

## What to do after exposure to an unknown substance

1. Seek first aid or medical attention
2. Immediately notify your manager, supervisor, or in-charge staff member
3. Follow any additional reporting procedures relevant to your workplace

Many exposures to unknown substances such as unregulated methamphetamine, fentanyl, heroin, and crack cocaine will cause no symptoms or only mild symptoms that should go away on their own. Workers who do experience symptoms should:

- Move to an area with fresh air
- Remove personal protective equipment (if applicable) and wash hands with soap and water
- If there is contact with bare skin, wash with soap and water
- If there is contact with eyes, use an eye wash station
- **If symptoms are consistent with anxiety:**
  - Take slow, regular breaths through closed lips
  - Focus on things outside of your body: what you can touch, smell, see, and hear
  - Seek additional mental health supports if needed

**If you have any of these signs or symptoms, seek urgent medical care:**

- Respiratory depression (fewer than 12 breaths per minute)
- Unusual breathing sounds (e.g. snoring, choking, or gurgling)
- Confusion
- Drowsiness or decreased level of consciousness
- Loss of coordination
- Persistent shortness of breath

**Note: If a someone is non-responsive and not breathing (or not breathing normally):**

- **Call a “code blue” or 911, and**
- **Give 1 breath every 5 seconds and administer naloxone**

If you experience no serious and obvious health effects, you may not need to seek emergency care. Most symptoms will resolve on their own within a few minutes to 1 hour. If symptoms last longer than 1 hour, seek non-urgent medical care (e.g. family doctor, counsellor). It is very unlikely that you will have long-term health effects from brief and/or infrequent exposures.

**Additional resources:**

- HealthLink BC: Call 811
- BC Drug and Poison Information Centre (DPIC): Call 604-682-5050 or 1-800-567-8911

## Guidance for aftercare following unintentional exposures to unknown substances in occupational settings

People may be directly or indirectly exposed to psychoactive unknown substances such as methamphetamine, fentanyl, other illegal unregulated substances at work, for example while treating an individual in their care who has recently used an unregulated substance. This document describes possible health impacts of these exposures and guides workers in determining appropriate responses. This is an emerging area of research and data are sparse. This resource will be updated as more information is available. Employers must make workers aware of all known and reasonably foreseeable health and safety hazards; develop and implement safe work practices and procedures; and control exposures by any route of exposure to below harmful levels.

**If a worker has any of these signs or symptoms, seek urgent medical care:**

- Respiratory depression (fewer than 12 breaths per minute)
- Unusual breathing sounds (e.g. snoring, choking, gurgling)
- Confusion
- Drowsiness or decreased level of consciousness
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**Note: If a worker is non-responsive and not breathing (or not breathing normally):**

- Call a “code blue” or 911 and
- Give 1 breath every 5 seconds and administer naloxone

For more information:

- [SAVE ME Steps to respond to a suspected opioid poisoning](#)
- [BCCDC Naloxone Decision Support Tool](#)

**Workers should follow the relevant occupational health reporting processes of their employer.**

## Direct and indirect exposure to unknown substances

How a worker is exposed to a substance can affect how much it impacts their health. Exposure can happen:

- **Directly** through physical contact with unknown substances. Workers may be directly exposed by touching unknown substances with bare skin (e.g. touching loose powder). Note that directly touching fentanyl powder with bare skin does not cause drug poisoning (overdose).
- **Indirectly** after an unknown substance is dispersed into the environment. For example, indirect exposures may occur when breathing in second-hand smoke or smelling a substance being smoked from outside of a patient room. The risk of serious side effects from indirect, brief exposures is extremely low.

## Health impacts of exposure to unknown substances

Exposure to unknown substances may or may not impact a worker’s health. Most health effects from unintentional exposure to unknown substances are usually mild and will go away on their own without needing treatment. Exposures that are **brief**, involve skin only, or occur outdoors or in well-ventilated spaces are particularly low risk for serious adverse health effects.

A worker is more likely to experience health effects if exposure involves airborne or vaporized unknown substances in small, poorly ventilated spaces, or if they are exposed over **prolonged** periods (i.e. during a whole shift). Following safe work procedures and wearing appropriate personal protective equipment can greatly reduce the risk of serious health impacts in these circumstances.

**Table 1: Direct, indirect, brief, and prolonged exposure**

The table below outlines examples and details on direct, indirect, brief, and prolonged exposures. The darker the background colour, the higher the risk.

	Direct (physical contact with unknown substances)	Indirect (after unknown substances are dispersed)
<b>Brief</b>  (e.g. seconds or minutes)	<i>Example: touching loose powder</i> <ul style="list-style-type: none"><li>Many health effects from direct, brief exposures are usually mild and go away without needing treatment</li><li>Factors that increase risk for direct, brief exposure include contact with mucous membranes in the eyes, nose, and mouth</li><li>Contact with skin alone carries less risk</li></ul>	<i>Example: walking into a space where someone was smoking several minutes ago</i> <ul style="list-style-type: none"><li>Many health effects from indirect, brief exposures are usually mild and go away without needing treatment</li><li>Indirect exposures indoors carry more risk than outdoors</li></ul>
<b>Prolonged</b>  (e.g. during a whole shift)	<i>Example: breathing in smoke or vapour in an enclosed room for an hour without ventilation.</i> <p>Direct exposures that are prolonged can increase risk for health effects</p> <p>Prolonged, direct exposures involving contact with mucous membranes in the eyes, nose, and mouth carry more risk</p>	<i>Example: working regularly in a room that has not been cleaned and decontaminated after substance use</i> <p>Indirect exposures that are prolonged or occur indoors can increase risk for health effects</p>

## Possible signs and symptoms following exposure

The table below describes the signs and symptoms a person may experience after being exposed to an unknown substance. Many direct and indirect exposures should result in no symptoms or mild symptoms and should go away on their own in a few minutes to 1 hour. Experiencing signs and symptoms after exposure does not necessarily mean that the person exposed is experiencing a drug poisoning (overdose). Regardless, workers should follow the occupational health assessment and reporting procedures of their employers.

**Table 2: Health impacts related to unknown substances**

Health Impacts related to unknown substances	Description	Signs and Symptoms
<b>Related to general irritant properties or to cutting agents</b>	Substances may irritate parts of the body with a mucous membrane (e.g., eyes and nose), the respiratory tract, or the skin depending on the route of exposure.	<ul style="list-style-type: none"> <li>• Cough</li> <li>• Chest tightness</li> <li>• Eye redness/stinging/watering</li> <li>• Itching or skin rash</li> </ul>
<b>Opioids or Benzodiazepines</b>	<p>The substance itself may have specific health effects, although people are unlikely to experience these from a direct or indirect unintentional exposure.</p> <p>Opioids, such as fentanyl, and benzodiazepines, such as etizolam are depressants. Depressants slow down body processes.</p>	<ul style="list-style-type: none"> <li>• Confusion</li> <li>• Drowsiness/decreased level of consciousness</li> <li>• Nausea</li> <li>• Loss of coordination</li> <li>• Slow, infrequent breaths (different than the sensation of not being able to catch your breath that is common with anxiety)</li> </ul>
<b>Cocaine/ Methamphetamine</b>	<p>The substance itself may have specific health effects, although people are unlikely to experience these from a direct or indirect unintentional exposure.</p> <p>Cocaine and methamphetamine are stimulants. Stimulants speed up body processes.</p>	<ul style="list-style-type: none"> <li>• Headache</li> <li>• Sweaty and warm skin</li> <li>• Restlessness/agitation</li> <li>• Dilated pupils</li> <li>• Tremors</li> <li>• Hypertension</li> </ul>

## Mental health supports

Workplaces should support the mental health of all workers. Being exposed to an unknown substance may be frightening and stressful. The potency of unregulated substances is unpredictable, which can be distressing. Workers may also have personal triggers related to substance use (e.g. a family member who has died from unregulated drug poisoning).

Anxiety from the experience of an exposure is a legitimate health concern that requires non-judgmental and stigma-free care. If a person experiences signs and symptoms of anxiety, they should also be assessed for other physical signs and symptoms of exposure. Having physical symptoms of exposure evaluated can help ease anxiety.

Signs and symptoms of anxiety or panic attack can include:

- Tingling around lips and extremities
- Trembling, numbness, weakness
- Chest tightness
- Rapid, shallow breathing
- Nausea
- Excessive perspiration, skin is cold and clammy
- Sensation of lump in throat

If symptoms are consistent with anxiety:

- Take slow, regular breaths through closed lips
- Focus on things outside of the body: what they can touch, smell, see, and hear

Additional resources:

- Seek mental health resources available through your employer or extended health benefits

## Definitions

**Opioid poisoning** refers to a drug poisoning caused by opioids (e.g. fentanyl, heroin).

**Regulated substance** refers to a substance that is currently legal and controlled by regulations to monitor for quality and consistency (e.g. prescription medication, fentanyl patch, cannabis, alcohol).

**Unregulated substance** refers to a substance that is currently illegal and not monitored for quality or consistency (e.g., crystal methamphetamine). Often referred to as “illicit substances”, or “street drugs”.

**Drug poisoning** refers to physiological harms that can occur from consumption of substances. Drug poisoning does not indicate the type of substance. Sometimes referred to as ‘overdose’.