

## Heat Stress

The healthy human body maintains its internal temperature around 37°C. Variations, usually of less than 1°C, occur with the time of the day, level of physical activity or emotional state. A change of body temperature exceeding 1°C occurs only during illness or when environmental conditions surpass the body's ability to cope with extreme temperatures.

As the environment warms-up, the body tends to warm-up as well. The body's internal "thermostat" maintains constant inner body temperature by pumping more blood to the skin and by increasing sweat production. In this way, the body increases the rate of heat loss to balance the heat burden created by the environment. In a very hot environment, the rate of "heat gain" exceeds the rate of "heat loss" and the body temperature begins to rise. A rise in the body temperature results in heat stress.

The risk of heat stress varies from person to person. Children, older and obese people are generally at higher risk. Lack of acclimatization, poor levels of physical fitness and pre-existing diarrhea or fever increase susceptibility to heat stress. Certain drugs such as tranquilizers and diuretics can also increase an individual's susceptibility.

Heat Stress	Symptoms
Heat Cramps	Painful muscle spasms, excessive sweating;
Heat Exhaustion	<b>Clammy moist skin;</b> Headache, dizziness, weakness, and nausea;
Heat Stroke	<b>Hot, dry, flushed skin;</b> severe headache; confusion, delirium, convulsions and loss of consciousness. Heat stroke occurs more readily when the body has suffered a previous heat disorder.

### A few simple precautions to prevent heat cramps, heat exhaustion and heat stroke

1. **Drink plenty of fluids.** The best fluid is water. Alcohol, coffee, tea cause your body to lose water.
2. **Increase your salt intake slightly.** The salt in most prepared foods **should be sufficient**, but if working in extreme conditions, drink lots of water and some liquids with sodium content. The product label will tell you if it contains sodium. Tomato Juice or V8 juice contain sodium.
3. **Wear appropriate clothing.** Light colored, loose fitting that does not leave too much skin exposed. Try to work and play in the shade. Wear a hat in the sun.
4. **Take it slowly.** Start by working slowly and taking short, frequent breaks. Gradually increase the frequency, intensity, or duration of your task as your comfort improves.

This may not be a complete list of heat related illness or precautions.