



Naloxone: Frequently Asked Questions

Updated December 2020

Background

Naloxone is a medication indicated for the treatment of natural and synthetic opioid induced respiratory depression (1). Overdose occurs when opioids bind to receptor sites on the brain stem, desensitizing the brain stem to carbon dioxide levels in the blood to the degree that breathing mechanisms are not normally triggered. This leads to depressed respiration and hypoxia. Death related to accidental opioid overdose in Manitoba has increased in recent years (2). These deaths have primarily involved pharmaceutical opioids, polysubstance use, oral or intravenous routes of consumption and, in some cases, the victim was prescribed the drug that caused the overdose. The availability of naloxone from community pharmacies and other distribution programs will help to address the rising number of opioid (including fentanyl) overdoses and deaths by increasing access to take-home- naloxone (THN) kits to at-risk Manitobans (3).

What is naloxone?

Naloxone, or Narcan®, is an antidote to opioid overdose. Taking too much of opioid drugs (e.g., morphine, heroin, methadone, oxycodone, and fentanyl) can make breathing slow down or stop. Naloxone reverses this, restoring normal breathing and consciousness. Giving naloxone can prevent death or brain damage from lack of oxygen during an opioid overdose. It does not work for non-opioid overdoses (e.g., cocaine, ecstasy, GHB or alcohol). However, if an overdose involves multiple substances, including opioids, naloxone helps by temporarily removing the opioid from the equation.

What are the conditions of sale for naloxone products indicated for emergency use in Manitoba?

As of December 15, 2020, naloxone products packaged for use in opioid overdose are excluded from the conditions for sale of Schedule 2 products in Manitoba, essentially equating them to unscheduled drug products (4). To help increase public access to naloxone indicated for emergency use during opioid overdose, these products are permitted to be sold:

- from any location or shelf in the pharmacy;
- without the involvement of a licensed pharmacist in the sale of the product; and
- without the requirement for the pharmacist to counsel individuals on the proper use and administration of the product in an opioid emergency; however, if requested or the opportunity presents for patient/client counselling, pharmacists are strongly encouraged to provide education on the proper use and administration.

Naloxone products packaged for use in opioid overdose can be left out of the lock and leave section in the pharmacy when closed. These products are also permitted to be sold at a range of retail locations across the province (4).

How does naloxone work?

Both naloxone and opioids bind to the same sites in the brain, and these sites affect breathing. However, naloxone binds more tightly than the opioids, knocking the opioids off the receptors and restoring breathing. Naloxone acts fast (usually within

5 minutes), and the protective effect lasts for 30 to 90 minutes. The body will have broken down some of the opioids over time, but naloxone does not destroy the opioids. So, if large doses, strong opioids (e.g., Fentanyl), or long acting opioids (e.g. mMethadone) are involved, or the individual has liver damage, another dose of naloxone may be needed. It is recommended to use two doses of naloxone, and it is always important to call 911 when someone overdoses.

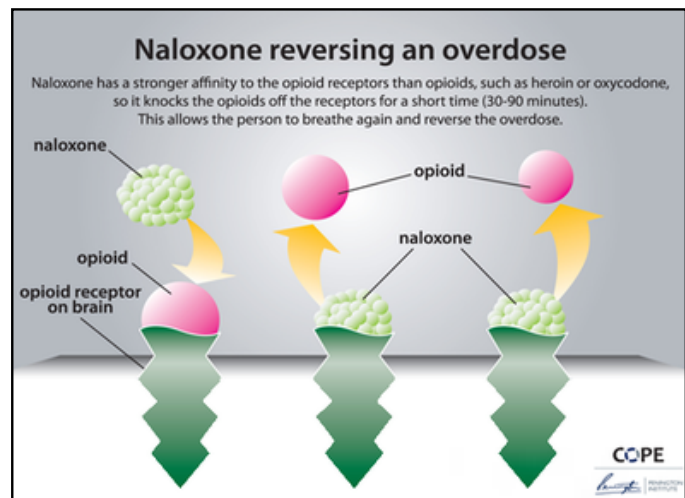


Image Credit: Penington Institute's Community Overdose Prevention and Education (COPE) Project; Adapted from art work by Maya Doe-Simkins

How is naloxone given?

You can give naloxone by injection (e.g. into a muscle) or intranasally (i.e. sprayed into the nose). You can inject naloxone through clothing into the muscle of the upper arm, upper leg, or buttock. Safety needles are ideal to provide with naloxone in order to avoid needle-stick injuries and facilitate safe needle disposal.

Is the intramuscular injection of naloxone different from the sterile injection technique?

Yes, administering naloxone (a lifesaving drug) is for opioid overdose emergencies; therefore, the sterile injection technique is not necessary. The injection can be administered through clothing into the muscle of the upper arm, upper leg, or buttock.

Can naloxone be harmful or be abused?

Naloxone has been used in Canada for over 40 years and is on the World Health Organization List of Essential Medicines. Naloxone does nothing in someone that has not taken opioids, since all it does is block the effects of opioids in the brain. Naloxone cannot get a person high and does not encourage opioid use. While naloxone is a very safe drug, it may cause individuals dependent on opioids to go into withdrawal; however, the small doses available in community pharmacy settings should minimize this risk.

Are there risks associated with using naloxone?

The only contraindication to naloxone is hypersensitivity. Naloxone may cause opioid withdrawal in those with opioid dependence. Withdrawal symptoms include pain, high blood pressure, sweating, agitation and irritability. In addition, it can be unsettling to come out of an overdose unaware of what has happened. Finally, people with health conditions (e.g., heart, liver, respiratory etc.) and/or who have taken other substances need additional medical attention. For these reasons and more, calling 911 is an important component of the overdose response.

Where can I get naloxone training?

Pharmacists should be knowledgeable on the use of naloxone for opioid overdose treatment in order to educate the public.

The following resources are recommended for pharmacists to review:

- [Toward the Heart: Quick Learn – Naloxone Administration](#)
- [Pharmacy5in5: Module on Naloxone](#)
- [Manitoba Health Training Manual: Overdose Prevention, Recognition, and Response.](#)
- [Canadian Pharmacists Association: Opioid crisis and resources on naloxone](#)

For quick reference:

Giving Naloxone by Injection

- [How to Inject Naloxone \(video\)](#)
- [How to Inject Naloxone \(Ampoules\) \(Patient Resource\)](#)
- [How to Inject Naloxone \(Vials\) \(Patient Resource\)](#)
- [Naloxone Injection Training Checklist](#)

Giving Naloxone by Nasal Spray

- [How to Give Naloxone Nasal Spray \(Video\)](#)
- [How to Use Naloxone Nasal Spray \(Print\) \(Patient Resource\)](#)
- [Naloxone Nasal Spray Training Checklist](#)

Pharmacists should engage in additional ongoing professional development as deemed necessary and review the appropriate drug product monographs.

What are the essential counselling points when providing naloxone education?

Should a patient/client seek information on how to use a THN kit, the dialogue and training must take place in a confidential area in the pharmacy. When engaging in this dialogue, the pharmacist should gather relevant information such as:

- History of opioid use
- History of past naloxone use and response
- Allergies and type of reaction

Important information when providing naloxone to an individual includes, but is not limited to:

- How to identify an opioid overdose
- The contents of each THN kit
- The importance of rescue breathing
- When to administer naloxone
- For injectable naloxone:
 - » How to prepare the dose for administration by withdrawing the dose of naloxone from the ampoule/vial into the syringe
 - » How to landmark on the thigh and administer an intramuscular injection
 - » How to avoid and manage needle-stick injuries
- For intranasal naloxone:
 - » How to administer properly
 - » Do not prime or test prior to administration
 - » Once the plunger is depressed, the dose is released

Who would benefit from a take-home naloxone kit?

Individuals who may benefit from a THN kit include (3):

- All individuals who use opioids, both prescription and non-prescription, for legitimate medical purposes and for recreational purposes;
- Individuals identified by the above group as the person most likely to be present if they were to overdose (e.g., partners, family, friends, roommates); and
- Any person who knows an opioid user and would like to be prepared in the event of an accidental overdose.

Given the safe and effective nature of naloxone, it is very unlikely that it would not be appropriate to provide a THN kit to someone who requests it for emergency use for opioid overdose (3).

Do you need to be a medical professional to recognize opioid overdose and administer naloxone?

Research and experience show, with basic training laypeople can recognize an overdose and administer naloxone just as well as a medical professional. Furthermore, community-based overdose prevention programs are empowering. They give peers, friends, and families of people who use opioid drugs the chance to save a life. However, the availability of naloxone in community pharmacies does not replace the need for emergency care or minimize the importance of calling 911.

If people who use opioids are given naloxone, will they continue using more opioids?

Research has shown that having naloxone available does not increase risk-taking behavior or cause people to use more opioids. The goal of distributing naloxone and training laypeople to prevent, recognize and respond to overdose is to prevent death and reduce brain injury or brain damage. Other goals such as getting people into treatment are only possible if people are alive.

Why is it important to stay with an individual after giving them naloxone?

Some longer acting opioids (e.g., methadone) may last longer in the body than naloxone, so an overdose could return. To make it less likely that an overdose will return, it is important to make sure that the individual knows not to take more drugs for several hours. In addition, you may need to tell them what happened, as they may be confused. Finally, it is important to tell emergency first responders everything you know about the situation so they can provide the best treatment.

Why give breaths in opioid overdoses?

Cardiopulmonary resuscitation may involve giving breaths and/or chest compressions. Breaths serve to re-oxygenate a person's blood while chest compressions help circulate blood when the person's heart is not beating. The Heart and Stroke Foundation changed their guidelines for resuscitation of sudden cardiac arrest to chest compressions only because the blood of a sudden cardiac arrest victim is well oxygenated; however, in the case of an opioid overdose, the blood is not well oxygenated, and this can cause organ damage and cardiac arrest.

Opioids bind to receptors in the area of the brain responsible for breathing. After binding, they decrease the rate of breathing, which can slow to a point where a person stops breathing. When a person who is not in cardiac arrest stops breathing and is unconscious because of an opioid overdose, the appropriate course of action is to CALL 911 and give breaths to that person. Because the heart is still beating, giving breaths helps increase the oxygen in the person's blood and supply it to oxygen sensitive tissues, such as the brain, preventing brain injury and death. While better than doing nothing, performing only chest compressions on a person experiencing an opioid overdose will

simply move blood in the body that is not oxygenated, causing vital organs to continue to be deprived of oxygen. Therefore, giving breaths to a person who has overdosed on opioids can help prevent that person from going into cardiac arrest, and has the potential to save their life.

What are some suggested supplies that will aid in the administration of naloxone?

The minimum required items for each initial THN kit include:

- 2 x 1 mL ampoules/vials of injectable naloxone 0.4 mg/mL or 2 doses of nasal naloxone 4mg/0.1ml
- 2 x 3cc syringes with auto-retractable needles (1" length recommended) (for injectable naloxone)
- 2 alcohol swabs (for injectable naloxone)
- 1 rescue breathing shield with one-way valve
- 1 printed card with overdose signs and symptoms, and overdose response steps
- 2 vinyl gloves
- 1 patient information leaflet on naloxone (supplied by the manufacturer and photocopied if need be)

Pharmacies are encouraged to provide all the above items for subsequent THN kits, but pharmacists can use professional judgement to provide only some of the items if and when appropriate to do so.

Should a patient/client seek counselling from a pharmacist, it is recommended that complete counselling occur every time naloxone is purchased.

Where can the public access publicly funded (free) naloxone?

Members of the public can contact Street Connections to access free naloxone:

[Street Connections: Overdose](#)

204-981-0742

496 Hargrave Street

Winnipeg, MB

Open Monday to Friday, 8:30am to 4:30pm

How can my pharmacy register as a naloxone distribution site for the publicly funded take-home naloxone program?

For information on how to register as a naloxone distribution site, please visit <https://www.gov.mb.ca/health/mh/overdose/providers.html>

Where can the public purchase THN kits?

The public can access naloxone from a variety of retailers, including pharmacies. For a listing of pharmacies that carry naloxone, please see the list on the College [website](#).

If the existing information requires updating or your pharmacy would like inclusion on the list, we invite your pharmacy manager to provide the College with your pharmacy's:

- name,
- address, and
- phone number.

You can email the above information to info@cphm.ca with the subject line Naloxone Kits. The list will be updated and posted on the College website in order to help interested people and organizations find a pharmacy to purchase naloxone kits and learn how to use them.

Works Cited

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