

## **Responding to Heat Illness Related Symptoms**

Heat related illnesses are avoidable if you are trained and the right actions are taken before, during, and after working in hot environments. High temperatures and humidity can stress the body's ability to cool itself making heat illness a big concern during hot weather months. Everyone whose job duties require them to work in the outdoors during summer months, are exposed to elevated heat conditions and therefore are susceptible to heat illness. The three major forms of heat illnesses are: heat cramps, heat exhaustion, and heat stroke. Heat stroke can be a life threatening condition. This section will outline the three major forms of heat illness, how to recognize them, and what actions to take to provide first aid before medical care is provided.

### **Heat Cramps**

Description:

Heat cramps are the most common type of heat related injury. Heat cramps are muscle spasms that usually affect the arms, legs, or stomach. Frequently, they will not occur until sometime later after work, at night, or when relaxing. Heavy sweating causes heat cramps, especially when water is not replaced quickly enough. Although heat cramps can be quite painful, they usually don't result in permanent damage.

Prevention/First Aid:

Plenty of water or electrolyte solutions should be consumed during the day. Try to eat more fruits such as bananas to help keep your body hydrated during hot weather. If the person begins to feel ill call 911 to request emergency treatment and transportation.

### **Heat Exhaustion**

Description:

Heat exhaustion is more serious than heat cramps. It occurs when the body's internal temperature regulating system is overworked, but has not completely shut down. In heat exhaustion, the surface blood vessels and capillaries, which originally enlarged to cool the blood, collapse from loss of body fluids and necessary minerals. This happens when person does not consume enough fluids to replace what they are sweating away.

Symptoms Include:

Headache, heavy sweating, intense thirst, dizziness, fatigue, nausea, loss of coordination, impaired judgment, loss of appetite, hyperventilation, tingling in hands or feet, anxiety, cool moist skin, weak and rapid pulse (120-200), and low to normal blood pressure.

*When we share the responsibility for safety in the workplace, everyone wins!!*

### Prevention/First Aid:

A person suffering these symptoms should be moved to a cool location such as a shaded area or air-conditioned building. Lay them down and slightly elevate their feet. Loosen their clothing, apply cool, wet cloths or fan them. Have them drink water or electrolyte drinks. Try to cool them down, and provide them with medical assistance. Victims of heat exhaustion should avoid strenuous activity for at least a day, and they should continue to drink water to replace lost body fluids. If the person becomes non-responsive, refuses water, vomits, or loses consciousness, immediately call 911 to request emergency medical treatment and transportation.

### **Heat Stroke**

#### Description:

Heat stroke is a life threatening illness with a high death rate. It occurs when the body has depleted its supply of water and salt, and the victim's core body temperature rises to deadly levels. A heat stroke victim may first suffer heat cramps and/or heat exhaustion before progressing into the heat stroke stage, but this is not always the case. It should be noted that, on the job, heat stroke is sometimes mistaken for a heart attack. It is therefore very important to be able to recognize the signs and symptoms of heat stroke - and to check for them anytime an employee collapses while working in a hot environment.

#### Symptoms Include:

A high body temperature (103° F); a distinct absence of sweating (usually); hot red or flushed dry skin; rapid pulse; difficulty breathing; constricted pupils; any/all the signs or symptoms of heat exhaustion such as dizziness, headache, nausea, vomiting, or confusion, and possibly more severe systems including; bizarre behavior; and high blood pressure. Advance symptoms may be seizure or convulsions, collapse, loss of consciousness, and a body temperature over 108° F.

#### Prevention/First Aid:

It is vital to lower a heat stroke victim's body temperature. Quick actions can mean the difference between life and death. Pour water on them, fan them, or apply cold packs. Immediately call 911 and request emergency medical treatment and transportation.