Heat Related Illness & Fatality

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North Carolina was reported by the Centers for Disease Control in to have the highest rate of heat related deaths between 1992-2006 at a rate of 2.36 deaths per 100,000 workers.

(MMWR, June 19, 2008)
Greater in June for heat-related illness than any other cause of ER visit

Can happen even when temperature is in the 80’s due to humidity
Risk Factors for Heat Related Illness

• 18-45 year olds working outside &/or in hot environments, especially if not used to it
• 65 years of age or older
• Poor wellness (i.e. overweight, high blood pressure, diabetes)
• Heart disease
• Other long term conditions
• Taking medications
Heat Related Conditions

- Heat Stroke
- Heat Exhaustion
- Heat Syncope
- Heat Cramps
Heat Stroke

- Most serious heat-related disorder
- Occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down
- Body temperature can rise to 106 degrees Fahrenheit or higher within 10 to 15 minutes.
- Can cause death or permanent disability if emergency treatment is not given.
Symptoms of Heat Stroke

- Red, hot, dry skin
- High temperature
- Confusion
- Fainting
- Convulsions

Source: www.osha.gov
First Aid for Heat Stroke

- Call 911; be prepared to describe symptoms & give specific directions to work site
- Move individual to a cool shaded area
- Cool individual by soaking clothes with water; sponge or shower exposed parts of body

Source: www.osha.gov
Heat exhaustion is the body's response to an excessive loss of the water and salt, usually through excessive sweating.
Symptoms of Heat Exhaustion

- Dizziness
- Headache
- Sweaty skin
- Fast heart beat
- Nausea, vomiting
- Weakness
- Cramps

Source: www.osha.gov
First Aid for Heat Exhaustion

- Call 911; be prepared to describe symptoms & give specific directions to work site
- Move individual to a cool shaded area
- Have them lie down and loosen clothing.
- Spray, sponge, or shower with water
- Give water to sip water if not vomiting

Source: www.osha.gov
Heat Syncope

Heat syncope is a fainting (syncope) episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position.

Factors that may contribute to heat syncope include dehydration and lack of acclimatization.
Symptoms of Heat Syncope

- Light-headedness
- Dizziness
- Fainting

Source: www.osha.gov
First Aid for Heat Syncope

Have the individual:

• sit or lie down in a cool place when they begin to feel symptoms.
• slowly drink water, clear juice, or a sports beverage

Source: www.osha.gov
Heat Cramps

• Usually affect workers who sweat a lot during strenuous activity
• Are caused by depletion of salt and moisture in the body due to sweating
• May also be the first symptom of heat exhaustion or heat stroke
Symptoms of Heat Cramps

- Muscle pain or spasms usually in the abdomen, arms, or legs
- Can be painful
- Usually occur later after work, at night, or when relaxing

Source: www.osha.gov
First Aid for Heat Cramps

Have the individual:

- stop all activity, and sit in a cool place
- drink clear juice or a sports beverage
- not return to strenuous work for a few hours after the cramps subside because further exertion may lead to heat exhaustion or heat stroke
- seek medical attention if they have heart problems, are on a low-sodium diet or cramps do not subside within one hour
Heat Index Chart

Apparent temperature is how hot the heat-humidity combination makes it feel.
Prevent Heat Related Illness & Fatality

Drink water every 15 minutes whether thirsty or not; look out for one another

Source: www.osha.gov
Prevent Heat Related Illness & Fatality

Rest in the Shade

Source: www.osha.gov
Prevent Heat Related Illness & Fatality

Wear light colored clothes

Source: www.osha.gov
First Aid for Heat Exhaustion

- Call 911; be prepared to describe symptoms & give specific directions to work site
- Move individual to a cooler location.
- Have them lie down and loosen clothing.
- Apply cool, wet cloths to as much of body as possible.
- Okay for them to sip water if not vomiting

Source: www.osha.gov
Remember:

all activity and get to a cool environment if you feel faint or weak