

# Cold Weather and Exercise

[getthehealthy.ca/cold-weather-exercise](http://getthehealthy.ca/cold-weather-exercise)

In this section you will learn:

- The effects of cold weather on the body
- Precautions to take when exercising in the cold
- Snow shovelling safety

- If you plan to complete your exercise outdoors, or engage in activities such as snow shovelling, it is important to understand how doing so in colder temperatures can impact your heart.

## Effects of Cold Weather on the Body

- The body has temperature-regulating mechanisms to maintain a stable internal body temperature of approximately 37°C.
- In response to cold temperatures, blood vessels near the surface of the skin narrow (constrict). This redirects blood away from the surface of the skin, towards the core.
- Narrowing of the blood vessels increases blood pressure, requiring the heart to work harder.
- Exercising in cold weather places added risk on individuals living with cardiovascular disease, as the demand on the heart is increased. You may experience:
  - Shortness of breath
  - Excessive fatigue or dizziness
  - Angina (chest pain)
  - Arrhythmias (irregular heart rates)
- During exercise, it is important that you monitor yourself for symptoms. Always inform your doctor of any new or worsening symptoms. Call 911 if you experience any new or worsening symptoms that are not resolved quickly.

## Precautions for Exercising in the Cold

- Perform a warm-up and cool-down with each exercise session.
- Check the weather forecast for the “feels like” temperature. It is recommended to avoid outdoor exercise if the “feels like” temperature is -10°C or cooler.



Cloud coverage can reduce the temperature up to 7°C.

- It may take your body time to adjust to cooler temperatures. Reduce your exercise intensity or distance until you feel your body has adjusted to the temperature.
- **Indoor alternatives:** Exercise in temperature-controlled indoor environments such as indoor walking tracks, malls, community centres, or fitness facilities. Home exercise videos or use of indoor exercise equipment are great at-home options.

## Cold Weather Attire

- **Head and hands:** To prevent heat loss, wear a hat, mittens, and scarf/neck warmer.
- **Footwear:** To keep your feet dry and warm, avoid cotton socks. Avoid exercising in heavy boots, and consider adding grippers or spikes to your shoes if walking on icy surfaces.
- **Night safety:** Wear reflective materials and have a light on your outermost layer.
- Dress in layers to maintain core temperature and prevent heat loss:
  - Layer 1 (closest to skin): Moisture-wicking. This layer transports moisture off your skin towards the surface of the fabric, where it can evaporate. Fabrics such as polyester or nylon.
  - Layer 2: Insulation. This layer traps body heat to keep you warm. Fabrics such as cotton, wool, or fleece.
  - Layer 3 (outer layer): Wind/water resistance. This layer protects you from the wind and rain/snow. Look for items labelled as wind or water resistant.

Breathing in cold air may also trigger heart-related symptoms. Wearing a face covering such as a scarf or balaclava can help to warm the air you breathe in.

## Snow Shoveling Safety

- Snow shoveling is a demanding physical activity. Paired with the additional strain on the heart due to colder temperatures, individuals living with cardiovascular disease are at increased risk for experiencing heart-related symptoms or having a heart event while shoveling.
- Most townships or cities offer free snow removal services for individuals living with health conditions. Call or visit your city's website for more information.
- If unable to arrange for someone else to clear your snow, consider these safety tips:



- Wear appropriate attire, as discussed above.
- Complete a warm-up prior to snow shoveling.
- Push the snow with a scoop rather than lifting it with a shovel. If you must lift the snow, lift small amounts.
- Incorporate rest breaks.
- Aim to clear snow more frequently, rather than allowing it to build up; the longer that snow stays on the ground, the wetter and heavier it becomes.
- If you have been prescribed nitroglycerin, carry it with you.

### Ask Yourself

What indoor exercise alternatives are available to you?  
Have you arranged for snow removal services or have someone who can assist you with snow removal?