### **Heat-related Illnesses**

#### Heat Stroke

Heat stroke is the most serious heat-related illness. It occurs when the body can no longer control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause permanent disability or death if the person does not receive immediate and aggressive emergency treatment.

# Symptoms of heat stroke include:

- Confusion, altered mental status, slurred speech
- Loss of consciousness
- Hot, dry skin or profuse sweating
- Seizures
- Extremely high body temperature
- Fatal if treatment delayed

### First Aid

Take the following steps to treat a person with heat stroke:

- Call 911 for emergency medical care.
- Stay with the person until emergency medical services arrive.
- Move the person to a shaded, cool area and remove outer clothing.
- Cool the person quickly, using the following methods:
  - With a cold water or ice bath, if possible
  - Wet the skin/place cold wet cloths on the skin
  - Soak clothing with cool water
  - Circulate/fan the air around the person to speed cooling.
  - Place cold wet cloths or icepacks on the head, neck, armpits, and groin.

## **Heat Exhaustion**

Heat exhaustion is the body's response to an excessive loss of water and salt, usually through excessive sweating. Heat exhaustion is most likely to affect:

- The elderly
- People with high blood pressure and/or on certain medications
- Those exercising/working in a hot environment
- Lack of cardiovascular conditioning and/or not acclimated to heat
- Excessive alcohol consumption
- Use of performance-enhancing supplements

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# Symptoms of heat exhaustion include:

- Headache
- Nausea
- Dizziness
- Weakness
- Irritability
- Thirst
- Heavy sweating
- Elevated body temperature
- Decreased urine output

#### First Aid

Treat a person who has heat exhaustion by doing the following:

- Call 911 if medical care is unavailable.
- Have someone stay with the person until help arrives.
- Remove the person from the hot area and give liquids to drink.
- Remove unnecessary clothing, including shoes and socks.
- Cool the person with cold compresses or have them wash their head, face, and neck with cold water.
- Encourage frequent sips of cool water.

## Prevention

- Be aware of the heat index
- Judicious use of alcohol
- Be aware of medications such as diuretics, antidepressants, and antihistamines can make us more prone to dehydration
- Maintain adequate hydration throughout exercise
- Pre-hydrate, hydrate during exercise and post-hydrate