Cold-related injuries and how to respond



A normal body temperature is approximately 37°C (98.6°F). When core body temperature drops by 1 or 2°C (1.8 or 3.6°F) or the body is exposed to severe cold, there is increased risk of cold-related injury. The most common cold-related injuries are **hypothermia** and **frostbite**.

The following information has been adapted from the BCCDC's *Public Health Recommendations to Reduce the Impacts of Exposure to Winter Weather on People Experiencing Homelessness in British Columbia.* Access the full document via the QR code.



Hypothermia - Warning Signs and Symptoms

- Confusion, fumbling hands
- Clumsiness or lack of coordination
- Memory loss, slurred speech or mumbling
- Drowsiness or very low energy

- Slow, shallow breathing
- Weak pulse
- Loss of consciousness
- Cold skin

Warning signs of hypothermia in infants may be less obvious than in adults, especially as young infants may not shiver.

Note: Sometimes hypothermia may look like the effects of substances use, and some individuals may be experiencing symptoms from both cold exposure and substance use at the same time.

If hypothermia warning signs are present following exposure to the cold, always assume the individual is hypothermic until core temperature is confirmed.

If you think someone may be hypothermic....

- For someone who is cold, shivering, alert, and complaining—call 8-1-1 for advice.
- If the person's body temperature is below 35°C (95°F)— call 9-1-1.
- If the person is unconscious or appears not to have a pulse or be breathing—handle the person gently, call 9-1-1 and get emergency assistance immediately.
- *If in doubt of hypothermia* call 9-1-1.

If medical care is not available, begin warming the person, as follows:

- Get the person into a warm room or shelter.
- Remove any wet clothing.
- Warm the center of the body first—chest, neck, head, and groin—using an electric blanket (if available), warm water bottles, heating packs, and reflective blankets.



- In situations where external sources of heat are unavailable, use body heat under loose, dry layers of blankets, clothing, towels, or sheets.
- Warm non-alcoholic beverages can help increase the body temperature. Do not try to give beverages to an unconscious person.
- After body temperature has increased, keep the person dry and wrapped in a warm blanket, including the head and neck.
- Get medical attention for the person as soon as possible.

Frostbite - Warning Signs and Symptoms

- White or grayish-yellow skin area
- Skin that feels unusually firm or waxy
- Numbness

Don't wait!

Get out of the cold or protect skin at the first signs of redness or pain—frostbite may be beginning.

If you think someone may have frostbite...

- Frostbite should be evaluated by a health care provider, as it may lead to amputation in severe cases.
- Get into a warm place and begin warming with gentle heat.
- Do not rub or massage the area or expose it to high heat (e.g., a fire).
- Ensure the area stays warm to avoid greater damage from re-freezing. Do not begin warming frostbite if there is a risk of the area re-freezing in the near term.

Trenchfoot - Warning Signs and Symptoms

• Tingling, itching, burning or blistered feet after continuous exposure to cold and wet.

If you think someone may have trenchfoot...

• Damage due to trenchfoot may lead to infection and requires medical attention.

Need to Get Out of the Cold?

Find your nearest warming center or emergency weather shelter:



Warming centers

BC Housing Shelters



