Protecting Yourself During Summer Activities

What is heat stress?
Heat stress occurs when the body’s mechanisms of controlling its internal temperature start to fail. The body is unable to cool itself by sweating resulting in symptoms ranging from mild to severe and in extreme cases can result in stroke, seizures and even death. The following are the 4 types of heat related illnesses listed in order of seriousness.

• **Heat Stroke** - is the most serious heat-related health problem. Heat stroke occurs when the body’s temperature regulating system fails and body temperature rises to critical levels (greater than 104°F). This is a medical emergency that may result in death! The signs of heat stroke are confusion, loss of consciousness and seizures. If a worker shows signs of possible heat stroke, call 911 and move the individual to a shady, cool area and remove as much clothing as possible.

• **Heat Exhaustion** - is the next most serious heat-related health condition. The signs and symptoms of heat exhaustion are headache, nausea, dizziness, weakness, irritability, confusion, thirst, heavy sweating and a body temperature greater than 100.4°F. Individuals with heat exhaustion should be removed from the hot area, given liquids to drink, and then taken to a clinic or emergency room for medical evaluation and treatment.

• **Heat Cramps** - are muscle pains usually caused by physical labor in a hot work environment. Heat cramps are caused by the loss of body salts and fluid during sweating. Individuals with heat cramps should replace fluid loss by drinking water and/or carbohydrate-electrolyte replacement liquids (e.g., sports drinks) every 15 to 20 minutes.

• **Heat Rash** - is the most common heat related side affect in hot environments. Heat rash is caused by sweating and looks like a red cluster of pimples or small blisters. The rash area should be kept dry. Powder may be applied to increase comfort. Ointments and creams should not be used on a heat rash. Anything that makes the skin warm or moist may make the rash worse.

What factors can contribute to heat related disorders?
Several personal and environmental conditions may be contributing factors in the onset of heat related symptoms. Age, weight, degree of physical fitness, acclimation to the sun, dehydration, use of alcohol and drugs, and medical conditions. Temperature, relative humidity, air movement and the effects of radiant heat from direct sun exposure are all contributing environmental conditions. Heat index, which takes in to account temperature and relative humidity, can increase the likelihood of developing heat related symptoms. Heat index levels greater then 103 degrees should trigger a heightened state of awareness and use of precautions. The local heat index for any given day can be found on just about any reputable weather website such as [www.weather.com](http://www.weather.com), [www.accuweather.com](http://www.accuweather.com), and [www.noaa.gov](http://www.noaa.gov).

What can I do to prevent heat stress?
1. Avoid strenuous activity during the hottest part of the day whenever possible
2. Drink small amounts of water frequently.
3. Eat smaller meals before work activity.
4. Avoid caffeine and alcohol or large amounts of sugar before and during strenuous activities.
5. Wear light-colored, loose-fitting, breathable clothing—cotton is good.

Where can I find more information regarding heat stress?
More information regarding heat stress and related disorders can be found at: [http://www.noaa.gov/features/earthobs_0508/heat.html](http://www.noaa.gov/features/earthobs_0508/heat.html)