

# WHAT RESEARCHERS KNOW ABOUT HEAT-RELATED ILLNESS

The Southeastern Coastal Center for Agricultural Health and Safety (SCCAHS) brought together scientists from the University of Florida, Florida State University, University of South Florida, Emory University, and Georgia Tech University for the inaugural Heat-Related Illness State of the Science Meeting in St. Petersburg, Florida, on October 25-26, 2018. The SCCAHS addresses occupational safety and health needs related to agriculture, fishing and forestry in Florida, Georgia, Alabama, Mississippi, South Carolina, North Carolina, Puerto Rico, and the Virgin Islands.

## Heat-related illness


The Southeastern Coastal Center for Agricultural Health and Safety (SCCAHS) recently brought together a slate of esteemed speakers on the topic of heat-related illness, showcasing research at the intersections of heat-related illness and climate change as it relates to the health and safety of outdoor workers and farmworkers, as well as athletes and military personnel. This crosscutting meeting brought together researchers from various fields to present current findings and pave the way for developing future research collaborations on these topics.

Death from heat-related illness is 100 percent preventable when aggressive cooling takes place. Deaths from heat-related illness occur because of misdiagnoses, lack of care, delay of care, and immediate transport before cooling. Three of the most common types of heat-related illness are heat cramps, heat exhaustion and heat strokes. Symptoms of heat cramps include muscle cramping, pain, thirst, sweating or fatigue. Symptoms of heat exhaustion include fainting, heavy sweating, cold clammy skin or fast weak pulse. Symptoms of heat stroke include body temperatures over 103 degrees; confusion; fast, strong pulse; or hot, red, dry or damp skin. Heat-related illness is the third-leading cause of death among high school athletes.

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TYPES OF HRI

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## WORKERS ARE AT A HIGHER RISK OF DEVELOPING HEAT-RELATED ILLNESS IN THE SUMMERS & AFTERNOONS

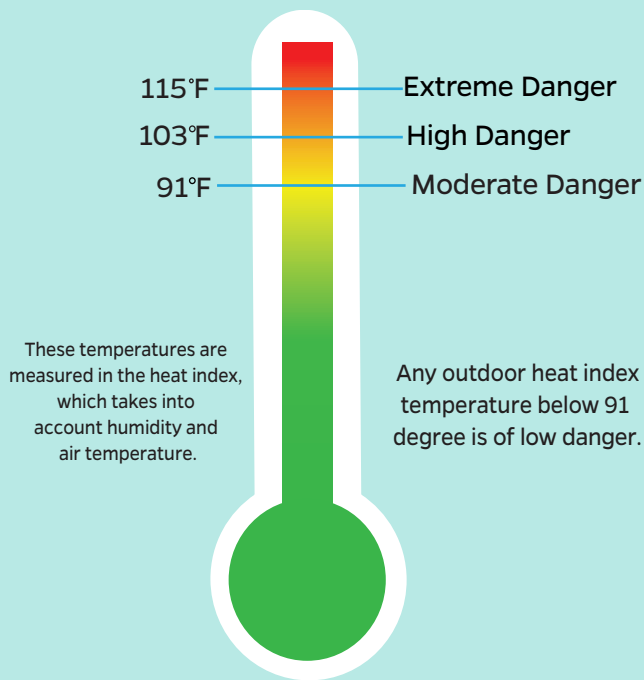
As temperatures rise, the risk of developing a heat-related illness also rises. At a heat index of 91 degrees, workers are at moderate danger of developing a heat-related illness. At a heat index of 103 degrees workers are at high danger of developing a heat-related illness. At a heat index of 115 degrees, workers are at extreme danger of developing a heat-related illness. Any heat index temperature below 91 degrees places workers in low danger of developing a heat-related illness. This means that workers are at a higher risk of developing a heat-related illness during the summers and the afternoons.

Scientists recommend that employers should encourage their outdoor workers to drink small amounts of water every 20 minutes. This will allow workers to consume about one quart of water every hour. Workers should be provided a five- to six-day acclimation period when they begin working in the heat.



**Workers should be provided a 5-6 day acclimation period when they begin working in the heat.**

## Danger of Developing a HRI in Outdoor Temperatures



**OUTDOOR WORKERS SHOULD CONSUME ABOUT ONE QUART OF WATER (APPROXIMATELY TWO BOTTLES OF WATER) EVERY HOUR**

\*NOTE: A quart is 32 ounces. Two standard water bottles are the equivalent of a quart.



**WORKERS SHOULD BE ENCOURAGED TO DRINK SMALLER AMOUNTS OF WATER EVERY 20 MINUTES.**