Heat Illness

Definition
Heat stroke is the most severe form of heat illness and is a life-threatening emergency. It is the result of long, extreme exposure to the sun, in which a person does not sweat enough to lower body temperature. The elderly, infants, persons who work outdoors, people with mental illness, obesity, poor circulation and those on certain types of medications or drinking alcohol are most susceptible to heat stroke. It is a condition that develops rapidly and requires immediate medical treatment.

Causes
Our bodies produce a tremendous amount of internal heat, and we normally cool ourselves by sweating and radiating heat through the skin. However, in certain circumstances, such as extreme heat, high humidity, or vigorous activity in the hot sun, this cooling system may begin to fail, allowing heat to build up to dangerous levels. If individuals become dehydrated and cannot sweat enough to cool their body, their internal temperature may rise to dangerously high levels, causing heat stroke.

Symptoms
The following are the most common symptoms of heat stroke. However, each individual may experience symptoms differently. Symptoms may include:

- Headache
- Hot, dry skin that is flushed but not sweaty
- Dizziness
- High body temperature
- Disorientation, agitation or confusion
- Rapid heartbeat
- Sluggishness or fatigue
- Loss of consciousness
- Seizure
- Hallucinations

The symptoms of a heat stroke may resemble other medical conditions or problems. Always consult your doctor for a diagnosis.

Treatment
It is important for the person to be treated immediately as heat stroke can cause permanent damage or death. There are some immediate First Aid measures you can take while waiting for help to arrive, including the following:

- Get the person to a shaded area.
- Remove clothing and gently apply cool water to the skin followed by fanning to stimulate sweating.
- Apply ice packs to the groin and armpits.
- Have the person lie down in a cool area with feet slightly elevated.
- Cool the person rapidly however you can.

Intravenous (IV) fluids are often necessary to compensate for fluid or electrolyte loss. Bed rest is generally advised, and body temperature may fluctuate abnormally for weeks after heat stroke.

For more information, or to contact one of our Sports Medicine Outreach Liaisons, email us at SportsMedicine@amitahealth.org or call us at 224.273.2416
Prevention
There are precautions that can help protect you against the adverse effects of heat stroke. These include the following:
• Drink plenty of fluids during outdoor activities, especially on hot days. Water and sports drinks are the drinks of choice. Avoid caffeinated tea, coffee, soda and alcohol, as these can lead to dehydration.
• Wear lightweight, tightly woven, loose-fitting clothing in light colors.
• Schedule vigorous activity and sports for cooler times of the day.
• Protect yourself from the sun by wearing a hat, sunglasses and using an umbrella.
• Increase time spent outdoors gradually to get your body used to the heat.
• During outdoor activities, take frequent drink breaks and mist yourself with a spray bottle to avoid becoming overheated.
• Try to spend as much time indoors as possible on very hot and humid days.
• Never leave children or pets in closed cars on warm or sunny days.

If you have a chronic condition, talk to your doctor about extra precautions you can take to protect yourself against heat stroke.