

## HEAT ILLNESS PREVENTION

### Heat Illness Prevention – Best Practices

*Source: Keenan & Associates*

There are several types of heat illness. The most serious of all heat-related illnesses is heat stroke and should be treated immediately as a medical emergency. In most heat stroke victims, the body's cooling system has stopped working and the core temperature rises to dangerous levels. The body cannot cool itself by sweating. Heat stroke can have life-long effects to the body and may be fatal if left untreated.

Early warning signs of heat stroke can be subtle and may include irritability, confusion, apathy, belligerence, emotional instability, vomiting, undue fatigue, or irrational behavior. Chills and goose bumps signal shutdown of skin circulation creating a rise in temperature. Other heat-related illnesses such as heat cramps, heat rash, heat syncope and heat exhaustion are less severe and require less drastic measures to treat; however, they should not be ignored. These are warning signs that your body is approaching heat stroke levels.

### Types of heat-related illnesses

**Heat Cramps** – Symptoms include: Painful and involuntary muscle spasms in the abdomen, arms or legs; hot skin; heavy perspiration; weakness/light-headed; and slightly high body temperature.

**Heat Rash** – is a mild inflammation of clogged sweat ducts. Different areas of the skin may feel prickly or burning due to overheating.

**Heat Syncope** – Symptoms include: Faintness; dizziness and/or headache; increased pulse rate; restlessness; nausea and/or vomiting; and brief loss of consciousness.

**Heat Exhaustion** – Symptoms include: Heavy sweating; extreme weakness and fatigue; nausea and/or vomiting; dizziness and/or headache; normal or slightly high body temperature; fainting; fast, weak pulse; fast, shallow breathing; dilated pupils, and clammy, pale, cool and/or moist skin.

**Heat Stroke** – Symptoms include: No sweating; mental confusion; delirium; convulsions; dizziness; hot and dry skin; possible muscle twitching; pulse can be rapid and weak; throbbing headache; shallow breathing; seizures; unconsciousness and coma. Body temperature may range from 102-104 degrees Fahrenheit or higher. Mental status changes include disorientation, confusion, loss of balance, and diminished coordination.

### Heat Stroke Treatment

- Call for emergency help immediately
- Have the victim lie down and move them into the shade

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- Loosen outer clothing
  - Elevate feet
  - Lower body temperature (massage body with ice or damp cloth)
  - If the victim is alert, have them slowly drink water

### **Heat Stroke Prevention**

- Acclimate slowly to hot, humid conditions.
- Pace physical activity and duration.
- Early recognition - keep an eye out for early warning signs.
- Provide adequate shade, ice water and misting fans for rest breaks (during physical exercise).
- Avoid exercising in the hottest part of the day and wear light, loose clothing. Suit up in stages.
- Hydrate well before, during, and after exercising using proper hydration techniques.
- Replace lost electrolytes (sodium, potassium, and magnesium) by eating food and drinking sports drinks low in sugar (Drink 16-20 oz/hour).

Please be aware that additional breaks may be needed while wearing a face covering. If face coverings need to be removed to prevent overheating or treat symptoms of heat illness, physical distancing must be maintained as much as possible. During rest breaks, ensure that there is adequate shade while also maintaining a safe distance from one another.

Preventing heat stroke hinges on acclimations, hydration, pacing activity, cooling and vigilance. If you notice someone experiencing early symptoms of heat stroke, proper emergency treatment and cooling is essential before transporting them for medical care.