

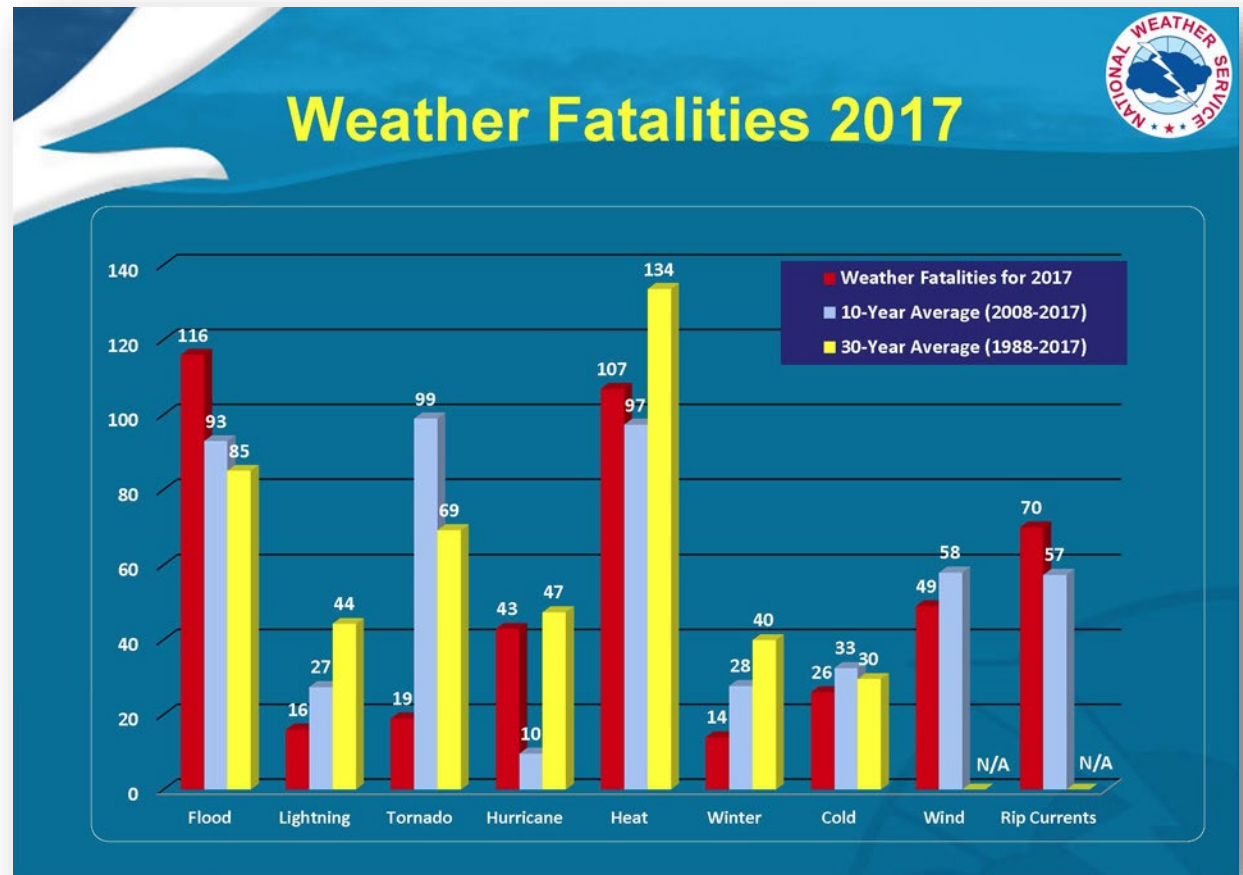
Heat Stress

Objectives

- Identify heat stress facts.
- Review the causes of heat stress.
- Learn about those at high risk.
- Review heat stress symptoms and treatment.
- Discover how to prevent heat stress.

Severe Weather Fatalities

Excessive heat continues to be a leading cause of weather related deaths in the United States.



Courtesy National Weather Service Forecast Office

Causes of Heat Stress - Inside

- Enclosed work space
- Limited air movement
 - Air conditioning not working properly
 - Lack of fans
- Physical exertion
- Rapid work processes without break
- Poor physical condition
- Lack of fluids

Those at High Risk

- Adults older than 65 years may not compensate for heat stress efficiently and are less likely to sense and respond to change in temperature.
- People who are overweight may be prone to heat sickness because of their tendency to retain more body heat.



Even Athletes are at Risk

- Since 1995, the NCCSIR (*National Center for Catastrophic Sport Injury Research*) study showed 61 football players — 46 high school, 11 college, two professional and two organized youth — died from heat stroke with a staggering 90 percent of the fatalities occurring during practice.
- Heat-acclimated persons (with increased sweating rates) who do not drink often may more rapidly experience the adverse effects of hypohydration than non-acclimated counterparts.



Heat Stress Warning Signs

- Dizziness, lightheadedness, feeling faint
- Cramps, nausea, chills
- Headache
- Confusion



If the individual is not alert or loses consciousness, **CALL 911 immediately.**

Treatment for Heat Stress

- Move to cool, shaded area
- Loosen or remove clothing
- Fan or mist with water
- Elevate legs
- Apply cold compress
- Drink fluids
- Contact 911 if symptoms continue or individual loses consciousness



Those at High Risk

- People who overexert during work or exercise may become dehydrated and susceptible to heat sickness.
- People who are physically ill, especially with heart disease or high blood pressure, or who take certain medications, such as for depression, insomnia, or poor circulation, may be affected by extreme heat.

Prevent Heat Stress

- Drink plenty of fluids.
- Increase fluids regardless of activity level.
- Do NOT wait until “thirsty”.
- Drink 16 to 32 ounces of cool fluids per hour in hot conditions.



Prevent Heat Stress

- Choose 'cool' clothing.
- Lightweight
- Loose-fitting
- Light colored
 - White
 - Beige
- Cotton or cotton blend



Warning!

- If you take medication that instructs you to avoid sunlight, don't ignore it. This typically means you could be more sensitive to sunlight, which would cause you to sunburn more easily.
- Avoid very cold drinks, because they can cause stomach cramps.



Engineering Controls

- Control the environment.
- Find shady areas.
- Adjust break schedules.
- Increase air movement (fans).
- Adjust work schedules based on outdoor heat and rotate schedules for those exposed to heat indoors.
- Contact supervisory staff for assistance.



Summary

- Be aware of the signs and symptoms.
- Acclimation is key: be aware of how you and others are tolerating the heat.
- Keep an eye on coworkers.
- Keeping hydrated is probably the most important heat stress control measure you can take.



Heat Stress