

Saint Mary's University recognizes the potential problems caused by high temperatures in the work environment or associated with sports activities. Heat Stress Guidelines have been established to prevent the occurrence of heat related illness.

This document is intended to provide information to First Aid Attendants who may need to recognize and attend persons suffering from heat stress related illnesses. Ensure an incident report form is prepared and forwarded to the OHS Office. Ensure the employee's direct supervisor is advised.

First Aid Treatment of Heat Stress

Health Effect	Symptoms	Treatment
Heat Rash	<p>Most common problem. Prickly heat rash shows itself as red bumps normally where clothing is restrictive or chafes. As sweating increases, the bumps begin to feel prickly. Prickly heat occurs in skin that is persistently wet from unevaporated sweat. Rash may become infected if not careful.</p> <p>In most cases heat rash will disappear when the individual returns to a cooler environment.</p>	Rinse skin with cool water and have individual change into dry clothes. Tell them to wash often and keep their skin clean and dry.
Heat Cramps	<p>Usually caused by performing hard physical labour in a hot environment. Cramps are caused by a lack of water - note: excess salt can build up in the body if water lost through sweating is not replaced; do not use salt pills. Thirst cannot be relied on as a guide to the need for water.</p> <p>Water must be taken every 15 to 20 minutes in hot environments - avoid alcohol, coffee, tea, carbonated drinks (pop).</p>	Get individual to rest and cool down. Ask them to drink small amounts of water or electrolyte-containing sports drink. Gently, massage the affected muscle group and have them try gently stretching and range-of-motion exercises.
Heat Collapse	<p>In a collapse or faint, the brain does not receive enough oxygen because blood pools in the extremities. The individual may lose consciousness. The onset of collapse is rapid and unpredictable.</p> <p>Move to cooler area, loosen clothing, and give fluids</p>	<p>GET MEDICAL ASSISTANCE</p> <p>Assess need for CPR and get assistance to move the individual to a cool area. Loosen clothing and make them lie down. Offer sips of cool water, but only if individual is fully conscious. Note that fainting may be due to other causes.</p>
Heat Exhaustion	<p>Signs are headache, nausea, dizziness, blurred vision, weakness, giddiness, thirst. Skin is damp and</p>	Move the individual out of the sun, preferably into an air conditioned space. Get them to lie down and elevate their feet slightly, loosening clothing.

	<p>looks muddy or flushed. Fortunately, this condition responds readily to prompt treatment. Symptoms in heat exhaustion are similar to heat stroke.</p> <p>People suffering from heat exhaustion should be removed from the hot environment, given fluids, loosen clothing, shower or sponge bath with cool water and rest in a cool place.</p>	<p>Give them cold (not iced) water or electrolyte containing sports drink. Cool the individual by spraying with cool water and fanning. WARNING: Heat exhaustion can quickly become heat stroke. If high temperature, fainting or confusion occurs CALL 911 and 5000 FOR EMERGENCY MEDICAL ASSISTANCE.</p>
<p>Heat Stroke</p>	<p>Heat stroke is a medical emergency. It occurs when the body's system of temperature regulation fails and body temperatures rise to critical levels. This condition is caused by a combination of highly variable factors and is difficult to predict. Primary signs and symptoms of heat stroke are confusion, irrational behaviour, loss of consciousness, convulsions, hot dry skin, lack of sweating (usually), and an abnormally high body temperature. If body temperature is too high it can cause death. The elevated metabolic temperatures caused by a combination of work load and environmental heat load are also highly variable and difficult to predict.</p> <p>Seek medical attention immediately</p>	<p>Move the individual out of the sun, preferably into an air conditioned space. CALL 911 and 5000 FOR EMERGENCY MEDICAL ASSISTANCE. Cool the individual by spraying with cool water and fanning or by covering with damp sheets. Offer sips of cool water, but only if individual is fully conscious.</p>

If in doubt about appropriate treatment of an individual, phone 911 (and 5000) for emergency advice with paramedic response to your location.

Further information on heat stress topics is available on the Saint Mary's University OHS Site: <http://www.smu.ca/administration/ohs/>

- Saint Mary's Heat Stress Guidelines Policy
- Occupational Health and Safety: Thermal Comfort and Heat Stress
- Occupational Health and Safety: Heat Stress Alert Notice
- Occupational Health and Safety: Indoor Heat Stress Warning Notice
- Occupational Health and Safety: Outdoor Heat Stress Warning Notice
- Occupational Health and Safety: Health Effects of Heat Stress