

SUPPORTING PEOPLE WHO USE SUBSTANCES DURING EXTREME COLD EVENTS



OHRDP

**Ontario Harm Reduction Distribution Program
December 2024**



TABLE OF CONTENTS

1. What Is an Extreme Cold Weather Event?	2
2. Why Are People Who Use Substances at Greater Risk?	3
3. Other Risks That May Impact People Who Use Substances	4
4. Additional Environmental and Social Risks	5
5. Naloxone and Extreme Cold Weather	5
6. Signs And Symptoms of Cold Related Illness and What to Do	6
7. Other Cold Related Injuries/Illness That Can Occur	8
8. Consider Messaging During Extreme Cold Events	9
9. How Harm Reduction Programs Can Support Service Users During Extreme Cold Weather	10
11. Key Messages to Share with Service Users	11
12. References	12

What Is an Extreme Cold Weather Event?

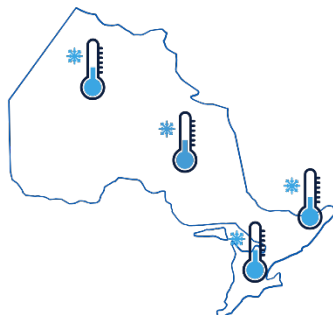
In Ontario, an extreme cold weather event is a period when the temperature or wind chill is expected to reach levels that pose a significant risk to health and safety. Criteria for issuing extreme cold weather alerts can vary slightly between regions and municipalities within Ontario. [Environment Canada defines](#) extreme weather events in Ontario like this:

South-central and southwestern Ontario	temperature or wind chill is expected to reach minus 30°C for at least two hours.
Southeastern Ontario	temperature or wind chill is expected to reach minus 35°C for at least two hours.
Northern Ontario	temperature or wind chill is expected to reach minus 40°C for at least two hours.
Far Northern Ontario	temperature or wind chill is expected to reach minus 45°C for at least two hours.

Levels are set because these temperatures can lead to health issues like frostbite and hypothermia in a short period of time. Wind chill can cause the body to lose heat faster and freeze skin very quickly. Risk of health effects like windburn and frostbite increases at wind chill values below -27C.

During these events, public health units and municipalities may take specific actions to protect vulnerable populations, such as opening warming centres or issuing public advisories.

Cold weather events can be challenging for anyone when trying to stay warm and safe.



Why Are People Who Use Substances at Greater Risk?

People who use substances are particularly at risk to the dangers of extreme cold weather because of:

<p>Impaired judgment, heat regulation and sensation</p>	<p>Substances, especially opioids and alcohol, can impair judgment and reduce the body's ability to sense cold. This increases risk of hypothermia and frostbite.</p>
<p>Overdose Risks</p>	<p>Cold weather can:</p> <ul style="list-style-type: none"> • increase risk of unnoticed overdoses • cause individuals to use higher doses to relieve the physical discomfort of the cold or use opioids in combination with other substances like alcohol, which further depresses the central nervous system • make it more difficult for emergency services to reach individuals on time. People may be more hidden when using drugs in an attempt to stay warm
<p>Sedation and Immobility</p>	<p>Substances contaminated with sedatives like xylazine, and benzodiazepines can cause heavy sedation and impair consciousness. This makes individuals more vulnerable to cold-related injuries and death.</p>
<p>Using Crystal Meth</p>	<p>Crystal meth raises body temperature and causes excessive sweating. In cold weather, this can make it difficult to regulate body temperature increasing risk of hypothermia.</p>
<p>Using Opioids</p>	<ul style="list-style-type: none"> • Opioids depress the central nervous system which slows down bodily functions like breathing and heart rate. It can also impair the body's ability to regulate temperature, increasing risk of hypothermia • Opioids cause widening of blood vessels which can lead to a drop in blood pressure. In cold weather, the body constricts blood vessels to preserve heat, but opioids work against this, making it harder for the body to stay warm. This



	combination can increase the risk of frostbite and other cold-related injuries. Individuals may not recognize how cold their body parts are or how their body is not regulating heat well
Worsening Respiratory Issues	Cold air makes it harder to breathe, and many drugs like opioids can cause slower breathing or other breathing issues.

Other Risks That May Impact People Who Use Substances

It's important to note that an individual may be impacted by multiple risks at the same time during cold weather events.

Risks may include:

- Experiencing homelessness or living in housing or shelters with no heat, power, or poor insulation
- lack of appropriate clothing
- lack of access to food and water
- having medical conditions, like diabetes and diseases affecting sensation and blood circulation
- being 65 years of age or older

People Who Use Substances and Experiencing Homelessness Face Numerous Additional Environmental and Social Risks During Cold Weather

Safety and Security	Increased vulnerability to violence and theft in crowded shelters or unsupervised outdoor areas
Expulsion from Shelters	Many shelters have strict no-drug policies, leading to the expulsion of individuals who use drugs. This leaves them exposed to the elements and at risk for withdrawal.
Stigma and Discrimination	Facing stigma can limit access to services and support, increasing health and safety risks.

Naloxone and Extreme Cold Weather



- Naloxone ideally should be kept at room temperature, so it is always ready to be administered when needed.
- Naloxone (injectable and nasal) can freeze if subjected to extreme cold for a period.
- If naloxone is frozen **it needs to be thawed for 15 minutes before use**
- **Keeping naloxone close to your body** during the winter can prevent it from freezing.
- If the naloxone is frozen, do not wait for it to thaw to administer, **seek another thawed naloxone product and seek medical help immediately.**

Additional considerations for overdose response during extreme cold:

- **Medications may be absorbed much slower when the body is cold.** This is important to know if you are giving naloxone as an overdose response during cold weather. **Calling 911 is important, as hypothermia can complicate overdose response. (If 911 is not available in your area, contact your local emergency healthcare service).**
- Cover the person with anything available to reduce heat loss.
- Replace wet clothing with dry items if possible.

Signs And Symptoms of Cold Related Illness and What to Do

Cold related illness/injury	Signs and Symptoms	Treatment
<p>Hypothermia Abnormally low body temperature due to prolonged exposure to cold</p>	<p>Early:</p> <ul style="list-style-type: none"> • shivering • cold, pale, or blue-grey skin • lack of interest or concern (apathy) • poor judgment • mild unsteadiness in balance or walking • slurred speech • numb hands and fingers and problems performing tasks <p>Late:</p> <ul style="list-style-type: none"> • *Torso of the body is cold to touch • muscles are becoming stiff • slow pulse • breathing is shallow and slower • weakness or sleepiness • confusion • loss of consciousness • shivering, which may stop if body temperature drops below 32°C (90°F) <p>*Torso refers to the body from the neck to groin (not including arms)</p>	<p>Get medical attention immediately—call 911</p> <p>If medical care is not immediately available, begin warming the person, as follows:</p> <ul style="list-style-type: none"> • get the individual into a warm room or shelter • remove wet clothing • warm the centre of the body first (chest, neck, head, and groin) • using a blanket, towels, warm water bottles, heating packs, and/or reflective blankets if available • in situations where external sources of heat are unavailable, use body heat • warm (not hot) beverages can help increase the body temperature • do not give alcoholic beverages • do not try to give beverages to an unconscious person. <p>Even if body temperature improves, keep the individual dry and wrapped in a warm blanket, including the head and neck.</p> <p>Call 911 and get medical attention for the person as soon as possible.</p>

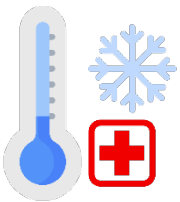


<p>Frostbite</p> <p>Freezing of skin and underlying tissues due to restricted blood flow to hands, feet, nose and ears because of cold exposure</p>	<p>Mild frost bite</p> <ul style="list-style-type: none">• Lighter or white skin (but still soft to the touch) of the tips of fingers, toes, hands, feet, ears, etc.• Normal colour returns once the area is warmed <p>Severe Frost Bite</p> <ul style="list-style-type: none">• permanent damage to body tissues• nerve damage• skin discoloured or black• loss of feeling to the affected area• blistering (if the blister breaks there is risk of infection)	<p>Frost bite should be assessed by a health care provider</p> <p>Mild frostbite can be treated in two ways:</p> <p>Passive warming Move to a warm room, wrap body in blankets or reheat body by skin-to-skin contact with another person.</p> <p>Active warming <i>Can be done along with passive warming</i></p> <ul style="list-style-type: none">• Add heat directly to the frostbit area and thaw the injured skin as quickly as possible without burning it• Thawing frostbitten skin is very painful so the injured skin should be placed in water that is just above body temperature• Do not rub, massage or shake the injured skin because that can cause more damage. <p>Severe frostbite requires immediate medical attention. Call 911</p> <p>While waiting for help to arrive begin treating it with passive and active warming.</p>
<p>Windburn</p> <p>Occurs when cold wind removes the top layer of oil from the skin. Symptoms are similar to a sunburn.</p>	<ul style="list-style-type: none">• excessive skin dryness• skin redness• skin soreness or pain• itchiness	<ul style="list-style-type: none">• do not scratch or rub the affected area—it can damage the skin• apply a protective skin care product (e.g. moisturizer) to



		the affected area(s) as needed
Trench Foot Injury from prolonged exposure to damp, cold conditions.	<ul style="list-style-type: none"> • pain • redness, swelling, numbness, blisters to feet 	<ul style="list-style-type: none"> • use lip balm to treat lips • gradual rewarming • wound care • see a medical professional if there are any infection concerns

Other Cold Related Injuries/Illnesses That Can Occur



- Respiratory infections (pneumonia, upper respiratory tract infections)
- Overdose
- Cardiovascular strain, causing higher risk of stroke, heart attacks and high blood pressure from making the heart work harder
- Previously stable conditions may worsen, such as asthma, cardiac disease, chronic obstructive pulmonary disease (COPD)
- Injuries (head injuries, breaks and sprains from slips and falls in icy conditions, burns and thermal injuries if using fire to keep warm, carbon monoxide poisoning from gas stoves and heaters in non-ventilated spaces)

Consider Messaging During Extreme Cold Events

“If you don’t have access to your own housing or warm space, use a warming centre”

This could be difficult because:

- Individual may have mobility, transportation and/or accessibility challenges
- Warming centre hours may be only daytime hours
- There may be a distrust of services or service providers
- Stigma has been experienced
- Pets may not be allowed inside these facilities
- Leaving personal belongings unattended is a risk

Consider asking these questions instead:



- 1. Do you have someone who can check on you?**
- 2. Are there any reasons why you wouldn’t be able to go to a warming centre?**
- 3. Do you know where the warming centres are located?**

How Harm Reduction Programs Can Support Service Users During Extreme Cold Weather

Provide Needed Supplies:

- warm winter clothing, blankets, and other essential supplies
- when possible, offer food, water and first aid items
- harm reduction supplies

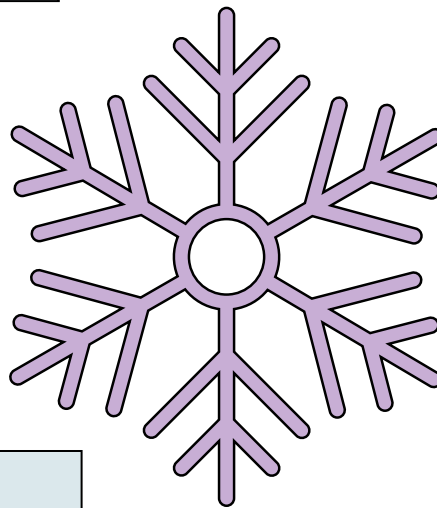
Create/Review Your Winter Weather Response Plans:

Ensure staff know the organization's response processes. If possible, increase community check-ins and outreach services during extreme events.

Access to Warm Shelters: Access warm shelters that provide low-barrier service.

Naloxone Distribution & Training:

- ensure naloxone is available and easy to access
- include information about naloxone and extreme cold weather



Health Services: Outreach medical care could include monitoring for frostbite, giving vaccinations and wound care.

Community Support:

Encourage service users to stay connected with people they trust.

Monitor weather:

- monitor news alerts for changing weather patterns
- share alerts with service users

Educate: Share information on the dangers of hypothermia, frostbite, and the added risk of overdose in cold weather. *Include:*

- recognizing early symptoms of hypothermia
- the risks of using drugs alone in cold conditions

Build relationships:

Continued engagement with people who use substances may make it easier for individuals to reach out if help is needed.

Key Messages to Share with Service Users

(stay safe vs stay warm)

SEEK MEDICAL ATTENTION

Find medical care for frostbite or infections. Call 911 in cases where overdose or hypothermia is suspected.

IF CLOTHES GET WET

When you are in the cold, change into dry clothes as soon as possible

STORE NALOXONE AT ROOM TEMPERATURE

Keep naloxone close to your body to decrease risk of freezing. If naloxone is frozen, it needs to be thawed before use.

DRINK PLENTY OF WARM FLUIDS

Drink warm fluids to help your body stay warm and hydrated.

*Caffeine and alcohol can be dehydrating.

MONITOR WEATHER

Be aware if cold weather or storms are coming

EAT HIGH CALORIE FOODS

Eat and drink regularly. **The body converts food to energy which heats the body.**

STAY WARM

Know where to get warm clothing and supplies if needed

DRESS APPROPRIATE FOR WEATHER

- Wear a hat and dress in layers so you can adjust to changes as you heat up or cool off. Remove layers if sweating. Don't wear tight clothing or footwear that impact circulation. Tight woven fabrics like wool are best
- Cover exposed areas like fingers, cheeks, ears, and nose

KEEP MOVING

If you can, keep moving - especially your hands and feet to keep your blood flowing and maintain your body heat if outside in the cold

AVOID USING ALONE

If possible use around people you trust and who can contact emergency services if needed. **Using substances alone increases risk of overdose.**

PLAN YOUR ROUTE

Know spaces where you can warm up. Seek shelter from the wind if you are getting cold, even if it is only behind a tree, hill, embankment, or other landscape feature.

COLD WEATHER CAN SLOW ABSORPTION OF MEDICATIONS

If the individual doesn't respond right away to naloxone, continue monitoring and give additional doses every 2-3 minutes until desired response is obtained (breathing has returned to normal). Additional supportive and/or resuscitative measures (recovery position/rescue breathing/CPR as appropriate) may be helpful while awaiting emergency medical assistance.

References

- BC Centre for Disease Control. (2023, December). *Public health recommendations to reduce the impacts of exposure to winter weather on people experiencing homelessness in British Columbia*. Retrieved from http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Health-Environment/Recommendations_Exposure_Winter_Weather_People_Experiencing_Homelessness.pdf
- Canadian Red Cross. (n.d.). *Cold-related emergencies: Staying warm and safe in Canadian winters*. Retrieved July 30, 2024, from <https://www.redcross.ca/training-and-certification/first-aid-tips-and-resources/first-aid-tips/cold-related-emergencies-staying-warm-and-safe-in-canadian-winters>
- Environment and Climate Change Canada. (n.d.). *Criteria for public weather alerts*. Government of Canada. Retrieved July 31, 2024, from <https://www.canada.ca/en/environment-climate-change/services/types-weather-forecasts-use/public/criteria-alerts.html#extremeCold>
- Health Canada. (2018, January). *Extreme cold: A prevention guide to promote your personal health and safety*. https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/hl-vs/alt_formats/pdf/iyh-vsv/environ/cold-extreme-froid-eng.pdf
- Healthwise Staff. (2022, November 9). *Hypothermia and cold temperature exposure*. HealthLink BC. <https://www.healthlinkbc.ca/health-topics/hypothermia-and-cold-temperature-exposure>
- Toward the Heart. (2022, December.). *Cold weather response guidelines*. Retrieved July 31, 2024, from <https://towardtheheart.com/assets/uploads/1704754844G21vakYNfbybu5WvU5Btmb3FMuxqYJiRyr3ifOP.pdf>
- British Columbia Centre for Disease Control (2021). *Overdose recognition and response guide*. Toward the Heart. <https://towardtheheart.com/assets/uploads/1704754844G21vakYNfbybu5WvU5Btmb3FMuxqYJiRyr3ifOP.pdf>
- Goedel, W.C., Marshall, B.D.L, Spangler, K.R. Alexander-Scott, N., Green, T.C., Wellenius, G.A., & Weinberger, K.R. (2019). Increased Risk of Opioid Overdose Death Following Cold Weather. A Case-Crossover Study. *Epidemiology (Cambridge, Mass)*, 30(5), 637-641. https://journals.lww.com/epidem/abstract/2019/09000/increased_risk_of_opioid_overdose_death_followin_g.5.aspx
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). (2024). *Updated guidance on rescue breathing for opioid overdose response and evidence on Naloxone storage in extreme temperatures*. Toronto, ON: Queen’s Printer for Ontario.