

Our bodies are vulnerable to the weather conditions in which we work. In hot environments, they may rise in temperature faster than they can be cooled. If this happens, we experience heat stress. Heat stress causes heat-related illnesses including heat cramps, heat exhaustion, and most severely, heat stroke, which can be fatal.

What's the hazard?

A hazard is something that may expose a person to a risk of injury, including heat-related illness. Below are workplace hazards that could lead to heat-related illness. Which could occur in your workplace? Are there any others?

Examples of workplace hazards that could lead to heat stress include:

- direct or reflected sunlight
- air temperature exceeding skin temperature
- dehydration
- excessive clothing
- high humidity
- high-intensity physical labour

Possible symptoms of heat-related illness?

Risk is the likelihood that someone will be harmed if they are exposed to a hazard. Most instances [hazard] are predictable and preventable if hazards are identified and steps are taken to mitigate the risks.

Below are some risk factors that could increase the likelihood of an injury from [hazard]. Which of these risk factors is relevant to your workplace? Can you think of others that may be relevant in your workplace?

Heat cramps:

- | | |
|----------------------|-----------|
| • muscle cramps | • fatigue |
| • excessive sweating | • thirst |

Heat cramps:

- | | |
|--------------------------------|-----------------------------------|
| • muscle cramps | • clammy skin |
| • headache | • dizziness |
| • extreme fatigue | • nausea |
| • loss of strength | • temporary loss of consciousness |
| • weak pulse at increased rate | |

Talk leader instructions:

- This is background information ONLY.
- Be sure to customize to your organization.
- Consider printing copies of this sheet for yourself and each participant.
- Lead a discussion with your workers about the materials on this sheet.
- Be sure to give real life examples whenever possible. Be open to questions.
- Conclude with a brief review of the main points or a summary based on the discussion.
- Fill in the name of your organization, location and the date on your sheet. Have each worker sign your sheet to confirm their attendance.
- File your sheet in your worker records to document the Safety Talk.

Heat stroke:

- muscle cramps
- headache
- extreme fatigue
- loss of strength
- weak pulse at increased rate
- clammy skin
- dizziness
- nausea
- temporary loss of consciousness

How should workers respond to possible heat-related illness?

If a worker is suspected of suffering from heat-related illness, move the person into an air-conditioned building. If this is not possible, move the injured worker to a cooler, shady location. Encourage the worker to rest comfortably. Remove as much clothing as possible, including, boots, socks, and head protection. Apply a cool, wet cloth or ice to the head, neck, and armpits. If the worker is conscious and capable of swallowing, provide them with cool water, sports drinks, or another cool, non-caffeinated, non-alcoholic beverage.

If possible, immerse the worker's body in cool water. Otherwise, immerse their forearms. If no immersion is possible, fan the injured person and spray, sponge, or douse them with cool water.

If heat stroke is suspected, contact 911 immediately. If not, monitor the worker. If symptoms persist or worsen, contact 911.

How to prevent heat-related illness in the workplace?

Ensure everyone at your worksite is familiar with the signs of heat-related illness, and trained to respond appropriately. When working outside, prepare for current and potential weather conditions. Wear loose fitting, light weight clothing. Choose to wear a hi-vis reflective shirt rather than a hi-vis reflective vest over your clothing. While working in direct sunlight, apply sunscreen regularly. Take regular breaks in a shaded or air-conditioned location. Stay hydrated with non-caffeinated, non-alcoholic beverages like water or sports drinks. If possible, schedule the most strenuous physical labour for cooler parts of the day.

Required by law:

- Employers must do hazard assessments and identify any hazards in their workplaces, including hazards that could lead to heat-related illness.
- Employers must provide education and training related to heat-related illness.
- Employers must provide and maintain in every indoor workplace thermal conditions, including air temperature, radiant temperature, humidity and air movement, which are reasonable and appropriate to the nature of the work performed.
- Employers must ensure effective protection for the health and safety and reasonable thermal comfort of workers; such protection may include:
 - (a) frequent monitoring of thermal conditions;
 - (b) special or temporary equipment such as screens, shelters and temporary heating or cooling equipment;
 - (c) special clothing or personal protective equipment;
 - (d) hot or cold drinks, acclimatization or other physiological procedures;
 - (e) limited work schedules with rest and recovery periods, changes in workloads, changes in hours or other arrangements for work;
 - (f) any other appropriate measure.

Discussion questions:

1. What safety measures are required in your workplace to prevent heat-related illness?
2. What steps can you take to reduce your risk of heat stress on the job site?

More information:

If you have questions about heat-related illness prevention in your workplace, please contact:

- Workers' Safety and Compensation Board, 867-667-5450 or 1-800-661-0443 or work.safe@wcb.yk.ca

Disclaimer

This resource has been prepared to help workplaces understand and comply with workplace health and safety laws. It is not legal advice and is not intended to replace the Workers' Safety and Compensation Act, S.Y. 2021, c.11 and Workplace Health and Safety Regulations.

Safety Talk record:

Print and complete this page or fill in electronically, then save as a record of your Safety Talk.

Comments/suggestions

Organization name

Safety Talk leader

Date

Safety Talk participants

print name

signature
