Heat-related illnesses are common, costly, and dangerous. They can affect anyone at any given time. By taking proper precautions, heat-related illnesses and deaths can be prevented.

The National Weather Service states that the heat index is a measure of how hot it “really” feels when relative humidity is factored into the actual air temperature. The Heat Index Chart represents a quantifiable method to find the heat index temperature using both temperature (degrees Fahrenheit) and relative humidity (%).

For example, if the temperature is 92 degrees Fahrenheit and the relative humidity is 80%, the heat index (how hot it “really” feels) is 121 degrees Fahrenheit.

The National Weather Service also provides a separate Heat Index Chart devised for areas with high heat but low relative humidity. Exposure to full sunshine can effect the heat index values, potentially increasing the values up to 15 degrees Fahrenheit higher as compared.
Whether playing sports, working on the job, or working at home, two primary sources of heat impact people.

**ENVIRONMENT**

Certain regions and climates will experience higher heat index temperatures, such as in the deserts of western and southwestern United States or the humid Midwestern and Eastern regions of the United States. Individuals who perform physical labor outdoors are more prone to experience heat-related illnesses than an individual who performs majority of work at the office in air conditioning.

**INTERNAL HEAT**

Internal heat refers to heat generated as a result of physical labor. Individuals who perform physically demanding tasks, such as heavy lifting, generate more body heat while performing jobs tasks as opposed to working at a computer.

**HOW TO PREVENT HEAT-RELATED ILLNESSES**

- Stay hydrated by drinking water every 15 to 30 minutes, even if you are not thirsty.
- Wear light-colored clothing and a hat to keep the sun off your head and face.
- Take rest breaks in the shade or air conditioning.
- Know your physical limits, and keep watch over fellow co-workers. Work in groups or pairs.
- Avoid large meals, caffeine, or alcohol before performing work.
- Do more physically demanding tasks in the morning or late afternoon (cooler times of day).
- If new to job or climate, acclimate yourself to the heat for the first few days.
- Learn the signs of heat-related illnesses and what to do in the event of an emergency.
WHAT TO DO IN AN EMERGENCY

HEAT RASH

Occurs when sweat ducts that lead to the skin becomes blocked or swell, resulting in discomfort via dry, red, and itchy skin; sweat is unable to evaporate from the skin

» Move the individual to a cool, shady area (when possible).
» Try to keep the affected area as dry as possible.
» If possible, have the individual perform work or activities in a cooler, less humid environment.

HEAT CRAMPS

Occurs in muscles during or after physical exercise when the body loses water, salt, and minerals from sweating

» Have the affected individual drink water or cool beverages.
» Move the individual to a cool, shady location.
» Wait several hours before letting the affected individual return to physically demanding job task.

HEAT EXHAUSTION

Occurs as a result of the body overheating from losing excess fluids from sweating and physical exertion

» Move the individual to a cool, shady location, and have the individual sit or lay down.
» Give the individual water, Gatorade, or Pedialyte to drink; encourage frequent sips.
» Cool the individual’s head, face, and neck with cold wet towels or cloths.
» Take the individual to a clinic or emergency room for further medical evaluation/treatment if symptoms worsen or do not improve within one hour.

HEAT STROKE

Occurs when the body cannot regulate its temperature and the core body temperature rises to 104 degrees Fahrenheit or above; sweating stops, and the body is unable to release excess heat

» Call 911 immediately, then notify a supervisor (if applicable).
» Move the individual to a cool, shady location.
» Loosen or remove as much of the individual’s clothing as possible.
» Place cold, wet towels, cloths, or ice over the individual’s body.
» Fan the individual to speed up cooling down process.
» Place the individual on his or her side if the individual feels nauseas.
» Provide liquids to the individual as soon as possible; encourage frequent sips. (Do not allow the individual to gulp, as this may induce nausea and/or vomiting.)

As Director of Risk Control for Beecher Carlson, Joey Freeman leads the consultation and coordination of resources to assist customers with managing and reducing their risks before losses occur, regulatory compliance, and other risk reduction strategies. He can be reached via email at jfreeman@beechercarlson.com.