

# Opioid Poisoning

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## Harm Reduction Manual

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First Nations Health Authority  
Health through wellness



BC Centre for Disease Control  
Provincial Health Services Authority

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# Introduction

## Aims

This section explains what happens to the body during an [opioid poisoning](#) and how to respond. It gives best practice recommendations for regulated and non-regulated service providers to respond to a person who may be experiencing an opioid poisoning outside of hospital settings. This guidance does not replace employer or organizational policies and procedures.

## Background

Deaths from the [unregulated drug supply](#) have increased across British Columbia (BC) since the public health emergency was declared in 2016. Fentanyl— on its own or mixed with other substances—was found in 82%-87% of deaths from 2017-2024.<sup>1</sup> Since 2017, among people dying of unregulated drug poisoning for whom a route of administration could be identified, the most common way of using substances was inhaling (smoking), followed by snorting (nasal insufflation) and injection.<sup>1</sup>

In BC, First Nations people are experiencing the highest rates of drug poisoning deaths— particularly First Nations women, who are dying at 11 times the rate of other female residents of BC.<sup>2</sup> The unregulated drug poisoning emergency has had devastating impacts on the life expectancy of First Nations people in BC. Between 2015 and 2021, the average life expectancy of First Nations people in BC decreased by 7.1 years.<sup>1,2,4</sup> The unequal impacts of the drug poisoning emergency on First Nations are caused by the ongoing harms of [settler-colonialism](#), including [Indigenous specific racism](#), lack of culturally safe care, and barriers to treatment and support.<sup>4</sup> Inuit and Métis people in BC also experience the harms of settler-colonialism and Indigenous specific racism. However, we do not currently have adequate data to understand the rates and impacts of drug poisoning deaths for Inuit and Métis people in BC.

[Drug checking services](#) and the [BC Coroners Service](#) show that the unregulated drug supply is toxic and unpredictable.<sup>3</sup> The strength of unregulated fentanyl varies a lot and can contain high levels of other potent opioids, like carfentanil. Unknown or harmful substances are also commonly found in the toxic unregulated drug supply, including fillers, cutting agents, and non-opioid sedatives (like benzodiazepines).<sup>5</sup> These substances can cause complex drug poisonings and make responding more complicated.<sup>6,7</sup> Because the unregulated drug supply keeps changing, drug poisonings can look different and may need different responses, and it's important to stay up to date. Up-to-date information on the unregulated drug poisoning

emergency can be found on the [Unregulated Drug Poisoning Emergency Dashboard](#). Sign up for the BCCDC Harm Reduction and Substance Use Services Education Newsletter [here](#).

## Rules and Responsibilities of Service Providers

How service providers respond during opioid poisoning response will be different depending on many factors, including their role as a regulated provider or non-regulated provider, their individual training and education, competence, professional regulations, legislation, as well as organizational policies and procedures.

All service providers are strongly encouraged to understand what they can and cannot do during an opioid poisoning response.

### Rules and Responsibilities for Regulated & Non-Regulated Service Providers

**Regulated service providers** (i.e., registered nurses, physicians etc.) follow:

- Provincial legislation (e.g., Health Professions and Occupations Act, Occupational Health and Safety Regulation),
- Federal legislation (e.g., Controlled Drugs and Substances Act),
- Guidelines and standards from their professional regulatory body (e.g., BC College of Nurses and Midwives, BC College of Social Workers, College of Physicians and Surgeons of BC, etc.), and
- Employer or organizational policies and procedures.

**Non-regulated service providers** (i.e., peer worker, mental health worker, etc.) follow:

- Provincial legislation (e.g., Workers Compensation Act, Occupational Health and Safety Regulation),
- Federal legislation (e.g., Controlled Drugs and Substances Act),
- Employer or organizational policies and procedures, and
- Their job descriptions.

## Opioid Poisoning

An [opioid poisoning](#) happens when a toxic amount of opioids overwhelms the body's ability to function, causing breathing to slow, stop, or become abnormal. Brain injury and death can occur when the brain and body do not get enough oxygen.

The term opioid poisoning is used in this document instead of the term "overdose". Overdose implies that a person took too much of a substance, but it does not capture the unpredictable and toxic unregulated drug supply.

There are different factors that influence a person's risk of experiencing an opioid poisoning, including: <sup>10-14</sup>

- The strength of the opioid (e.g., fentanyl is about 100 times stronger than morphine),
- A person's opioid tolerance (e.g. risk is higher when a person's tolerance is lower from not using opioids or taking a break from using opioids),
- How much opioid is taken,
- How the substance is [consumed](#) (e.g., inhalation, injection),
- Using more than one substance at a time, including prescription medications and alcohol,
- The presence of unexpected or [novel substances](#) in opioids,
- A person's overall health and how their body processes the substance, and
- Having conditions that affect breathing (e.g., chronic obstructive pulmonary disease) or the liver (e.g. hepatitis).

## Signs of Opioid Poisoning

Opioid poisoning can look differently from person to person and from one situation to the next. Most people will present with the 3 key signs of opioid poisoning. Often, there will be other signs too. The indication that someone is experiencing an opioid poisoning is slow, stopped, or [abnormal breathing](#).

### 3 Key Signs of Opioid Poisoning

Opioid poisoning is usually characterized by 3 key signs:<sup>10-16</sup>

#### Key Signs of Opioid Poisoning



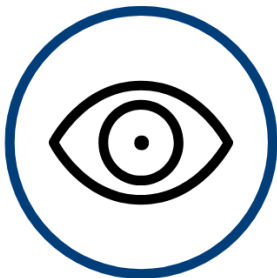
##### 1. Having Trouble Breathing

- Taking less than 12 breaths per minute, or
- Taking slow, irregular, or shallow breaths, or
- Making unusual sounds such as choking, gurgling, snoring, wheezing, or gasping, or
- Not breathing at all.



##### 2. Not responding

- Being very drowsy, sedated, low energy, or confused, or
- Not responding to voices or painful touch



##### 3. Very small (pinpoint) or constricted pupils

Having trouble breathing leads to other common signs, including:

## Other Signs of Opioid Poisoning



### **Low oxygen levels in body**

Less than 90% by pulse oximetry, when breathing room air



### **Grey, Ashen, Blue, or Purple Skin, Lips, and Nails**

Skin, lips, and fingernails that look grey or ashen in darker skin tones, or blue or purple in lighter skin tones.



### **Cold and Clammy Skin**



### **Stiff neck, chest, or body**

## Complex Opioid Poisoning Signs

Sometimes a person will show the 3 key signs of opioid poisoning along with other symptoms that make it harder to respond. There are many factors that can make response more complex, such as [fentanyl induced muscle rigidity](#), pregnancy, [prolonged sedation](#), [seizure](#), and any other presentation that is unusual or makes response more challenging.

See [Complex Opioid Poisoning Response](#) for more information on how to recognize and respond.

## Other Conditions and Substances

Serious medical conditions can be confused with an opioid poisoning. Substances like alcohol and benzodiazepines can cause symptoms similar to an opioid poisoning, like unresponsiveness and sedation. Some medical conditions and emergencies such as traumatic brain injury, very low blood sugar (hypoglycemia), stroke, or heart attack can also cause similar symptoms like unresponsiveness or abnormal breathing.<sup>19,20</sup>

If you think a person is experiencing an opioid poisoning or medical emergency, call 911. It is safe to give naloxone even if you are unsure whether the person is experiencing an opioid poisoning.

**If you are unsure whether a person is experiencing an opioid poisoning, the safest thing to do is to call 911 and follow the SAVE ME steps.**

## Before Responding to an Opioid Poisoning

Anyone responding to an opioid poisoning is encouraged to:

- Know their scope of practice: what they are allowed and not allowed to do,
- Have basic training, education, and equipment, and
- Protect the health and safety of themselves and others.

### Education and Training

There are many ways to learn how to respond to an opioid poisoning and give naloxone. At minimum, service providers are encouraged to take basic drug poisoning response training that covers the SAVE ME steps and how to give naloxone. Training is recommended to be updated yearly or when new updates come out from the BCCDC or their workplace.

Service providers can start basic drug poisoning (overdose) response education by taking Toward the Heart's [Naloxone 101 Training Course](#). Service providers are encouraged to get hands-on practice giving naloxone. This can be done through their organization or at a community pharmacy or a THN kit distribution site. Check Toward the Heart [site finder](#) to find a local naloxone distribution site.

### Minimum education and training

1. Basic drug poisoning response training that teaches:
  - How to recognize an opioid poisoning,
  - How to respond to an opioid poisoning using the SAVE ME steps, and
  - How to give aftercare.
2. Know the specific policies of your organization, including health and safety, infection prevention and control, and needlestick injuries.
3. People who work in an overdose prevention setting (OPS): Basic life Support (BLS) or Cardiopulmonary Resuscitation (CPR) training.

Note: BLS or CPR training is strongly recommended for anyone who might respond to drug poisoning.

### Additional education and training

1. Knowledge of health and social services and how to make referrals,
2. Advanced drug poisoning prevention and response training,
4. Education on current trends in the unregulated drug supply,

5. Advanced training to improve care (such as trauma- and violence- informed care, Indigenous cultural safety and humility, and anti-stigma practices).

## **Equipment**

How service providers respond to an opioid poisoning depends on what equipment is available, training and what they are allowed to do, and organizational policies and procedures. At minimum, service providers are encouraged to carry basic equipment for responding to a suspected opioid poisoning. All of the basic equipment is available in a take home naloxone (THN) kit. Depending on the setting, service providers may also have access to advanced equipment.

## Basic & Advanced Equipment for Opioid Poisoning Response

**Basic equipment** (included in a THN kit):

- Injectable/intramuscular (IM) naloxone with syringes, or nasal naloxone,
- CPR face shield, and
- Basic personal protective equipment like gloves.

### **Advanced equipment:**

Basic equipment listed above, plus:

- Pulse oximeter,
- Automatic external defibrillator (AED),
- Oral and nasopharyngeal airways,
- Pocket mask,
- Bag-valve-mask,
- Simple face mask,
- Supplemental oxygen,
- Suction and Yankauer catheters,
- Blood pressure cuff and stethoscope,
- Thermometer,
- Glucometer,
- Pen light,
- Emergency medications (e.g., epinephrine, glucose tabs),
- Timekeeper (e.g., clock, phone), and
- Sharps disposal container.

Some advanced response skills (like inserting a nasopharyngeal airway) can only be done by some regulated healthcare providers. Service providers should know what they can and cannot do depending on their personal training and competence, professional regulations, legislation, and organizational policies.<sup>27, 46</sup>

### Practice Tip – Using Oximeters

Counting breaths is the best way to check if someone's breathing is too slow or shallow. Normal breathing is taking 12 or more full breaths per minute.

A pulse oximeter can be used to check the amount of oxygen in the body, but it has limitations. A pulse oximeter may not always give an accurate oxygen reading.

Some things can make oximeter readings inaccurate, including:<sup>61</sup>

- Having a dark skin tone,
- Wearing fake nails or nail polish,
- Having cold or swollen hands or fingers,
- Having dirty or calloused fingers,
- Having a respiratory condition like chronic obstructive pulmonary disease (COPD),
- Have higher carbon monoxide levels (e.g., from smoking cigarettes),
- Being anemic,
- Low blood pressure,
- Muscle stiffness from fentanyl-induced muscle rigidity,
- Wearing henna,
- Moving a lot,
- Condensation on the pulse oximeter.

### Health and Safety

It is important to understand your employer's safe work procedures and occupational health and safety policies. Follow these steps to protect yourself and others:

- Know your rights and responsibilities as a worker.
- Stay up to date on your vaccinations. See [BCCDC recommended vaccines for healthcare workers](#).
- Take steps to avoid injuries, including accidental needlestick injury and injuries from staying in awkward positions for long periods of time. See the [Canadian Centre for Occupational Health and Safety Needlestick and Sharps Injuries](#) and [Work Safe BC Ergonomics](#) for more information on how to reduce risks.

# How to Respond to an Opioid Poisoning

## Follow the SAVE ME Steps

Responding to an opioid poisoning is stressful, and sometimes service providers forget the steps. The [SAVE ME acronym](#) (explained over the next pages) was developed to help people remember the steps. An infographic explaining these steps on one page can be found at the end of this section. The SAVE ME steps can also be found at [Toward the Heart- SAVE ME Steps to Respond to Opioid Poisoning](#).

If you suspect an opioid poisoning, follow the SAVE ME steps to respond. If at any time the person starts breathing normally on their own, help them into the recovery position on their side, monitor their breathing, and repeat the steps if their breathing becomes slow, abnormal, or stops.

This section identifies drug poisoning response recommendations for all levels of service providers. Advanced skill recommendations are intended for service providers with advanced training and competence.

Before responding to an opioid poisoning, check the scene for hazards and take necessary safety precautions:<sup>70,71</sup>

1. Look for potential hazards and risks like hazardous chemicals and sharps,
2. Follow [regular infection prevention steps](#). Take extra steps if local or provincial public health authorities identify higher levels of risk of disease spread, and
3. Conduct a [point-of-care risk assessment](#), [perform hand hygiene](#), and wear the proper personal protective equipment (PPE).

## Stimulate

1. Try to wake them up by speaking to them:
  - Call their name and try to get their attention.
  - If they wake up, encourage them to take deep breaths.
2. If they do not respond, try to wake them up by touch:
  - Squeeze the muscle between their neck and shoulder (trapezius) or squeeze their fingertip for 10-20 seconds.<sup>111, 112</sup>
  - Apply firm but careful touch. Avoid injuring the person.
3. If they do not respond to voice or touch, call 911 (or follow your organization's policy):

- Tell the emergency health services (EHS) call-taker that you suspect the person is having an opioid poisoning.

### Stimulate Practice Tip – Trying to Wake a Person Up

Always say what you are going to do before touching someone.

Sternum rubs (rubbing the long, flat bone in the middle of the chest) and applying pressure to the nailbed are no longer recommend ways to wake people up. Sternum rubs can cause rib fractures, while applying pressure to the nailbed can cause bruising, fingernail loss, and loss of sensation.<sup>111</sup>

## Airway

1. Check if their breathing is slow, [shallow](#), or abnormal:
  - Count the number of breaths they take per minute (respiratory rate).
  - Check if they are taking shallow breaths or if they are making sounds like gurgling, gasping, or choking.
  - Determine if they are breathing slow, shallow, or abnormally. This means they are taking less than 1 breath every 5 seconds (less than 12 breaths per minute) or making unusual sounds.
  - **Advanced skill:** Check if they are getting enough oxygen to their brain and body:
    - i. Assess the colour of their skin, lips, and fingernails for signs of [hypoxia](#).
    - ii. If available, check their oxygen saturation using a pulse oximeter.
2. Keep their airway open.
  - Position the person to keep their airway open and clear:
    - i. If they are in a chair, move them to the floor with two people.
    - ii. If their mouth is open, look inside and remove anything that could block their breathing like gum or a needle cap. Do not put your finger into their mouth if you cannot see into their mouth.
  - Tilt their head back by lifting their chin up and pushing their forehead back (head tilt-chin lift).
3. **Advanced skill:** Insert an oropharyngeal airway.
  - If you are trained and allowed to, insert an oropharyngeal airway (OPA) to help keep a person's airway open.
  - In rare situations, a nasopharyngeal airway (NPA) is needed to open an airway. Only certain regulated healthcare providers who have up to date training are allowed to insert an NPA.

4. Check their pulse (heartbeat).<sup>58-60</sup>
  - If you are trained to check pulse, check for no more than 10 seconds.
    - i. If you do not feel a pulse, start CPR. Use an AED if one is available.
    - ii. Tell the EHS call-taker whether the person has a pulse or not.
  - If you do not know how to check pulse, tell that to the EHS call-taker and they will tell you what to do.

### Practice Tip – Normal Breathing

Normal breathing means the person is breathing at least 1 breath every 5 seconds, or 12 breaths per minute. Normal breaths are deep and regular. To figure out their breathing rate per minute, count the number of breaths they take in 15 seconds and multiply that by 4.

When the body is getting enough oxygen, the colour of their lips, fingernails, and skin should be their usual skin tone and oxygen saturation should be more than 90%.

If the body is not getting enough oxygen, dark skin tones will be ashen or grey, while light skin tones will be blue or purple. Oxygen saturation will be less than 90%.

## Ventilate

1. Give rescue breaths if their breathing is not normal:
  - Use a [head-tilt chin lift](#) to keep their airway open,
  - Give 1 breath every 5 seconds, using:
    - i. a CPR face shield *or* pocket mask *or*
    - ii. **Advanced skill:** a bag-valve-mask with supplemental oxygen at 15-25 litres per minute<sup>a</sup>. Follow guidance in the Oxygen and Ventilation section.

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<sup>a</sup> For providers trained and competent in the use of a bag-valve mask with supplemental oxygen.

### Practice Tip – Ventilation

There are many effective ways to give oxygen to someone experiencing an opioid poisoning, including a CPR face shield (in THN kits), a pocket mask, or using a bag-valve-mask with supplemental oxygen. The way you deliver oxygen will depend on your training, the equipment you have, and where you work.

## Evaluate

1. Check their breathing again:
  - Count the number of breaths they are taking per minute (should be at least 1 breath every 5 seconds or 12 breaths per minute) and quality of breaths (should be deep and regular).
  - Keep their airway open using a head-tilt chin lift (lifting their chin up and pushing their forehead back).
  - **Advanced skill:** Check for signs that they are getting enough oxygen like the colour of their skin and their oxygen saturation.
  
2. Try to wake them up again:
  - Check if they respond to your voice or touch.
  
5. Check their pulse (heartbeat) again.<sup>58-60</sup>
  - If you are trained to check pulse, check for no more than 10 seconds.
    - i. If you do not feel a pulse, start CPR. Use an AED if one is available.
    - ii. Tell the EHS call-taker whether the person has a pulse or not.

### Practice Tip – Pulse Check

A pulse check indicates if the heart is beating. During opioid poisoning, breathing slows or stops first, and the heart can stop beating after a few minutes without oxygen. Novel substances in the unregulated drug supply (like medetomidine) can also cause the heart to stop. If the heart stops, CPR gives the person the best chance of survival until emergency help arrives.

To check for a pulse to tell if a heart is beating:

- Use your pointer finger and middle finger. Do not use your thumb,
- Place your two fingers on the side of the neck, just under the jaw in the soft space next to the trachea (windpipe),
- Press gently and feel for a beat for up to 10 seconds, and
- If you cannot feel a pulse, start CPR. Use an AED if one is available.

## Medication

How you give naloxone and how much you give will depend on your setting and the type of naloxone you have. See table 1 below for more guidance.

1. Give 1 dose of naloxone if the person’s breathing is not normal (or if you are unsure).

**Table 1. Giving Naloxone in community settings**

Route of Administration	Dosing	Repeat Dosing
<b>Injectable intramuscular (IM) naloxone or intranasal (NAS) naloxone</b>	1 dose: <ul style="list-style-type: none"><li>• 0.4 mg injected into a large muscle: upper arm (deltoid) or thigh (vastus lateralis), <i>or</i></li><li>• 4 mg spray into one nostril.</li></ul>	Repeat 1 dose every 3 minutes until they are breathing at least 1 breath every 5 seconds (12 or more breaths per minute).  If you need to give another dose, give it in a different nostril or muscle.

21-26, 28-37

The best naloxone is the one you have and will use to respond to opioid poisoning. Usually, trained service providers have access to IM naloxone in their work setting. IM naloxone works faster and is absorbed by the body more consistently, compared to nasal naloxone.<sup>32, 34</sup>

Injectable naloxone allows service providers to give smaller doses, which can help people with a physical opioid dependence avoid [precipitated opioid withdrawal](#).<sup>125, 126</sup> Nasal naloxone also works quickly and effectively to reverse an opioid poisoning.<sup>35</sup>

### Advanced Skill– Intravenous (IV) Naloxone Administration<sup>10,17, 24</sup>

IV administration of naloxone may be given in some acute care settings where patients have IV access, and the setting has the equipment and personnel to safely administer IV naloxone. The administration of IV naloxone can only be performed by a regulated healthcare provider that is within scope and has competence to administer. Healthcare providers should follow their organizational policies, regulatory standards, and individual scope of practice.

**Table 2. Dosing Considerations for Intravenous Naloxone**

Amount for First Dose	Repeat Doses	Considerations
0.04 mg to 0.1 mg IV <sup>17, 28</sup>	<p>If there is no response after the first dose, give more doses every 2 minutes until respiratory depression is reversed.</p> <p>The following escalated dosing schedule may be used:<sup>10, 21, 22</sup></p> <ul style="list-style-type: none"> <li>• 0.4 mg IV</li> <li>• 0.4 mg IV</li> <li>• 0.8mg IV</li> <li>• 2 mg</li> <li>• 4 mg IV</li> <li>• 10 mg IV</li> </ul> <p>If there is no improvement in respiratory depression after a total of 10 mg of naloxone has been given, investigate other causes.<sup>21</sup> Stop giving naloxone when respiratory depression is reversed.</p>	<p>Start with a lower dose for people with physical opioid dependence to avoid inducing precipitated opioid withdrawal.<sup>17</sup></p> <p>The goal of naloxone is to reverse respiratory depression. Do not give naloxone to reverse sedation.</p>
		<p>Gradually increase the amount of naloxone to avoid precipitated opioid withdrawal in people with a physical opioid dependence.</p>

## Evaluate & Support

1. Continue to give 1 breath every 5 seconds while you wait for the naloxone to work:
  - Wait 3 minutes for IM or NAS, or
  - Wait 2 minutes for IV naloxone.
2. Check their breathing again:
  - Count the number of breaths they are taking (should be at least 1 breath every 5 seconds or 12 breaths per minute) and quality of breaths (should be deep and regular).
  - Keep their airway open using a head-tilt chin lift (lifting their chin up and pushing their forehead back).
  - **Advanced skill:** Check for signs that they are getting enough oxygen like the colour of their skin and their oxygen saturation.
3. Try to wake them up again:
  - Check if they respond to your voice or touch.
4. If their breathing is not normal, repeat [Medication](#) and [Evaluate & Support](#) steps. Continue to follow SAVE ME steps until their breathing returns to normal or emergency services arrives.

### Special Considerations After an Opioid Poisoning is Reversed<sup>44, 113-121</sup>

#### Rural and Remote Communities

In some communities, it can take longer for emergency services to arrive. Responders may need to give support for longer and may also need extra supplies, including extra naloxone.

#### Prolonged Sedation

Sometimes after an opioid poisoning has been reversed, the person is breathing normally but they are still not responding or appear to be in a deep sleep. Giving more naloxone will not wake the person up. This sedation can be caused by other sedatives. See [Prolonged Sedation](#) for more information on how to respond.

See [Complex Opioid Poisoning Response](#) for more information on other situations that can happen during or after opioid poisoning.



## Complex Opioid Poisoning Response

Sometimes, a person experiencing an opioid poisoning can show other unusual signs or complicating signs that can make responding more complicated. This is called a complex opioid poisoning. This section contains just a few complex opioid poisoning signs and how to manage them. The types of complex opioid poisoning signs will change over time because of the unpredictability and toxicity of the unregulated drug supply.

Focus on maintaining the person's airway and breathing. Give rescue breaths and naloxone as needed while you get emergency help for the complex signs.

Always call for emergency medical help (911) if someone is showing signs that make opioid poisonings complex, including:<sup>6,7,15, 17-19, 70, 71</sup>

- Muscle rigidity (fentanyl-induced muscle rigidity), characterized by:
  - Clenched jaw,
  - Rigid or stiff chest or torso, or
  - Abnormal body posture with arms bent in towards the body, legs straight, and fists clenched.
- Involuntary muscle movements or “flailing”.
- Seizure.
- Jerking or twitching movements.
- Abnormal pulse: very fast (more than 100 beats per minute) or very slow (less than 60 beats per minute), or an irregular heartbeat.
- Feeling confused or [delirious](#).
- Vomiting.
- Unequal pupil size.
- Pregnancy.
- Normal breathing but not responding to voice or touch (prolonged sedation).

**Advanced skill:** Regulated healthcare providers with the training and equipment are encouraged to do a [secondary assessment](#) while waiting for emergency health services to arrive.<sup>70,71</sup>

### Fentanyl-Induced Muscle Rigidity

Fentanyl-induced muscle rigidity (FIMR) is a complication caused by fentanyl. It starts quickly (within 1-2 minutes) after using fentanyl and causes the chest, neck, jaw, and upper airway muscles to become stiff, spasm, or make jerking motions. Jaw clenching and upper airway

spasm can make hard or impossible to give oxygen and insert an airway. Sometimes people call it “wooden chest syndrome”.

FIMR can happen no matter how much fentanyl a person takes or how they take it. There have been reports of FIMR happening in people who have taken lower than their usual dose of fentanyl. FIMR usually reverses quickly after giving naloxone but often needs larger or multiple doses to reverse the drug poisoning and getting their breathing back to normal.

Factors that increase the likelihood of experiencing FIMR:

- Using high amounts of fentanyl quickly (e.g., rapid injection).
- People who are very young or elderly, including infants and older adults.
- Having a serious illness such as neurologic or metabolic conditions.
- Using more than one substance that changes dopamine levels, like mixing cocaine, amphetamines, antidepressants, or Parkinson’s medications.

Signs of FIMR include:

- Muscle stiffness in the upper body: jaw, neck, chest wall, and abdominal muscles.
- Vocal cord spasm that blocks upper airway (laryngospasm).
- Jaw, neck, or chest clenching that makes it difficult to insert an oral airway or ventilate.
- Stiffness or abnormal body positioning, such as abnormal flexing of the arms and legs.

How to respond to FIMR:

- Call 911 right away. FIMR is a medical emergency.
- Prioritize helping the person breathe as quickly as possible and give naloxone.
- If muscle stiffness makes it too difficult to insert an airway or give rescue breaths, give naloxone immediately while troubleshooting ventilation.
- Consider giving a higher dose of naloxone (0.8 mg IM or two doses of 0.4mg) or more frequent doses (every 2 minutes) until an airway is inserted and ventilation and oxygenation is restored.
- Check for signs of ventilation resistance, such as “cheeking” (distention of cheeks) or air leaking from around the mask. If this happens, use short, firm breaths when ventilating.
- **Advanced skill:** Regulated healthcare providers who are trained and equipped can carry out a [secondary assessment](#) while waiting for emergency health services to arrive.<sup>65-69</sup>

**When responding to opioid poisoning with muscle rigidity, the priority is to quickly establish an airway and ventilate. Give more naloxone if you cannot deliver high quality rescue breaths.**

Sometimes muscle rigidity is caused by something else, such as:

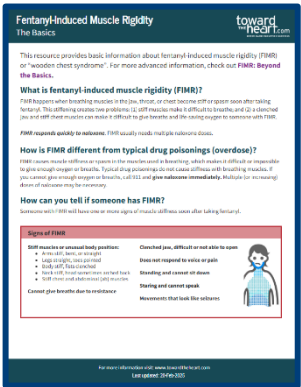
- Taking high doses of substances that increase dopamine (e.g., bupropion), norepinephrine (e.g., stimulants) or serotonin (e.g., citalopram, fluoxetine),
- Experiencing anticholinergic toxicity (e.g., diphenhydramine, dimenhydrinate),
- Having a hemorrhagic stroke, or
- Having a seizure.

If you are unsure if the person is experiencing FIMR, it is safe to give naloxone.

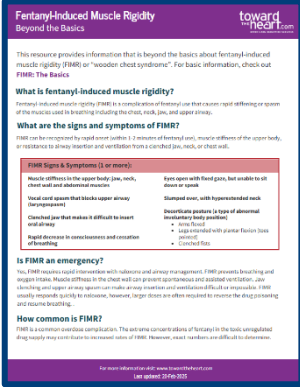
### Fentanyl-Induced Muscle Rigidity Infographics

This section includes links to infographics and information about FIMR. Click on the title or photo to access the resource.

#### Fentanyl-Induced Muscle Rigidity: The Basics



#### Fentanyl-Induced Muscle Rigidity: Beyond The Basics



### Low Heart Rate (Bradycardia)

Low heart rate (bradycardia) is when the heart is beating too slowly. This happens when the pulse (heartbeat) is less than 60 beats per minute. Bradycardia can reduce blood flow and

oxygen to the body and brain. Bradycardia can happen at the same time as opioid poisoning or after using substances that affect the pulse (such as [medetomidine](#)).<sup>127,128</sup>

Bradycardia can cause the following signs and symptoms:<sup>129</sup>

- Dizziness,
- Feeling lightheaded,
- Confusion,
- Difficulty thinking or answering,
- Shortness of breath,
- Fatigue,
- Fainting, and
- Chest pain.

How to respond to bradycardia:

**Call 911 and transfer to the hospital if the person has:**

- Pulse less than 50 beats per minute, OR
- Pulse less than 60 beats per minute with any of the symptoms listed above.

How to respond when bradycardia occurs during opioid poisoning:

- Call 911 and transfer to the hospital if indicated (see above).
- Follow the [SAVE ME steps](#) to respond to opioid poisoning.
- Always check pulse during [Airway](#) and [Evaluate](#) steps. Do not spend more than 10 seconds checking for a pulse.
- If at any time there is no pulse, start CPR. Use an AED if one is available.

How to respond when bradycardia occurs after opioid poisoning is reversed:

- Call 911 and transfer to the hospital if indicated (see above).
- Monitor breathing, responsiveness, and pulse.
- Prepare AED if one is available.
- Start CPR with rescue breathing and compressions if you cannot find a pulse within 10 seconds. Use an AED if one is available.

How to respond while you wait for EHS to arrive:

- Stay with the person. Monitor breathing, responsiveness, and pulse.

- Keep the person warm by providing a blanket or extra clothing. Low body temperature can make the heart beat slower.
- Help the person into a comfortable position. Encourage them to lie flat on their back with their legs up to increase blood flow to vital organs and to prevent injury from fainting. If they do not want to lie down, encourage them to sit in a chair.
- If the person is confused, tell them where they are and what you are doing.
- **Advanced skill:** If trained and equipped, regulated healthcare providers are encouraged to do a [secondary assessment](#), including:
  - Monitor pulse rate and rhythm.
  - Assess tissue perfusion: Evaluate skin temperature and colour, dizziness, confusion, chest pain, pulse strength, shortness of breath, numbness, tingling, capillary refill time.
  - Provide supplemental oxygen if oxygen saturation is less than 94%.<sup>130</sup>
  - Ask about relevant medical history and medications.

129-131

Visit [this link](#) for a longer resource on responding to low heart rate (bradycardia).

## Pregnancy

There is limited information on using naloxone during pregnancy. Animal studies show it does not harm the fetus at doses equal to what humans receive (8-10 mg a day). Because of this, opioid poisoning response for a pregnant person are encouraged to follow the standard opioid poisoning response recommendations with extra precautions.

Special considerations for responding to opioid poisoning with a pregnant person:

- Use injectable (IM or IV) naloxone to give the lowest effective dose to restore breathing. Nasal naloxone gives a higher dose, which can increase the chance of precipitated opioid withdrawal and may cause more complications for pregnant people with a physical opioid tolerance.
- Start with the lowest effective dose of naloxone to restore breathing.<sup>70, 71</sup>
  - IV: 0.1 mg - 0.4 mg
  - IM: 0.4 mg
  - Nasal: 4 mg
- Give rescue breaths, 1 breath every 5 seconds.
- Give each dose of naloxone enough time to work. Use a timer to avoid giving more naloxone than needed.

- Repeat naloxone doses until breathing is restored:
  - IV: every 2 minutes
  - IM and Nasal: every 3 minutes
- After 20 weeks of pregnancy (about 5 months or if they visibly appear pregnant):
- Do not lay the person flat on their back. This position can press on major blood vessels and affect blood flow.
  - Tilt the person onto their left side at a slight angle (15-30 degrees). They should be halfway between lying flat and fully on their side.
  - Wedge pillows or blankets under the right side of their bum or hip.
  - Their right shoulder should be higher than their left shoulder.
- After giving naloxone, check for signs of precipitated withdrawal symptoms. Get emergency health care if they show any signs.<sup>71</sup>
- **Advanced skill:** If trained and equipped, regulated healthcare providers may carry out a [secondary assessment](#) while waiting for emergency health services to arrive.

72-79, 83, 113, 119

## People Who are Breast- or Chest-Feeding

Service providers are advised to give naloxone to a person experiencing an opioid poisoning, including anyone who is pregnant or planning to breast- or chest-feed.

Sometimes people who are breast- or chest-feeding experience opioid poisoning and have questions about feeding their child. Service providers are encouraged to:

- Inform the person that the safest option is to avoid breast- or chest-feeding if you plan on taking opioids.
- Inform the person that opioids get into human milk. This means that a child who consumes human milk from a person who has taken opioids is at risk for experiencing an opioid poisoning.
- Advise caregivers to watch their child and get emergency help if they show signs of distress (such as very sleepy, limp, not breathing normally, very irritable, or having trouble feeding). Visit this [link](#) for more information on the SAVE ME steps for accidental opioid poisoning in infants and children.
- See Duty to Report in [Section 4](#) – Harm Reduction for more information on a service provider’s duty to report to the child welfare agency and when a report should not be made.

## Prolonged Sedation

Prolonged sedation is when a person is unresponsive and cannot be woken up after their opioid poisoning has been reversed and their breathing is normal.

Prolonged sedation can happen at the same time as opioid poisoning or after using substances that contain a strong non-opioid sedative (such as xylazine or medetomidine). Many other medical conditions can look similar to prolonged sedation, so service providers should not assume that the person is sedated because of prolonged sedation. It is important to seek emergency medical care.

### How to recognize prolonged sedation:

- The person is less responsive or does not respond to your voice or painful touch, and
- The person is taking at least 1 breath every 5 seconds (12 or more breaths per minute) on their own, and
- They are not making any abnormal breathing sounds like snoring or gurgling, and
- **Advanced skill:** Trained and equipped regulated healthcare providers conduct a full secondary assessment that does not show signs or symptoms of other causes of sedation.

### How to respond to prolonged sedation:

- Treat it as a medical emergency. Call 911 or your organization's emergency response.
- Do not assume they are experiencing prolonged sedation because of contaminated opioids. Other serious conditions can also cause unresponsiveness including brain injury, high or low blood sugar, heart conditions, and other substances.
- While you wait for help to arrive:
  - Place the person in the recovery position to keep their airway open.
  - Stay with the person. Keep monitoring and supporting their breathing and keep them safe.
  - Reposition the person every 30 minutes to prevent injuries like nerve compression from lying in one position for too long. Use blankets or rolled-up clothes to relieve pressure on their joints, including wrists, neck, and hips.
  - If their breathing or responsiveness changes, follow the SAVE ME steps.
  - Consider storing and securing the person's items somewhere safe to prevent them from getting lost or stolen.
  - **Advanced skill:** If trained and equipped, regulated healthcare providers are encouraged to do a [secondary assessment](#) to check for other possible causes.

See the next page for an infographic on responding to prolonged sedation. You can also visit [this link](#) for a longer resource on responding to prolonged sedation.

# RESPONDING TO PROLONGED SEDATION

Sedatives like benzos or medetomidine are in the unregulated drug supply in BC. A person who has consumed substances with sedatives may become unresponsive. **Know what to do.**

## IF A PERSON IS NOT RESPONSIVE

Check: are they **breathing normally**?

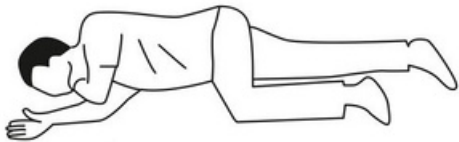
- Taking 12 or more breaths per minute
- Making no unusual sounds (gurgling, choking)

**YES**

**NO**

**1** Stop giving naloxone

**2** Lay them on their side in the recovery position



**3** Check if their mouth is clear

**4** Call 911

**5** Monitor breathing, pulse, and responsiveness until help arrives

**1** Call 911

**2** Check their pulse  
If they have no pulse, give CPR with compressions and rescue breaths

**3** Give 1 breath every 5 seconds in between naloxone doses

**4** Give naloxone every 3 minutes until they are breathing normally

**5** Monitor breathing, pulse, and responsiveness until help arrives

## Substance Use-Related Seizures

A seizure happens when there is uncontrolled electrical activity between the brain and muscles. This causes sudden changes in muscle movements, behaviours, sensations, or levels of awareness. Some people, like people with epilepsy, live with chronic seizures. Others may have a single seizure triggered by infection, injury, substance use, or withdrawal.

Seizures caused by substance use are often from stimulants use or other substances in the unregulated drug supply. Sometimes, an opioid poisoning can look like a seizure because of body stiffness or twitching muscles, so it is important to also monitor for signs of an opioid poisoning.

Tonic-clonic seizures are the most common type of seizure linked to substance use. They involve muscle stiffness and jerking and typically last about 3 minutes. Seizures lasting 5 minutes or more (called status epilepticus) need immediate emergency care due to the risk of serious complications, including permanent injury or death.

## Seizure First Aid

To respond to a seizure, service providers should:<sup>12</sup>

- Check the person's breathing. Sometimes, an opioid poisoning can look like a seizure because of body stiffness or twitching muscles. If the person's breathing is slow, stopped, or abnormal (e.g. snoring, gasping, or choking), give rescue breaths and naloxone when it is safe to do so.
- Stay with the person.
- Time the seizure.
- Remove nearby objects that may cause harm.
- Support safety. Loosen clothes around their neck, and support their head using a soft pillow or a piece of clothing when it is safe to do so.
- Do not restrain the person and do not put anything in their mouth.
- Advise the 911 call-taker if seizure-like activity lasts longer than 5 minutes.

# How to Respond to Substance Use-Related Seizures

**CALL 9-1-1** if someone is having a seizure **OR** is having seizure-like movements

## Signs a person may be having a substance use-related seizure:

1. Muscles suddenly tense up and the body becomes stiff
2. Body then begins to make quick, jerking movements (like tremors or shaking).

Substance use related seizures can be caused by several reasons, including withdrawal, drug poisoning, mixing substances, or having a medical condition like epilepsy.



## Check that it's not an opioid poisoning first!

Check if they're breathing normally (12+ breaths per minute and no unusual sounds). If they are NOT breathing normally, follow SAVE ME steps.

## DURING A SEIZURE:

**1**



Clear area and remove hazards to prevent injury.

**2**



Time the seizure (should last ~3 min).

**3**

Stay with them until the seizure ends.

**Do not touch them or put anything in their mouth**

## AFTER A SEIZURE:

**4**

Place them in the recovery position on their side.



**5**

- Keep the area quiet and calm.
- Explain they may feel confused, exhausted.
- Encourage them to go with paramedics.



## Seizure Recovery

Recovery after a seizure (called the post-ictal phase) usually lasts between 5 to 30 minutes. Symptoms vary but can include fatigue, confusion, anxiety, headache, and muscle pain.

Before emergency medical services arrive, service providers can:

- Place them in the recovery position on their side.
- Check breathing. Start SAVE ME steps if they are not breathing normally. This means they are taking less than 1 breath every 5 seconds (less than 12 breaths per minute) or making unusual sounds.
- When the person is awake and breathing normally:
  - Talk calmly. Explain what happened and where they are.
  - Dim the lights and reduce the amount of people and noise around them.
  - Offer privacy, discretion, and support if they lost bladder or bowel control.
  - Acknowledge they may feel confused, exhausted, embarrassed, or sore.
  - Discuss the possibility of a seizure happening again, which may be more likely if they experience withdrawal.

88-96,111

# Oxygen and Ventilation During Opioid Poisoning Response

Opioid poisoning slows or stops breathing, which prevents oxygen from reaching the brain and body. Giving rescue breaths by pushing air into the person’s lungs gives their brain and body the oxygen it needs when the person cannot breathe effectively on their own. Giving rescue breaths is a priority when responding to a suspected drug poisoning.

## Rescue Breathing Steps

Rescue breathing involves two steps: giving oxygen and ventilating. Both steps are necessary for effective rescue breathing.

### 1. Give oxygen:

- This means making oxygen available. This can be air that contains oxygen from the service provider’s lungs or supplemental oxygen from an oxygen tank.

### 2. Ventilate:

- This means moving oxygen into the lungs. Ventilation can be done several different ways:
  - i. *Rescuer-powered ventilation*: the rescuer uses their own lungs to push oxygen into the person’s lungs through a barrier device, such as a CPR face shield or pocket mask.
  - ii. *Device-powered ventilation*: an external source of power is used to deliver oxygen into the person’s lungs, such as manually squeezing a bag-valve-mask (BVM).

## Rescue Breathing Methods

There are several ways to give oxygen and ventilate a person during opioid poisoning response, including through:

- Mouth-to-mouth,
- Mouth-to-CPR face shield,
- Mouth-to-pocket mask, and
- BVM and supplemental oxygen.

Mouth-to-mouth rescue breathing may be performed when a barrier device is unavailable, depending on the service provider’s comfort level. When available,

**Figure 1: Mouth-to-mouth rescue breathing.**



the use of a barrier device is preferred to reduce the risk of exposure to body fluids and communicable disease transmission.

This section is intended for **trained service providers** in situations where barrier devices are available. This section addresses both basic and advanced rescue breathing methods, including mouth-to-face mask techniques (such as CPR face shields and pocket masks), as well as BVM ventilation and the use of supplemental oxygen.

There is no single best way to deliver oxygen and ventilate a person during opioid poisoning response. The best approach depends on the service provider's education and training, their level of skill, the number of people responding to the opioid poisoning, and what equipment is available in their setting.<sup>158, 159</sup>

Rescue breathing, whether using a mouth-to-face mask device or a BVM, is a difficult skill for most service providers to learn, carry out, and remember.<sup>132</sup> Effective ventilation relies on the service provider's skill and competence. Organizations are encouraged to develop clear protocols that identify the recommended rescue breathing method(s) and equipment for drug poisoning response in their organization. Organizations are encouraged to plan ongoing education and training for service providers to maintain their skills.

### **Basic: Mouth-to-Face Mask Device (CPR Face Shield and Pocket Mask)**

Giving rescue breaths using a mouth-to-face mask device, such as a CPR face shield (like those provided in a Take Home Naloxone Kit) or pocket mask allows service providers to give oxygen effectively until Emergency Health Services (EHS) arrives or naloxone restores breathing.

Using a mouth-to-face mask device, the service provider gives rescue breaths by breathing air from their lungs through the one-way valve in the face mask into the person's lungs. The device

**Figure 3: Mouth-to-Pocket Mask.**



**Figure 2: Mouth-to-CPR Face Shield.**



is small, portable, and provides a barrier and one-way valve to reduce the risk of transmitting infection.

Who can use a mouth-to-face mask device?

Using a mouth-to-face mask device to respond to opioid poisoning is recommended for service providers with:<sup>133-136,153</sup>

- [Basic opioid poisoning response training](#), or
- Situations where there is one service provider, or
- In settings with basic opioid poisoning response equipment.

What is the recommended education and training?

[Basic opioid poisoning response training](#) is recommended for service providers who give rescue breaths using a mouth-to-face mask device. Service providers are also encouraged to take cardiopulmonary resuscitation (CPR) or basic life support (BLS) training.

Using a mouth-to-face mask device to deliver rescue breaths can be challenging. The service provider might not give enough oxygen if they do not open the person's airway or maintain a proper seal around the person's mouth and nose. The service provider might give too much air if breaths are delivered too quickly or with too much force.<sup>153</sup>

Education and hands-on training are encouraged to cover how and when to give rescue breaths using a mouth-to-face mask device, including:<sup>141</sup>

- How to use a CPR face shield or pocket mask,
- How to position the person,
- How and when to use a head-tilt chin-lift and jaw thrust maneuver,
- How to maintain a tight seal over the person's mouth and nose,
- How to give effective rescue breaths,
- How to determine if rescue breaths are effective, and
- How to reposition the person and troubleshoot common issues if rescue breaths are not effective.

## **Advanced: BVM and Supplemental Oxygen**

A BVM is a handheld device used to give rescue breaths by manually pushing air into the person's lungs. A BVM has 3 main parts:

1. A **bag** which is squeezed to deliver air into the person's lungs.

2. A **one-way valve** which allows air flow to the person and prevents exhaled air from flowing back into the bag.
3. A **mask** which fits over the person's nose and mouth to create a tight seal for effective ventilation.

**Figure 4: BVM and Supplemental Oxygen**

A BVM is typically used to deliver rescue breaths with supplemental oxygen. However, it can be used to deliver rescue breaths without supplemental oxygen in emergency situations or until an oxygen source is available.<sup>150, 152</sup>



Who can use a BVM and supplemental oxygen?

Giving rescue breaths using a BVM and supplemental oxygen is a complex skill that is difficult to perform correctly. There are risks from improper technique and important safety considerations.<sup>136</sup> Serious harms can be caused by improper use of a BVM, including gastric insufflation (blowing air into the stomach), gastric perforation (a hole or tear in the stomach), and aspiration (stomach contents going into the lungs) from forcing too much air, providing breaths too quickly, or applying too much pressure.<sup>138-140,152</sup> It is important for service providers to have adequate training and skill in ventilation to achieve good outcomes and avoid harms.

Using a BVM and supplemental oxygen to respond to opioid poisoning may be considered when all of the following are met:<sup>133</sup>

- Service providers have [advanced opioid poisoning response training](#), and
- Service providers have education, hands-on training, and demonstrated skill in airway management, supplemental oxygen administration, and ventilation using a BVM, and
- Situations where there are two or more skilled service providers, and
- Settings with advanced equipment to maintain an airway, administer supplemental oxygen, monitor oxygen saturation, and ventilate using a BVM.

What is the recommended education and training for using a BVM and supplemental oxygen? Service providers who use a BVM and supplemental oxygen to respond to opioid poisoning are strongly encouraged to receive [advanced opioid poisoning response training](#), and an oxygen

therapy course. Cardiopulmonary resuscitation (CPR) or basic life support (BLS) training is strongly recommended.

Many organizations (such as The Red Cross, St. John Ambulance, and The Heart and Stroke Foundation) offer CPR, Basic Life Support (BLS), and oxygen therapy courses and refresher training. Some health authorities deliver their own courses to train staff. Education and hands-on training are encouraged to teach service providers how to manually ventilate a person using a BVM and supplemental oxygen.

Service providers are encouraged to receive education, hands-on training, and demonstrate that they can proficiently do all of the following:<sup>138, 141,149,150, 157, 165-166</sup>



- Follow [safety considerations for supplemental oxygen](#),
- Identify when to use the BVM and when it should not be used (e.g. total upper airway obstruction),
- Safely store and maintain oxygen equipment,
- Identify features that can make it more difficult to ventilate using a BVM (e.g. beard, obese, no teeth, elderly, snoring or sleep apnea [BONES]),
- Measure and insert an oropharyngeal airway (OPA)<sup>b</sup>,
- Use a pulse oximeter,
- Proper head positioning of the person,
- Use a two-person responder technique,
- Perform a head-tilt chin-lift and jaw thrust maneuver and when to use each technique,
- Create a seal over the person's mouth and nose using a mask seal technique (e.g. E-C seal),
- Connect supplemental oxygen tubing to the BVM,
- Deliver supplemental oxygen at the correct flow rate,
- Determine if the BVM reservoir is inflating,
- Troubleshooting oxygen issues (e.g. disconnected tubing),
- Give effective rescue breaths at the appropriate ventilation rate and volume,
- Determine if ventilation is effective (e.g. visible chest rise and fall),
- Effective repositioning and airway management when ventilation is not effective, and
- Escalate care (e.g. call 9-1-1) and communicating medical information with the 911 call-taker.


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<sup>b</sup> The use of a nasopharyngeal airway (NPA) is a restricted activity. NPAs can only be inserted by certain regulated healthcare providers with advanced skill and training according to their scope and standards of practice.

## Rescue Breathing Devices Quick Comparison

This table provides a quick comparison of different rescue breathing devices, including a description, training requirements, benefits, and risks of each device.

Device	Description	Training	Benefits	Risks
<p>CPR face shield</p> 	<p>A clear flexible sheet with a raised mouthpiece on the patient side and a flat valve on the service provider side.</p>	<p>Basic opioid poisoning response education and training. CPR or BLS training is recommended.</p>	<ul style="list-style-type: none"> <li>• Small and portable.</li> <li>• Fits in a take home naloxone kit.</li> <li>• Low cost.</li> <li>• Basic protection from body fluids.</li> <li>• Can be used by a single responder.</li> </ul>	<ul style="list-style-type: none"> <li>• Can be accidentally placed upside down.</li> <li>• Can be difficult to get a tight seal over the nose and mouth.</li> </ul>
<p>Pocket mask</p> 	<p>A mask with a soft cushioning that covers a person's nose and mouth.</p>	<p>Basic opioid poisoning response education and training. CPR or BLS training is recommended.</p>	<ul style="list-style-type: none"> <li>• Can be easier to get a tight seal over the nose and mouth.</li> <li>• Basic protection from body fluids.</li> <li>• Portable. Can be carried in a bag.</li> <li>• Can be used by a single responder.</li> </ul>	<ul style="list-style-type: none"> <li>• Can delay response by taking time to locate and prepare the mask.</li> </ul>

<p>Bag-valve-mask</p> 	<p>A handheld device with a mask and self-inflating bag that is connected to an oxygen source.</p>	<p>Advanced education and training: advanced opioid poisoning response training, oxygen therapy course, and CPR or BLS training is strongly recommended.</p>	<ul style="list-style-type: none"> <li>• Can be used to deliver oxygen and ventilate quickly and efficiently.</li> <li>• Provides protection from body fluids.</li> <li>• Can be used by two or more skilled responders.</li> <li>• Can be expensive to order oxygen and replace bag-valve-mask.</li> </ul>	<ul style="list-style-type: none"> <li>• Requires advanced skill to use correctly.</li> <li>• Not recommended for use by a single responder.</li> <li>• Risks for significant harm to the person if the responder uses equipment incorrectly.</li> <li>• Bulky and not easy to transport.</li> <li>• Requires policies and education on supplemental oxygen education and training, staffing capacity, supplies and occupational health and safety.</li> </ul>
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## Supplemental Oxygen

Including oxygen as part of emergency opioid poisoning response may not be feasible or appropriate in all settings. Settings are encouraged to determine whether having supplemental oxygen is a safe and effective way to respond to emergency opioid poisoning in their unique context.

As of April 1, 2026, anyone can administer supplemental oxygen as emergency first aid to respond to respiratory depression during emergency opioid poisoning response.<sup>147</sup> Before this change, administering oxygen during opioid poisoning response was a restricted activity that could only be carried out by regulated healthcare providers, such as paramedics and nurses. This change aligns with research evidence that supports oxygen administration as part of opioid poisoning response by any service provider trained to do so.

It is important to note that this change only allows for the emergency use of supplemental oxygen until breathing is restored during emergency opioid poisoning response. This change does not permit the use of oxygen by non-regulated service providers outside of this specific situation (e.g. responding to low heart rate, prolonged sedation, low heart rate etc.).

Settings that choose to provide supplemental oxygen as part of emergency opioid poisoning response are encouraged to develop plans for service provider education and training, staffing and response capacity, complex drug poisoning presentations, supplies, and safety.

## Clinical Considerations for Giving Supplemental Oxygen

Giving oxygen can be a helpful tool to respond to opioid poisoning in overdose prevention settings.<sup>142-146</sup> However, there are important considerations for oxygen administration during opioid poisoning response:<sup>160, 161</sup>

- Oxygen does not replace naloxone or calling 9-1-1,
- A person receiving oxygen is not left unattended,
- Naloxone is given to reverse opioid poisoning and restore breathing, and
- Oxygen administration is a short-term emergency intervention. Non-regulated service providers only provide supplemental oxygen to give rescue breaths during emergency opioid poisoning response, and only until the person begins breathing normally on their own or EHS arrives to take over care.

### Precautions when giving supplemental oxygen

The use of supplemental oxygen may pose risks for people with certain medical conditions. People with certain respiratory conditions (e.g., COPD, asthma) and neuromuscular disorders (e.g., muscular dystrophy) are at risk of [oxygen-induced hypercapnia](#).<sup>151</sup> However, short term use of oxygen (less than 20 to 30 minutes) to respond to a typical opioid poisoning and wait for EHS has not been shown to cause harm.<sup>152</sup> To avoid oxygen-related harms, non-regulated service providers ensure that oxygen is only used for short-term emergency response. Service providers are advised to escalate care (e.g. call 9-1-1) if someone has a known respiratory condition or neuromuscular disorder and experiences opioid poisoning.

Oxygen should be used along with naloxone and should be discontinued when normal breathing is restored. Ensure oxygen is not used for extended periods or to treat other conditions that are out of scope for the service provider (e.g. prolonged sedation).

### Simple face masks and supplemental oxygen

Non-regulated service providers are advised not to administer oxygen using a simple face mask or nasal prongs. A simple face mask and nasal prongs rely on the person breathing on their own. These methods will not deliver enough oxygen if breathing is slow, shallow, or absent due to opioid poisoning.

Certain regulated healthcare providers can administer oxygen using a simple face mask or nasal prongs to address hypoxia. Using a simple face mask or nasal prongs requires clinical assessment, judgement, and decision making to safely manage oxygen therapy.

### Complex drug poisoning response presentations

Due to the unpredictable nature of the unregulated drug supply, settings are encouraged to anticipate and address complex drug poisoning presentations that slow down response time and oxygen administration. Many of these complex drug poisoning presentations can make airway insertion and ventilation difficult.

Settings are encouraged to develop clear protocols on when and how to escalate care during common [complex drug poisoning events](#) (e.g. prolonged sedation, low heart rate, etc.) and provide ongoing training on new and emerging issues in drug poisoning response.

For example, settings are encouraged to develop a [fentanyl induced muscle rigidity \(FIMR\)](#) protocol to help staff identify strategies to support timely ventilation and restore breathing when a person is experiencing a stiff neck, chest, or body. A FIMR protocol may identify the use

of higher dose naloxone or giving more frequent doses until the person can be adequately ventilated.

It is important for settings to emphasize that oxygen is not a substitute for giving naloxone or calling 9-1-1. Service providers are encouraged to give naloxone and call 9-1-1 when someone experiences complex drug poisoning.

## **Education and training**

Service providers who administer supplemental oxygen and ventilate using a bag-valve-mask to respond to emergency opioid poisoning are encouraged to follow the recommendations and advanced education and training outlined [above](#).

Settings are encouraged to develop plans for onboarding new staff, providing annual drug poisoning response and naloxone administration refresher training, establishing referral processes, conducting post- drug poisoning debriefs and follow up discussions, and evaluating staff training effectiveness.

## **Staffing and response capacity**

Settings are encouraged to develop staffing plans that are capable of adequately responding to opioid poisoning events.

Staffing plans are encouraged to:

- Ensure at least 2 skilled service providers are available and able to respond at all times,
- Ensure there are a sufficient number of staff available to provide services while ensuring safety of the staff and people accessing services,
- Consider the maximum number of people who may access the service at any given time and ensure staff capacity to respond to multiple drug poisonings at the same time,
- Consider EHS response times and response capacity while waiting for EHS to arrive,
- Identify strategies to maintain site operations during opioid poisoning responses,
- Prioritize inclusion of people with lived and living experience (PWLLE) in staffing models,
- At sites where BVM ventilation and supplemental oxygen are used, staffing plans should also have a response plan for situations in which only one service provider is available.

## Supplies

Oxygen shortages can occur and create barriers to oxygen administration.<sup>148</sup> Settings are encouraged to ensure it is feasible for their site to consistently manage ordering, maintain storage and safety, and stay up to date with training. Settings are encouraged to develop clear protocols on which oxygen supplies to order, when and how to monitor oxygen tank levels, and processes for ordering.

Depending on the setting and size of oxygen tanks, maintaining oxygen supplies can be time consuming and require multiple staff to organize. For example, oxygen tanks are often checked at the beginning and end of each shift and between opioid poisoning events. Standard “first aid” sized oxygen tanks last approximately 30–45 minutes when used at a flow rate of 15 L/min. If a tank is used for 10 minutes per drug poisoning response, it will need to be replaced after 3–4 drug poisoning events.

## Occupational health and safety

Compressed oxygen stored in a tank poses safety risks and requires important safety considerations. Oxygen causes materials to burn easily and makes fires more intense, even from a small spark.<sup>156</sup> Improper handling, storage, or transport can create significant risks. Settings where people smoke nearby or where there may be open flames (e.g. inhalation services, outreach, etc.) should be especially aware of these risks.

It is important to follow occupational health and safety regulations on oxygen. Policies and protocols are encouraged to address safety considerations as well as safe use, handling, storage, and transportation.

### Safety considerations

Oxygen increases fire risk near open flames, and pressurized oxygen tanks can explode if exposed to excessive heat.<sup>149,156</sup>

Safety considerations for oxygen include:<sup>155, 156</sup>

- Protecting oxygen tanks from:
  - sparks and flames, including smoking, vaping, candles, and open flames,
  - excessive heat, including space heaters and hot plates,
  - direct sunlight when the room temperature exceeds 52 °C, and
  - physical damage, electrical contact, or corrosion.
- Fitting oxygen tank with a pressure-relief device,
- Not putting oxygen tanks in contact with quick-burning materials, such as:

- petroleum products, such as oil, grease, and fuel,
- natural fibres, such as cotton, wool, and paper, or
- metal powders, such as magnesium powder.
- Not using oxygen for other reasons (such as cleaning, airing out the room, etc.),
- Being prepared to turn off the flow of oxygen in case of fire.

### Handling oxygen tanks

Oxygen tank handling considerations include:<sup>155,156</sup>

- Only handling when safety precautions have been read and understood,
- Closing valves on tank when not in use and when empty,
- Using in a well-ventilated area,
- Not lifting with a sling or magnet, and
- Not dragging, dropping, rolling, sliding, hitting, carrying by the regulator, or using as a roller or support.

### Storage of oxygen tanks

Oxygen tank storage considerations include:<sup>155,156</sup>

- Storing it in a well-ventilated area,
- Always securing it during storage, transport, and use so they cannot fall or roll,
- Keeping it upright whenever possible,
- Clearly labelling empty oxygen tanks, and
- Storing empty oxygen tanks separately from full oxygen tanks.

### Transporting

Oxygen tank transport considerations include:<sup>156</sup>

- Not transporting it in vehicles where the cargo area is not physically separated from the driver's compartment,
- Ensuring the driver understands potential hazards of oxygen tanks and knows what to do in case of an accident or emergency,
- Before transporting:
  - Making sure the vehicle has adequate ventilation,
  - Securing all containers so they cannot move during transport,
  - Checking that the valve is fully closed and not leaking,
  - Ensuring the valve outlet cap is in place (if provided), and
  - Ensure the valve protection device is properly fitted (if provided).

## Secondary Assessment for Regulated Healthcare Providers

### Advanced Skill – Secondary Assessment

A secondary assessment is a quick but thorough head-to-toe assessment to check for urgent health issues following opioid poisoning reversal.<sup>70, 71</sup> Healthcare providers can conduct a secondary assessment following an opioid poisoning, if it is indicated and within their scope of practice.

After the opioid poisoning is reversed, conduct a secondary assessment in the following situations:

- If there are any signs of a [complex opioid poisoning](#),
- If the cause of the person's condition is unknown or uncertain, or
- The person presents with unusual or unresolved signs or symptoms.

### How to Conduct a Secondary Assessment

Healthcare providers are encouraged to follow their organizational policies and protocols to respond to assessment findings.

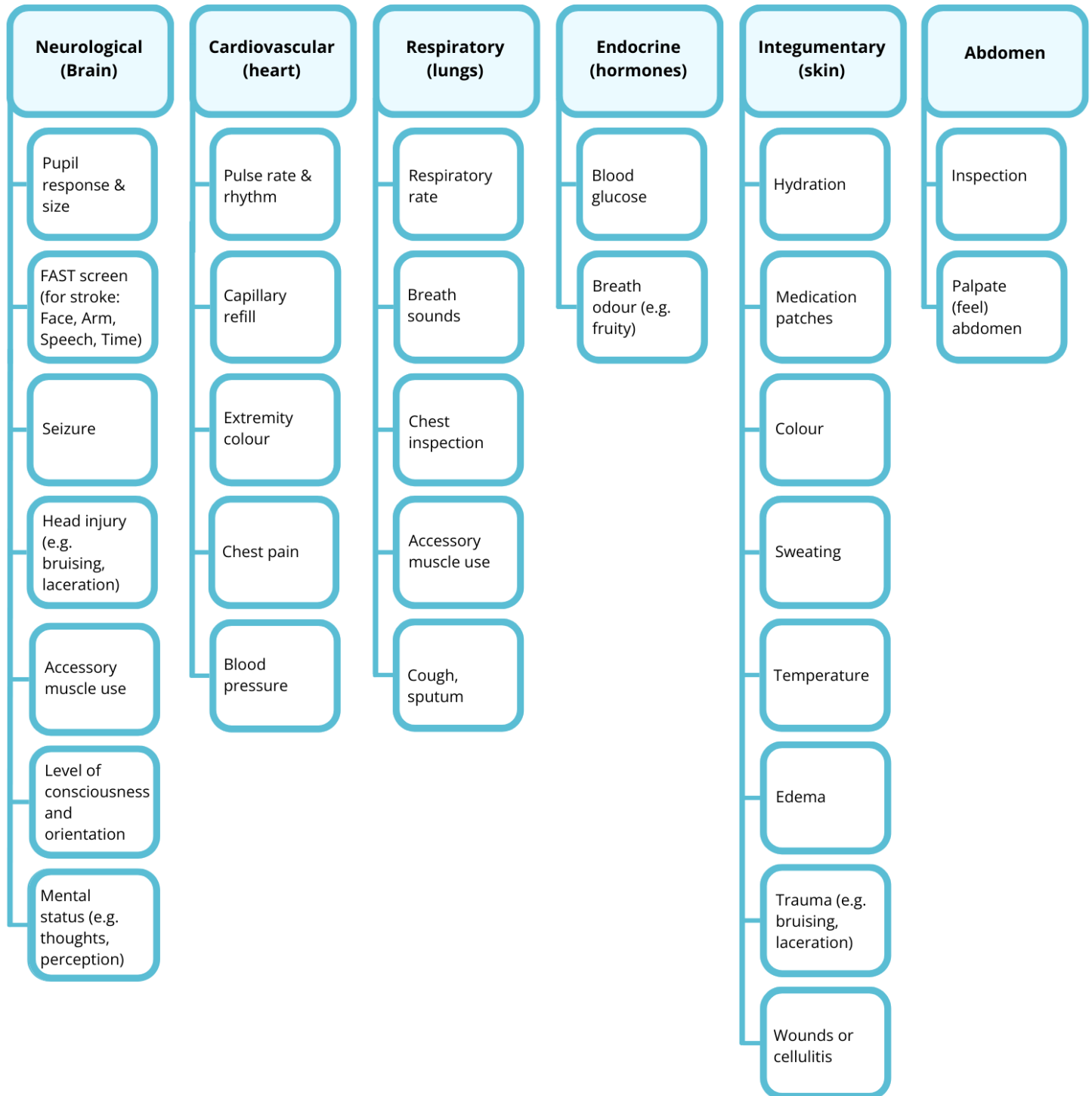
You may have access to some or all of the following equipment to conduct a secondary assessment and respond to abnormal findings, including:

- Penlight,
- Oximeter,
- Blood pressure cuff and stethoscope,
- Thermometer,
- Blood glucose meter and lancets,
- Glucose tabs,
- Warming blanket,
- Supplemental oxygen, and
- Chewable ASA (aspirin).

**Figure 1. Body Systems to Assess in a Secondary Assessment:**

Check each body system to identify issues and how to respond. This list is not exhaustive.

Healthcare providers are encouraged to conduct a secondary assessment according to the clinical scenario, their training, and scope of practice.



# After Responding to an Opioid Poisoning

## Provide Trauma- and Violence-Informed Aftercare

[Trauma- and violence-informed care](#) (TVIC) means providing services in a way that recognizes how trauma and violence affect health and behaviour. After a drug poisoning, it's important to create a physically and emotionally safe space, offering choices and support. Waking up in an unfamiliar place, with memory loss and possible withdrawal, can be stressful and cause fear and anxiety.

Ways to provide TVIC aftercare include:

- Ask permission before touching the person,
- Move the person to a calm and quiet space,
- Give privacy. Ask bystanders to give the person space,
- Minimize noise and lights. Dim lights, turn off music, and reduce noise,
- Validate the person's experience. Avoid dismissing their concerns and reactions,
- Explain what happened, where they are, what time of day it is, and how much naloxone you gave them,
- When the person is awake and able to sit up, offer food or water, and
- Offer health and social services and cultural supports in an open and nonjudgemental way. Follow their lead.

Always connect the person to emergency health services so the person can continue to be monitored and cared for. It is important for service providers to practice cultural safety in interactions, offer health and social services, and help the person explore their options.<sup>122</sup>



All workers at healthcare settings should (including security guards) should require **training to practice trauma informed care and conflict resolution**. Patients and their family or friends are often not in their best states of minds under high stress situations.

Serving people in accelerated states of mental health, shock or injury creates **situations where people may not be the best versions of themselves**. These situations require tact and compassion where such training and practices are essential to best health care outcomes for all.

*-Charlene, Member of PEEP*



### Monitor for Rebound Opioid Poisoning

Naloxone only works for a short time and wear off within 20 minutes to 2 hours. Most opioids stay in the body longer than naloxone. When the naloxone wears off, a rebound opioid poisoning (sometimes called rebound opioid toxicity) can happen. It is important to keep watching the person's breathing for signs of a rebound opioid poisoning after naloxone is given.

How long you should keep watching a person depends on the type of opioid they took, how long it stays in the body, how much naloxone was given and how it was given, and the person's current health status and opioid tolerance (see Table 3). Medications that are not directly received from a pharmacy can be fake. This means that people may take substances they did not expect.

In general, it is best practice to watch people for 2 to 12 hours after the last dose of naloxone. It is recommended that the person is transferred to a hospital for ongoing evaluation, treatment, and access to other health and social services.

If you are unsure or would like more advice, call the [BC Drug and Poison Information Centre \(DPIC\)](#) for guidance 1-800-567-8911 available 24/7.

**Table 3. Guidance for how long to monitor a person after reversing an opioid poisoning<sup>10</sup>**

<b>Monitoring Lower Risk of Rebound Opioid Toxicity</b>			
How the substance was taken	What substance was taken	Type of naloxone given	How long to monitor after last dose of naloxone
Injection, inhalation (smoking), or snorting.	Short-acting opioids (heroin, fentanyl, hydromorphone, etc.)	Injection 0.4 mg to 0.8 mg (1-2 doses)	2-4 hours
		Nasal 4 mg (1 dose)	2 hours
<b>Monitoring Higher Risk of Rebound Opioid Toxicity</b>			
How the substance was taken	What substance was taken	Type of naloxone given	How long to monitor after last dose of naloxone
Ingestion (swallowing)	Long-acting opioids (methadone, extended-release opioids, buprenorphine etc.)	Any dose of injectable or nasal	6-12 hours
Injection, inhalation (smoking), or snorting	Any opioid	Injection dose more than 0.9 mg (more than 2 doses)	6-12 hours
		Nasal dose 8 mg or more (2 or more doses)	

### **When Someone Does Not Want To Go To The Hospital**

Sometimes a person may not want to go with the ambulance or stay for monitoring. If they choose to decline recommended monitoring, advise them about the risks of rebound opioid poisoning and provide recommendations on how to reduce risks:<sup>10, 21, 23-25, 123</sup>

- Naloxone only lasts 20 minutes to 2 hours in the body.
- Most opioids, especially strong ones like fentanyl, last much longer in the body and are more likely to cause a rebound opioid poisoning.
- Do not use more opioids until the naloxone wears off completely. Opioid withdrawal symptoms will get better as the naloxone wears off. Taking more opioids will not stop opioid withdrawal symptoms, will not relieve pain, and will increase the chances of experiencing a rebound opioid poisoning.
- Stay with someone who knows how to recognize and respond to an opioid poisoning with naloxone, can monitor for the full amount of time recommended, and can call for help if needed.

## Managing Precipitated Opioid Withdrawal

Precipitated opioid withdrawal happens when naloxone is given to someone who is physically dependent on opioids. Naloxone quickly blocks the effects of the opioids in the person's body, which can cause sudden and uncomfortable withdrawal symptoms. It's called "precipitated" because the withdrawal happens quickly after naloxone is given.

People with a physical dependence on opioids are more likely to experience precipitated opioid withdrawal if they are given more naloxone than needed to reverse an opioid poisoning.

Common signs and symptoms of precipitated withdrawal are:<sup>104</sup>

- Fast heart rate (tachycardia)
- Tremors
- Sweating or chills
- Nausea or vomiting
- Abdominal cramps
- Muscle or joint pain
- Anxiety or irritability
- Dilated pupils

If you think someone is experiencing precipitated withdrawal:

- Let them know that withdrawal symptoms will get better when naloxone wears off within 30 minutes to 2 hours.

- Encourage them to go to the hospital for help with their symptoms. The hospital has medications that can help relieve symptoms without the risk of rebound opioid poisoning.
- If the person is pregnant, advise them that precipitated withdrawal can cause pregnancy complications. Encourage them to go to hospital.<sup>104</sup>
- Advise the person that using opioids before naloxone wears off:
  - Will not help with withdrawal symptoms,
  - Will not give them the usual effects and pain relief of opioids, and
  - Can cause opioid poisoning symptoms to come back when the naloxone wears off.

### **Have A Safety Planning Conversation**

Experiencing a drug poisoning can lead a person to reflect on their substance use. After drug poisoning, have a safety planning conversation to identify ways to prevent harms in the future and to support access to services across the continuum of care, from harm reduction to treatment and recovery.

The following page provides guidance on how to have a safety planning conversation:

# How to Have a Safety Planning Conversation

## 1. Ask permission to talk about substance use safety

- “We check in with everyone about substance use because of the toxic drug supply.”
- “Is it okay if we talk about safely planning to help keep you safe?”
- If yes: “Do you use any substances?”

## 2. Review strengths

- “How have you been keeping yourself safe from drug poisoning (overdose)?”

## 3. Review challenges

- “Do you ever use substances alone?”
- “Has your tolerance changed recently?”
- “Is there anything making it harder for you to stay safe while using substances?”

## 4. Offer information and support

- “What information or supports do you need to stay safer when using substances?”
- “Are there any other supports you need?”
- If yes: Offer safer substance use information, share onsite, nearby or virtual OPS and harm reduction services, offer a naloxone kit and training, and share referrals to health and social services.

## 5. Say thanks and invite questions

- “Thanks for taking the time to talk with me. I know sometimes it can be a difficult topic.”
- “Please feel free to come back if you have any questions or want to talk.”

## Resources

Virtual drug poisoning prevention and response resources:

- [NORS](#) phone line (call or text: 1-888-688-6677).
- [Lifeguard App](#) virtual overdose prevention app.

Harm reduction and substance use services:

- [Toward the Heart Site Finder](#) for nearby overdose prevention sites, harm reduction supplies, and take home naloxone sites.
- [BCCSU Find Drug Checking](#) for nearby drug checking services.
- [HelpStartsHere.Gov](#) for mental health and substance use resources.
- [Foundry](#) for youth mental health and substance use supports.
- [BCCSU OAT clinics accepting new patients](#)
- [BC Women's Hospital Perinatal Substance Use Program](#) for people who are pregnant or parenting and using substances.
- BC's [Alcohol & Drug Information Referral Service](#).

FNHA Resources:

- [Virtual Substance Use and Psychiatry Service](#)
- [First Nations Virtual Doctor of the Day](#)
- [FNHA Treatment Centres](#)
- [FNHA Mental Health and Wellness Supports](#)

Regional health authority programs and services:

- [First Nations Health Authority](#)
- [Fraser Health](#)
- [Interior Health](#)
- [Island Health](#)
- [Northern Health](#)
- [Vancouver Coastal Health](#)

## Support After Drug Poisoning

### Support for People Who Respond to Drug Poisoning

People who respond to drug poisoning often experience grief and trauma after these events, especially if they have witnessed or responded to many poisoning events. This can happen whether the person who experienced the poisoning lived, was injured, or died.

Responders can have strong and complicated reactions after a drug poisoning, especially if the person dies. It is common for responders to feel guilt, blame themselves, and isolate themselves from others, especially because of stigma that is still attached to substance use. People can also experience significant stress, including nightmares and flashbacks, after witnessing an overdose death.

People with lived and living experience (PWLE) of substance use are especially impacted by ongoing trauma, grief, and loss within their communities because of the ongoing toxic unregulated drug poisoning emergency.<sup>109</sup>

It is important for sites to offer staff resources and regular opportunities to debrief after a drug poisoning or other critical events. The [Provincial Overdose Mobile Response Team](#) offers support to people who respond to drug poisonings and is available to all service providers across the province.



**Debriefing is important** when responding to drug poisonings. Whether that be taking a walk by yourself, talking about the response, and/or just taking time away from the space. It's important, even if it's after multiple.

*-Kali, Member of PEEP*



### Support for Loved Ones & Family

Family members and friends who lose a loved one to drug poisoning often experience isolation and shame from stigma on top of grief and trauma. This can make it difficult to reach out to friends within their support circles and the healthcare system.

There are many resources and support groups for people who are grieving the loss of a loved one from drug poisoning.<sup>110</sup> You can find resources and support groups near you by visiting [HelpStartsHere](#).

## Support Groups

Many community-based organizations across the province offer peer-led support groups. [Moms Stop the Harm](#) offers:

- [National Peer Support Phone Line](#) is a phone line for people impacted by substance use or loss from drug poisoning. Call 1 866 355 MSTH (6784) to connect with a trained peer supporter.
- [Holding Hope](#) is a peer-led support group for families with loved ones who are living with substance use. The groups offer support and healing through stories, resources, and strengths-building.
- [Healing Hearts](#) is a peer-led bereavement group that helps people grieve and navigate the loss of a loved one because of substance use in an open format.

## Resources

[Gone Too Soon](#) is a handbook that shares stories from people who have lost a loved one to substance use and gives information on practical considerations and encourages self-care. This resource was created by the BC Centre on Substance Use (BCCSU), the BC Bereavement Helpline, and the Affected Persons Liaison with the BC Coroners Service.

## Culture & Grief

Culture itself is medicine and healing. Every culture has its own way of experiencing and expressing grief. These beliefs and practices can differ across and within cultures, communities, and families.

Each Nation and community has their own practices and beliefs around death, burials, and ceremonies. When working with First Nations, Métis, and Inuit families and communities, it's important to use a distinctions-based approach. This means you recognize and respect the unique and diverse beliefs and practices across each community. Service providers are encouraged to take the time to understand and respect the beliefs and practices of their host First Nations, Métis chartered communities, and Inuit communities, especially around grief and death.

Service providers supporting First Nations, Métis, and Inuit families who are grieving can connect them to a few different services, including The [Non-Insured Health Benefits \(NIHB\)](#) program—for [status First Nations people](#), [Inuk people recognized under one of the Inuit land claim organizations](#), and [Métis Nation programs and services](#). These programs may cover fees for approved counsellors.

Service providers wanting a better understanding of Indigenous approaches to grief and loss are encouraged to:

- Watch some short videos from First Nations, Inuit, and Métis Peoples on [ceremonies, the spirit world, and grief and celebration](#).
- Watch and listen to [Indigenous Voices: Honouring Our Loss and Grief](#).

## First Nations Communities

Each First Nation has its own traditions, practices, and beliefs around death, dying, and grieving. Many communities share the practice of gathering to talk about the person who died and honour their life. People can find healing through many cultural practices, such as ceremony, smudging, spirit bathing, drumming, sharing meals, prayer, distributing the deceased person's ceremonial possessions, holding a sacred fire, and holding gatherings.

### **An Example of Wise Practices in First Nations Harm Reduction** *from the FNHA's Indigenizing Harm Reduction Study*

“We have a team here that does home support detox. We have a nurse and a doctor that would go and check in on the client as they're detoxing. We'll get the family to empty out a room, we'll get a candle, we have water, we have cedar boughs, traditional medicines to help cleanse and detox.

Then we have Elders who would go in and talk to the one who is detoxing and just have full support with the cedar brushings every morning or when needed, drumming and singing for the one who's detoxing.”

*-Participant from the Fraser Salish Region in the FNHA Indigenizing Harm Reduction Study*

The First Nations Health Authority's [Healing Indigenous Hearts Facilitators' Guidebook](#), created together with Moms Stop the Harm and the BC Centre on Substance Use, provides evidence-based guidance on culturally safe care to support British Columbia First Nations communities grieving the loss of loved ones because of toxic drug crisis. The guide emphasizes holding circles of support for people in mourning. For more information, please email [CMO.HiH@fnha.ca](mailto:CMO.HiH@fnha.ca)

## Elder Doreen Peter - Cowichan Tribes

*“Culture is medicine, and medicine is culture.”*



One principle of Healing Indigenous Hearts is “culture is healing”, with an example being the drum.

The drumbeat represents the culture and the spirit. When we sing and drum in ceremony, the drumbeat is the heartbeat of the song, connecting us to spirit.

This approach provides essential guidance within a culturally safe, Indigenous-led framework, helping the bereaved move from grief toward hope and healing. Reconnection to land, spirit, and culture is crucial for restoring one’s spirit and facilitating the healing process.

## Métis Nation

Grief affects the whole community, not just individual people or families. Service providers can support Métis people experiencing grief using culturally relevant approaches, including: <sup>105-107</sup>

- **Connecting with Culture:** Offer resources or opportunities to engage in traditional practices like storytelling, language, and ceremonies. This can give comfort and a sense of belonging, improving their emotional well-being.
- **Elders and Knowledge Keepers:** Elders have guidance and wisdom that can help Métis communities in times of grief. Encourage people to connect with Elders for counsel, sharing stories, or engaging in cultural teachings.
- **Personalized and Holistic Supports:** Everyone grieves differently. Get to know what each person needs to navigate their grief. The [Métis Nation](#) Outreach Program focuses on the unique needs of each person and are well rounded, offering cultural supports, as well as supports for mental health, physical well-being, and social connections.
- **Community and Family Involvement:** Métis communities are often close-knit, and grief is shared across the entire community. Offer community-based support services, group healing circles, or grief support gatherings to help people feel connected in their grief and strengthen community bonds.
- **Land-Based Healing:** Many Métis people find healing and comfort in nature. Encourage people who are grieving to spend time on the land, whether through traditional activities, nature walks, or ceremonies.
- **Cultural Safety in Healthcare Settings:** Healthcare providers supporting Métis communities need to offer culturally safe care. This means being aware of and respectful toward Métis cultural practices and traditions.

Visit this link to find more information about [Métis Nation programs and services](#).

## The Good Samaritan Drug Overdose Act

The [\*Good Samaritan Drug Overdose Act\*](#) (GSDOA) is a federal law that gives legal protection for people who call for emergency medical help during a drug poisoning emergency. It protects anyone, including youth, at the scene of a drug poisoning, as well as the person experiencing the drug poisoning, from being charged with simple possession of an illegal substance (carrying substances for personal use). It also protects people who may be breaking the conditions of their pre-trial release, probation order, conditional sentence, or parole related to simple possession.<sup>86,87</sup>

For more information, refer to the [Government of Canada website](#).

## Toxic Drug Alerts

Due to the unpredictable toxic drug supply, it's important to keep people who use substances and respond to poisonings informed about new or dangerous trends in the drug supply.

If you notice clusters of unusual or complex drug poisonings, including severe drug poisoning or other trends, notify your regional health authority toxic drug alert system through your [regional Harm Reduction Coordinator](#).

To sign up, text Join to 253787 (ALERTS) and find more information on [Toward the Heart](#).

## Glossary

**Abnormal breathing** refers to breathing that is less than 12 breaths per minute or unusual sounds that indicate respiratory distress such as gurgling, snoring, wheezing, gasping, or choking.

**Central nervous system (CNS)** refers to the brain and spinal cord where information, movement, cognition, and vital body functions are controlled. Psychoactive substances act on the CNS.

**Consumed or consumption** refers to the way a substance is put into the body. Consumption can be done in many ways, including inhalation (smoking), snorting, injection, rectal use, orally (ingestion), etc.

**Delirious or delirium** refers to a mental state where someone experiences problems with their attention and awareness over a short time of period. The person may be confused, disoriented, not able to think clearly, agitated, or having difficulties remembering. Delirium can be caused by a medical condition, an adverse effect of a medication, intoxication, or withdrawal from a substance.

**Drug checking** is a harm reduction service that tests substances so people know what is in them. There are various methods to test substances, such as test strips or Fourier Transform Infrared Spectroscopy [FTIR] machine. By knowing what is in their substances, people can make safer choices about using them.

**Dyskinesia** is the uncontrolled, involuntary, and erratic movement of muscles.

**Fentanyl** is a potent synthetic opioid.

**Fentanyl induced muscle rigidity** (or “wooden chest syndrome”) is the stiffening of the chest and abdominal muscles because of fentanyl poisoning. This condition stops the muscles used to breathe and causes ventilatory failure.

**Head-tilt chin-lift maneuver** refers to a first aid technique used to open a person’s airway by tilting the head backward and lifting the chin. While the person lays flat on their back, the responder puts one hand on the person’s forehead to tilt their head backward while lifting their chin up with the other hand.

**Hypoxia** refers to low levels of oxygen in the body.

**Indigenous-specific racism** refers to a type of stereotyping, bias, and discrimination against First Nations, Métis, and Inuit Peoples.

**Non-regulated service provider** is an employed service provider who is not licensed or registered by a regulatory body, who has no legally defined scope of practice, required education, or practice standards.

**Non-opioid sedative** is a substance that is not an opioid and causes central nervous system depression (slowed brain and body activity).

**Novel substance** is a new substance that has been added to a known substance. Sometimes added as filler to increase bulk or for another reason. They are also known as an 'adulterant' or 'contaminant'.

**Opioid** is a group of substances that slows down the central nervous system (the brain and spinal cord) and relieves pain. Opioids can be legal and prescribed, or illegal and unregulated.

**Opioid poisoning** is the physiological harms the body experiences by taking opioids, such as slowing down breathing or causing unconsciousness. These harms happen because street drugs are often toxic, unpredictable, and mixed with unknown substances. The term opioid poisoning is preferred to "overdose," which implies that an individual took too much of a substance, whether on purpose or by accident.

**Oxygen administration** means giving someone extra oxygen to help them breathe when they are having problems.

**Oxygen-induced hypercapnia** refers to a condition where too much carbon dioxide is in the blood.

**Potent or potency** refers to how strong a substance is. If a substance is potent, it means a small amount has a large effect.

**Precipitated opioid withdrawal** is when a person experiences sudden and serious opioid withdrawal because medication pushes opioids off their opioid receptors too quickly.

**Prolonged sedation** means the person is unresponsive and cannot be woken up for a long time (usually a few hours) after their opioid poisoning has been reversed and their breathing is normal.

**Service provider** means any person employed in a health or social service setting to provide care to another person. A service provider may be regulated or non-regulated.

**Rebound opioid poisoning** is a second opioid poisoning that happens after naloxone wears off. This is because opioids are still circulating in the body, and the effects of naloxone are temporary.

**Regulated healthcare provider** is a type of regulated service provider who is trained and qualified to practice a health profession or occupation. For example, registered nurses.

**Regulated service provider** is an employed service provider who is registered and licensed by an approved regulatory body (as defined under the Health Professions and Occupations Act), with specific education requirements, a legally defined scope of practice, and related practice standards. For example, registered social workers.

**Restricted activity** is a specific and defined activity that can only be performed by specific regulated service providers.

**Respiratory depression** means breathing too slowly or too shallowly where the person is taking less than 12 breaths per minute.

**Routine infection prevention and control practices** are a set of strategies and standards that protect workers from exposure to infectious diseases through blood and body fluids. Routine practices are based on the idea that all blood, body fluids, secretions, excretions, mucous membranes, broken skin, or soiled items could carry infections.

**SAVE ME** is an acronym that refers to the steps for responding to opioid poisoning.

**Seizure** is a sudden burst of unusual activity in the brain that causes changes in behaviour, movement, or consciousness.

**Settler-colonialism** refers to an ongoing system that perpetuates the displacement and elimination of Indigenous Peoples and culture, where settlers remove and erase Indigenous Peoples from their lands.

**Shallow breathing** refers to a breathing pattern of short breaths that do not fully fill the lungs.

**Toxicity** means how harmful or poisonous a substance is to the body.

**Trauma- and violence-informed care** means providing services and care in a way that recognizes how past experiences with personal and systems-level trauma and violence can affect a person's behaviour and health. It focuses on promoting safety and trust by working together, building connections, and supporting a person's strengths.

**Unregulated drug supply** are substances that are not checked for quality or consistency.

**Unresponsive** means a person does not respond when spoken to or touched. It is also called unconscious.

**Ventilate** means to supplying air to the lungs.

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