



Naloxone: Frequently Asked Questions

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.

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. Methadone) 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.

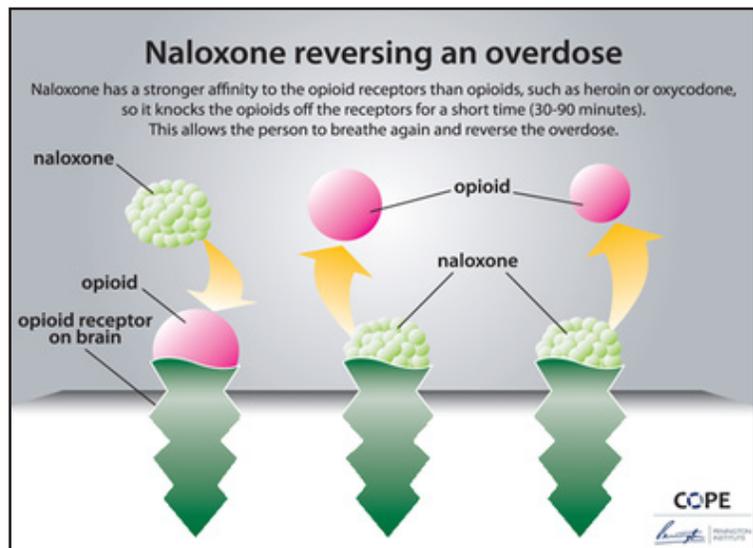


Image Credit: Penington Institute's Community Overdose Prevention and Education (COPE) Project; Adapted from art work by Maya Doe-Simkins

How is naloxone given?

You can give naloxone by injection (e.g. into a muscle, vein, or under the skin) 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, calling 911 is an important component of the overdose response.

What does overdose education and naloxone training involve?

It is important to provide education and training on an appropriate response to an opioid overdose; this includes calling 911, performing rescue breathing, placing someone in the recovery position (if you have to leave them, or if breathing has been restored), and administering naloxone. These skills are not a substitute for professional medical care, but can help keep someone alive until an ambulance arrives. Pharmacists should review the [College Guidelines for Pharmacists Selling Naloxone as a Schedule II Drug](#). The Guidelines outline key patient counselling points for any naloxone product. Complete counselling should occur every time a customer purchases naloxone. This counselling will review the important training and education points for a drug that is not regularly used

Where can information be found on naloxone nasal spray?

The manufacturer of the commercial naloxone nasal spray provides information on their [website](#) including prescribing and patient information, Opioid Overdose Response Instructions with naloxone nasal spray and videos on the use of the nasal spray.

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.

Who has access to naloxone in Manitoba?

As of June 24, 2016, naloxone, when indicated for emergency use for opioid overdose, can be purchased without a prescription at a community pharmacy in Manitoba. The pharmacy will provide a “take home” naloxone (THN) kit which includes items to aid in the rescue of person who has overdosed on opioids. The pharmacist must provide education and training on the use of the THN kits. [A List of Pharmacies Carrying Naloxone Kits](#) can be accessed on the College website.

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 behaviour 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.

Why are opioid overdoses an important public health Issue in Manitoba?

A study of 302 accidental opioid overdose deaths in Manitoba found that prescription opioids were highly implicated in the unintentional deaths¹. Manitoba experiences about 100 overdose deaths per year, which is approximately equivalent to the mortality rate for motor vehicle collisions in the province.

Are there exceptional record-keeping requirements for naloxone?

The record-keeping requirements for naloxone are the same as any other Schedule II product. There are no additional requirements.

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.

Unlike some prescription medications where a complete dialogue on refills is only required at the pharmacist's professional judgement, complete counselling should occur every time a customer purchases naloxone. This counselling will review the important training and education points for a drug that is not regularly used.

Where can I find more information?

You can find more information regarding naloxone on the College [website](#).

Where can the public purchase THN kits?

The public can access a listing of pharmacies that carry naloxone on the College [website](#).

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

Additional Resources

Street Connections: Overdose

http://www.streetconnections.ca/content.php?navigation_id=2294

College of Pharmacists of Manitoba Naloxone Ampoule Brochure (in colour)

http://www.cphm.ca/uploaded/web/Legislation/Guidelines/Naloxone/Naloxone_Brochure_Ampoule_MB_Colour.pdf

College of Pharmacists of Manitoba Naloxone Ampoule Brochure (in black and white)

http://www.cphm.ca/uploaded/web/Legislation/Guidelines/Naloxone/Naloxone_Brochure_Ampoule_MB_Black_and_White.pdf

College of Pharmacists of Manitoba Checklist for Naloxone Injection Training

http://www.cphm.ca/uploaded/web/Legislation/Guidelines/Naloxone/Checklist_for_Naloxone_Injection_Training_MB.pdf

College of Pharmacists of Manitoba Checklist for Naloxone Nasal Spray Training

http://www.cphm.ca/uploaded/web/Legislation/Guidelines/Naloxone/Checklist_for_Naloxone_Nasal_Spray_Training_MB.pdf

References

1. Winnipeg Regional Health Authority. Clinical Practice Guideline: Overdose Lay Responder Preparation by Public Health Nurses (2016).