

# Sun and Heat-related Illnesses

## What are they?

Hazards related to the sun can be placed on a spectrum, ranging from mild irritations to severe medical emergencies. The most mild irritation is a **heat rash**, caused by excessive sweat indirectly irritating the skin. **Sunburns** are burns caused by over-exposure to the sun. **Heat cramps** are mild muscle contractions, usually in the legs or abdomen, that can potentially become severe muscle cramps. **Heat exhaustion** is a precursor to heat stroke and is characterized by excessive fatigue. **Fainting** (loss of consciousness) due to heat exposure commonly occurs along with exhaustion. **Heat stroke** is a medical emergency, occurring when body temperatures exceed 41°C. Heat stroke is characterized by a progressive loss of consciousness, rapid pulse, and shallow breathing. There is also a risk of seizures in heat stroke.

## How are they caused?

All sun- and heat-related hazards are caused by being over-exerted in or being over-exposed to high temperatures and/or high humidity.

## Signs and Symptoms

Signs and symptoms associated with heat-related illnesses include:

- Dizziness or fainting
- Nausea or vomiting
- Headache
- Rapid breathing and heart rate
- Extreme thirst (e.g. dry mouth or sticky saliva)
- Decreased urination or unusually dark yellow urine
- Behaviour changes such as sleepiness or temper tantrums (in children)

(Government of Canada, 2012)

## Treatment

Someone suffering from a heat-related illness should be immediately moved to a cool place (e.g. indoors or under shade). To cool an over-heated individual, loosen or remove tight clothing and fan the person as much as possible or apply cool water to large areas of their skin or clothing (e.g. submerging them in a cold bath). Over-heated individuals need their fluids replenished so give them plenty of water. Cramped muscles can be stretched or massaged out.

## Risks

Individuals who work, play, or exercise in the sun for long periods of time are at risk for heat-related illnesses. People who have light-coloured skin, eyes, and hair are most at

risk for sunburns. Areas of the body that are most exposed to the sun and are at risk for sun burns include the head, face, neck, hands, and arms.

### **Prevention**

Heat-related illnesses are easily preventable. If you are spending long periods of time outdoors, exposure to sunlight can be reduced by staying in the shade as much as possible. Wearing sunglasses and a wide-brim hat can protect the eyes, face, and neck from exposure. A broad-spectrum sunscreen will help protect exposed skin from sunburns. Clothing should be loose-fitting, lightweight, and light-coloured. The most important thing to do is to stay properly hydrated.

### **What does Camp Kawartha do?**

Camp Kawartha and its staff members monitor all campers for signs and symptoms of heat-related illnesses and emergencies. We always encourage the use of sunscreen and protective clothing, such as long, loose sleeves/pants, wearing a hat, and sunglasses. We take regular shade and snack/drink breaks. On hotter days or during extreme heat alerts, activities are altered to suit the temperature, such as more water activities on hot days and more quiet activities to prevent overexertion.

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### **References**

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