**Heat Exhaustion & Heat Stroke**

Sweat evaporates from the skin to cool the body. If this personal cooling system does not work right or fails to work, heat exhaustion or a heat stroke can occur. Heat exhaustion is a warning that the body is getting too hot. With a heat stroke, body organs start to overheat. They will stop working if they get hot enough. If it is not treated, a heat stroke can result in death.

**Signs & Symptoms for a Heat Stroke**

These signs and symptoms can occur suddenly with little warning:

 Very high temperature (104ºF or higher).

 Hot, dry, red skin. No sweating.

 Deep breathing and fast pulse. Then shallow breathing and weak pulse.

 Confusion. Hallucinations.

 Convulsions.

 Loss of consciousness.

**For Heat Exhaustion**

 Normal, low, or only slightly elevated body temperature.

 Cool, clammy, pale skin. Sweating.

 Dry mouth. Thirst.

 Fatigue. Weakness. Feeling dizzy.

 Headache.

 Nausea. Vomiting can occur.

 Muscle cramps.

 Weak or rapid pulse.

**Causes**

Anything that keeps the body's natural cooling system from working right can lead to heat exhaustion and heat stroke. This includes:

 Extreme heat and humidity.

 Being in places without fans or air conditioners during hot, humid weather.

 Not being able to get to public air-conditioned places. Waiting for a bus or other type of public transportation in hot, humid weather.

 Overdressing.

 Changes in the skin due to aging.

 Poor circulation. Heart, lung, and/or kidney disease.

 Not being able to sweat due to medicines, such as water pills and some used for mental illnesses.

 Alcohol or drug use.

 Any illness that causes weakness, fever, vomiting, or diarrhea.

**Treatment** A heat stroke is a medical emergency. Heat exhaustion may respond to self-care measures. If not, medical care is needed.

Is any sign of a heat stroke listed above present? {Note: Call 9-1-1 without delay. Then give first aid listed below as needed.}

Are these signs of heat exhaustion present?

 Dryness on the inside of the mouth.

 Fatigue. Weakness. Listlessness.

 Muscle cramps.

 Feeling lightheaded or faint.

**Self-Care / First Aid** First Aid for a Heat Stroke

 Call 9-1-1!

Before Emergency Care Arrives

 Move the person to a cool place indoors or under a shady tree. Place the feet higher than the head to avoid shock.

 Remove clothing. Either wrap the person in a cold, wet sheet; sponge the person with towels or sheets that are soaked in cold water; or spray the person with cool water. Fan the person.

 Put ice packs or cold compresses on the neck, under the armpits, and on the groin area.

 Once the person's temperature gets to 101ºF, place him or her in the [Recovery Position](http://www.healthy.net/scr/article.asp?Id=8147). Do not lower the temperature further.

 Don't give fever reducing medicine.

 Don't use rubbing alcohol.

**First Aid for Heat Exhaustion**

 Move to a cool place indoors or in the shade. Lie down.

 Loosen clothing.

 Drink fluids, such as cool or cold water. Add 1/2 teaspoon of salt to 1 quart of water. Sip this. Or, drink sport drinks, such as Gatorade, etc.

 Have salty foods, such as saltine crackers, if you tolerate them.

 Massage and stretch cramped muscles.

**Prevention**

 Drink lots of liquids, especially if your urine is dark yellow. Drink water, sport drinks, such as Gatorade, etc.

 Do not stay in or leave anyone in a closed, parked car during hot weather.

 Don't have drinks with alcohol or caffeine.

 Use caution when you are in the sun. At the first sign of heat exhaustion, get out of the sun. If you can, avoid midday heat. Do not do vigorous activity during the hottest part of the day (11:00 a.m. to 4:00 p.m.).

 Wear light, loose-fitting clothing, such as cotton, so sweat can evaporate. Wear a wide-brimmed hat with vents. Use an umbrella for shade.

 If you feel very hot, try to cool off. Open a window. Use a fan. Go to an air-conditioned place.

 Check with your doctor about sun exposure if you take:

 Water pills.

 Mood-altering medicines.

 Some antibiotics, such as tetracycline.