A message from Health and Safety

Heat Exhaustion

Summer Readiness

Heat cramps, heat exhaustion and heat stroke are collectively known as heat-related illnesses.

In hot weather your body cools itself mainly by sweating. The evaporation of sweat regulates your body temperature. When you do strenuous physical activity in hot, humid weather, your body is less able to cool itself efficiently. As a result, your body may develop **heat cramps**, the mildest form of heat-related illness.

Symptoms are painful muscle spasms or involuntary jerks within the abdomen, legs or arms.

Treatment of heat cramps includes rest, cooling the body, rehydration and stretching the muscles that are cramping.

Prompt treatment usually prevents heat cramps from progressing to **heat exhaustion**.

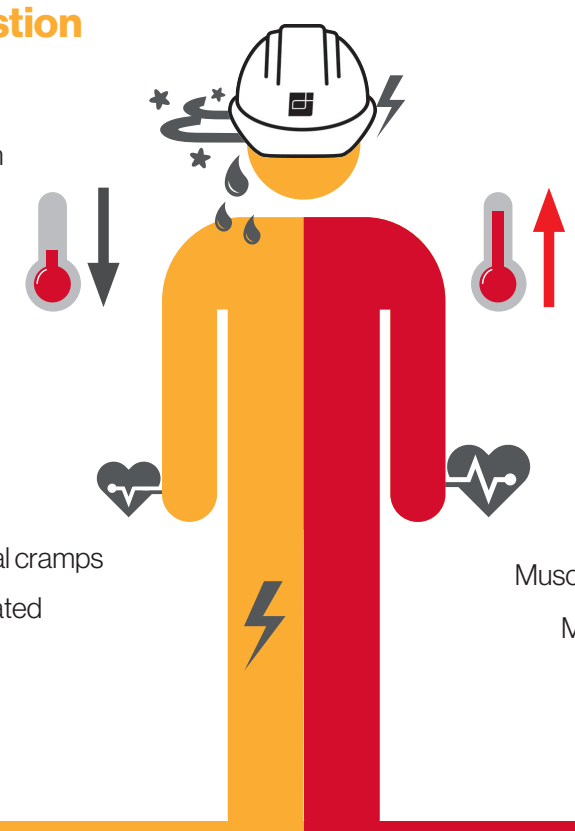
Heat exhaustion is the second part of the spectrum and may develop suddenly or over time. If left untreated, it may progress to **heat stroke**.

Heat stroke is serious, considered a medical emergency and results from prolonged exposure to high temperatures usually in combination with dehydration.

Possible heat exhaustion and heat stroke signs and symptoms include:

Symptoms of Heat Exhaustion

- Dizziness, confusion or fainting
- Sweating profusely
- Cool, pale clammy skin
- Nausea or vomiting
- Dark-colored urine
- Rapid heartbeat, weak pulse
- Muscle or abdominal cramps
- Weak or uncoordinated



Symptoms of Heat Stroke

- Throbbing headache
- Lack of sweating
- Body temperature rises 40°C/104°F
- Red, hot and dry skin
- Nausea or vomiting
- Confusion, staggering
- Rapid heartbeat, pulse strong or weak
- Muscle weakness or cramps
- May lose consciousness

Treatments for heat exhaustion include

- stopping the activity and resting
- moving to a cooler place
- rehydrating with water or a sports drink

Treatment for heat stroke: Call 911

- DO NOT LEAVE AFFECTED PERSON ALONE
- move the person to a cool shaded area
- loosen or remove excess clothing
- provide cool water to drink

Risk Factors

Heat exhaustion is strongly related to the heat index, which is a measurement of how hot you feel when the effects of humidity and air temperature are combined. A relative humidity of 60% or more hampers sweat evaporation.

Things to KNOW

About your Clothing and Personal Protective Equipment (PPE)

Heat-related illnesses can be aggravated by wearing PPE, fire or chemical-retardant clothing.

Coated and non-woven materials used in protective garments block the evaporation of sweat and can lead to substantial heat stress.

The more clothing worn or the heavier the clothing, the longer it takes evaporation to cool the skin. Wearing loose cotton or linen under your FRC helps air circulation and can reduce the chance of overheating.

Source: www.ihsa.ca/Topics-Hazards/Heat-Stress-FAQs, www.webmd.com/fitness-exercise/heat-cramps,heat exhaustion, and others.