe but may be less effective. **Always call 9-1-1.**

Nasal naloxone can freeze at temperatures below -15°C. This means the device will not spray and the person will not receive naloxone. Do not wait for the naloxone to thaw. Get help immediately, give breaths, and use injectable naloxone if available. **Always call 9-1-1.**