

THE HAZARDS OF HEAT STRESS

Heat and humidity are a normal part of Ontario summers, but how your body reacts to the heat depends on how hard you are working, how much water you have been drinking, how fit you are, and whether you have become acclimatized to the higher temperatures.

Heat stress can occur wherever physical work is being done in a hot, humid environment. The body tries to cool itself by increasing the heart rate to move blood—and heat—to the skin and by sweating to help cool the blood and body. But when too much water is lost through sweating, dehydration occurs. This can lead to heat-related illnesses.

Illness	Symptoms	Severity
Heat Rash	<ul style="list-style-type: none"> Red blotches and extreme itchiness in areas persistently damp with sweat Prickling sensation on the skin where sweating occurs 	If treated, symptoms usually disappear after a few days.
Heat Cramps	<ul style="list-style-type: none"> Painful cramps or spasms in the arms, legs, back, or stomach that occur suddenly at work or later at home Hard, painful lumps in the muscles as a result of the cramps 	If not treated promptly, heat cramps can lead to more serious heat-related illnesses.
Fainting	<ul style="list-style-type: none"> Sudden fainting after at least two hours of work Cool, moist skin Weak pulse 	If not treated promptly, fainting can lead to more serious heat-related illnesses. Fainting may also be due to other illnesses.
Heat Exhaustion	<ul style="list-style-type: none"> Weakness Headache Breathlessness Nausea or vomiting Feeling faint 	If not treated promptly, heat exhaustion can lead to heat stroke, which can be fatal.
Heat Stroke	<ul style="list-style-type: none"> Irrational behaviour Confusion Loss of consciousness Weakness Moist or hot skin Confusion Take a shower or rinse skin with cool water. Change into dry clothes. 	Can be fatal if medical assistance is not obtained immediately.

- Rest in a cool place.
- Remove or loosen clothing.
- Drink cool water or a sports drink containing electrolytes.
- Stretch and massage muscles.
- If the cramps are severe or don't go away, seek medical aid.

Symptoms of heat stress should never be ignored. They are your body's way of telling you that something needs to be done to balance your body's heating and cooling system. For more information on heat stress and helpful resources on how to prevent it, visit the **Heat Stress** topic page on ihsa.ca.

Prevention tips for workers

- **Be aware of the symptoms.** Watch out for symptoms of heat stress in yourself and your co-workers.
- **Drink water.** You need to drink one cup of cool water every 20 minutes, even if you're not thirsty.
- **Avoid alcohol and caffeinated drinks.** Alcohol and caffeinated beverages such as tea, coffee, and soda are diuretics and will dehydrate your body. These drinks should also be avoided the night before work as they can cause dehydration.
- **Wear light, loose-fitting clothing.** Wear clothes that allow sweat to evaporate. Light-coloured garments absorb less heat from the sun.
- **Know your personal risk factors.** Any of the following conditions could increase your risk for heat-related illness: excessive weight, poor physical condition, previous heat-related illnesses, older age, heart disease, high blood pressure, recent illnesses, and certain medications.

Prevention tips for managers/supervisors

- **Training.** Make heat stress your next safety talk and remind workers about it periodically throughout the summer. Visit ihsa.ca for free safety talks on heat stress and sun protection.
- **Breaks.** Give workers frequent breaks in cool areas.
- **Scheduling.** Schedule hotter jobs during cooler parts of the day.
- **Assistance.** Minimize strenuous tasks by pairing up workers or providing material handling equipment such as carts, dollies, pallet jacks, or manual forklifts.