

## HEAT-RELATED INJURIES & ILLNESSES

**In a hot environment** you may need to be prepared to deal with both heat and humidity. Not doing the right thing can lead to heat exhaustion, which can incapacitate you, or heat stroke, which is life-threatening.

**Heat exhaustion** is more common than heat stroke and often occurs when people exercise (work or play) in a hot, humid place and body fluids are lost through sweating, causing the body to overheat. The person's temperature may be elevated, but not above 104°F.

**The symptoms of heat exhaustion** include: heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, nausea or vomiting and fainting. The skin may be cool and moist. The victim's pulse rate will be fast and weak, and breathing will be fast and shallow.

If heat exhaustion is untreated, it may progress to heat stroke, which is a medical emergency. Seek medical attention and call 9-1-1 immediately if symptoms are severe or the victim has heart problems or high blood pressure. Otherwise, help the victim to cool off, and seek medical attention if symptoms worsen or last longer than one hour.

**Heat stroke**, on the other hand, is life threatening. It occurs when a person's cooling system, which is controlled by the brain, stops working and the internal body temperature rises to the point where brain damage or damage to other internal organs may result (temperature may reach 105+°F).

**The symptoms of heat stroke** include: unconsciousness or a markedly abnormal mental status (dizziness, confusion, hallucinations or coma), flushed, hot and dry skin (although it may be moist initially from previous sweating or from attempts to cool the person with water), slightly elevated blood pressure at first that falls later, hyperventilating and body (core) temperature of 105°F or more.

If heat stroke is suspected, emergency medical services should be contacted immediately so that the person can be transported to a hospital. While waiting for emergency medical services to arrive, the following can be done to assist the victim and possibly help to cool them down:

- Move the person to a cooler environment, or place him or her in a cool bath of water (as long as he or she is conscious and can be attended continuously).
- Alternatively, moisten the skin with lukewarm water and use a fan to blow cool air across the skin.

- Give cool beverages by mouth only if the person is conscious, has a normal mental state and can tolerate it.

**To avoid heat exhaustion and/or heat stroke** you should do the following:

- Drink plenty of water to ensure you are properly hydrated. Avoid caffeinated drinks, alcohol or large amounts of sugar.
- If working outside or in a warm environment inside, take frequent breaks (preferably in a shaded area if outside and a cooler area if inside).
- Wear light, loose-fitting, breathable clothing, such as cotton.
- When working in the sun, use sunscreen with a sun protection factor of at least 30, which blocks 93 percent of harmful ultraviolet rays.