

Fire Department of North Huron

Naloxone Administration Best Practice

PURPOSE:

To establish procedures to ensure that before the arrival of paramedics, trained firefighters, when administering Naloxone, follow best practices in order to provide the best care to patients experiencing diminished hypoxic drive due to opioid narcosis.

RESPONSIBILITY:

It is the responsibility of all Fire personnel to be familiar with and to follow this guideline.

DEFINITIONS:

Naloxone - also known by its trade name, NARCAN™, is a medication used to block the action of opioid narcotics.

Opioids (opioid narcotics) - are medications that are chemically related and interact with opioid receptors on nerve cells and the brain. Opioids are common pain relievers, which may be misused for their euphoric effects.

Most Commonly Used Opioids include the following:

<u>Drug Names</u>	<u>Trade Names</u>	<u>Street Names</u>
Heroin		
Opium		
Morphine	Statex, MS Contin,	
Fentanyl	Duragesic, Sublimaze	
Hydrocodone	Vicodan	
Hydromorphone	Dilaudid	
Oxycodone	OxyContin, Percocet, Percodan	Oxys, Percs
Methadone		
Codeine	Tylenol 1,2,3,4	
Carfentanyl		

GUIDELINE:

1. Protect Naloxone from freezing. Naloxone must be stored at room temperature.
2. For suspected opioid overdoses, responding firefighters shall wear as a minimum:
 - Nitrile gloves
 - Safety glasses
 - N95 mask
3. Ensure the scene is safe before making contact with the patient. Be aware of the potential for uncapped needles.
4. Check the level of responsiveness, airway, breathing, and pulse. Ensure airway patency.

Ensure the patient has an adequate respiratory rate and volume.

5. If the patient has no pulse, initiate CPR and AED Protocol.
6. If the patient has a pulse but is not breathing (or less than 10 breathes/min), insert an oropharyngeal airway (OPA), and initiate rescue breathing with bag-valve-mask (BVM) device using 100 percent oxygen at 10 l/min. Administer 1 breathe every 5 seconds, and monitor the person's vital signs.
7. Where opioid overdose is suspected gather information from bystanders, family or friends. Helpful information includes:
 - Specific drug use. There may be drug paraphernalia.
 - Route of administration and time of last use.
 - Medical history of the person if available.
8. Ask if there is known previous hypersensitivity reaction to Naloxone/ NARCAN™ and if so, do not administer Naloxone. Report this to the paramedics.
9. Look for other indications of an opioid use including:
 - Absence of breathing or a decrease in respiratory rate (rate less than 10/min). Also observe if gurgling or snoring types of sounds are present.
 - Altered mental status—is the patient drowsy or unable to be aroused?
 - Cyanosis, a bluish discolouration of the skin resulting from poor circulation.
10. Where an opioid overdose is suspected and if there is no response after for two (2) minutes of rescue breathing, OR rescue breathing is impossible / difficult to perform, then administer first dose of Naloxone nasal spray.
11. Be aware that patients emerging from the effects of opioids after administration of Naloxone may be confused, violent and may vomit.
12. Evaluate patient again for spontaneous breathing. Continue rescue breaths unless there is a return to spontaneously breathing greater than 12/min.
13. Repeat Naloxone every 3-5 minutes (with a new container in alternating nostrils).
14. Check pulse every 60 seconds. If pulse is absent initiate cardiac arrest protocol.
15. Check and record vitals when breathing on their own.
16. Continue rescue breathing until respiratory depression has resolved or until Paramedics arrive.
17. Place the person in the recovery position if they don't regain full consciousness or if the person does not require further BVM respiration support.
18. The report to the paramedics should include the number of doses of Naloxone, the vital signs, and the response to treatment.
19. Bring used Naloxone spray bottles back to the Fire Hall for disposal into the garbage.
20. Upon return to the fire station, document the details of the event in the Emergency Incident Report in FirePro2, including all information given in #7.
21. Notify Chief/Deputy of the use Naloxone (NARCAN™) to ensure timely replacement.

COMPANION DOCUMENTS:

- a) APPENDIX A: Opioid Overdose and NALOXONE (NARCAN™)

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Clinical Features of Opioid Overdose

- Absence of respiration (apnea), shallow breathing, or decreased respiratory rate – a respiratory rate of less than 10/min is the best clinical predictor of opioid intoxication
- Difficulty maintaining an open airway - gurgling or snoring type sounds
- Altered mental status – drowsy, sleepy, unable to arouse
- Constricted/pinpoint pupils – while often present, the presence of pinpoint pupils alone is not sufficient to infer opioid intoxication
- Slow or absent heart rate
- Cool grey, cyanotic (dusky blue) skin

Goal of Naloxone Administration

The goal of Naloxone administration is to improve breathing and restore airway reflexes in the person. This prevents organ damage from hypoxia or anoxia. The goal is to restore the person's respiratory drive, not to restore full level of consciousness.

Warnings and Precautions

Some narcotics can be absorbed through the skin, mucous membranes, or lungs. It is extremely unusual to accidentally receive a toxic dose this way. However, because this is possible, PPE and exposure precautions must be used. If a fire fighter is suspecting a contamination might occur, follow the Department's policies for PPE use.

The following shall be the minimum PPE worn on suspected opioid overdoses

- Nitrile Gloves
- Safety Glasses
- N95 Mask

There may be uncapped needles or fire hazards present at the scene of an overdose. Like any other rescue situation, make sure the scene is safe before contact with the person is made.

The beneficial effects of Naloxone begin to wear off in 20-40 minutes. People who overdose on a very large amount of opioid or a long acting one, e.g. Methadone, may start to exhibit the symptoms of overdose when the Naloxone wears off. Therefore, all people who Fire Fighters attend for an opioid overdose, especially if Naloxone was given, must be transported to hospital. Care will be transferred to Paramedics upon their arrival.

The dose used in the Naloxone (NARCAN™) Nasal Spray provided is approximately 5 times the dose the paramedics give initially. This is a large dose. The effect of opioids can end rapidly (30-90 seconds) after the administration of Naloxone. Some people emerge from their overdose state, confused and aggressive. This usually does not last long. However, they can become violent. Be prepared for this type of emergence reaction.

People who are dependent on opioids to control chronic pain will have this effect blocked by the administration of Naloxone. These people might emerge from the overdose state complaining of pain. They might need to be reassured that their pain will recede in 20-40 minutes when the Naloxone wears off.

Indications

- People of any age presenting with signs of a suspected opioid overdose
- Unable to rouse with loud voice or by shaking
- Respiratory depression – absent, shallow, infrequent breathing

Contraindications

- Known previous hypersensitivity reaction to Naloxone

Obtain Information and Perform Assessment

- History of opioid use or suspected use from bystanders, family, or friends. It is helpful for hospital care givers to know the specific drug use, route of administration and time of last use. There may be evidence of drugs of abuse paraphernalia present.
- Medical history of the person if available
- Assess the airway and breathing. Look for the absence of breathing or a decrease in respiratory rate - (rate less than 10/min). Also observe if gurgling or snoring types of sounds are present
- Assess the pulse
- Altered the mental status – is the person alert, drowsy, able to be roused or not
- Assess the pupils - constricted/pinpoint pupils
- Assess the skin – especially for the presence of cyanosis

Procedure (S.A.V.E.M.E.)

Stimulate

- Assess responsiveness and stimulate using verbal and painful stimuli

Airway and Ventilate

- if unresponsive, simultaneously assess airway, breathing, and circulation
- If no pulse, initiate CPR and AED Protocol
- If pulse present and not breathing (or less than 10 breathes /min) initiate rescue breathing with bag-valve-mask (BVM) device using 100 percent Oxygen at 10 l/min
- Administer one breathe every 5 seconds
- Insert OPA
- Monitor the person's vital signs

Evaluate the Situation

- If no response after rescue breathing for 2 minutes, then administer first dose of Naloxone.

Medication Administration

- Administer 4mg intranasal Naloxone

Evaluate again

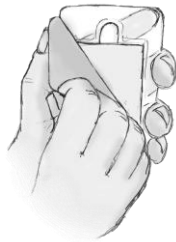
- Continue rescue breaths unless there is a return to spontaneously breathing greater than 12/min.
- Repeat Naloxone every 3-5 minutes (with new container in alternating nostrils)
- Check pulse every 60 seconds, if pulse is absent initiate cardiac arrest protocol
- Check and record vitals when breathing on their own

- Continue rescue breathing until respiratory depression has resolved or until Paramedics arrives
- Place the person in the recovery position if they don't regain full consciousness or if the person does not require further BVM respiration support.
- Constantly monitor to check if the person's condition deteriorates and requires a repeat dose of Naloxone.

ADMINISTERING NALOXONE (NARCAN™) NASAL SPRAY

Follow this step-by-step guide to using Naloxone (NARCAN™) Nasal Spray in the event of an opioid overdose.

1. PEEL



Peel back the package to remove the device. Hold the device with your thumb on the bottom of the plunger and two fingers on the nozzle.

2. PLACE



Place and hold the tip of the nozzle in either nostril until your fingers touch the bottom of the person's nose.

3. PRESS



Press the plunger firmly to release the dose into the person's nose.

Video: <https://www.youtube.com/watch?v=aR3qA63TrAI>

Uncommon Side Effects After Administration of Naloxone

- Rapid heart rate
- Nausea and vomiting
- Sweating
- Blurred vision
- Many people can become agitated that "their high" has been interrupted. So be aware of your surrounding and your own protection.

Note: Our role is to support the Paramedics in dealing with Opioid overdoses. Should we arrive prior to the Paramedics or one of our members have been expose to opioids we shall follow the above protocols.