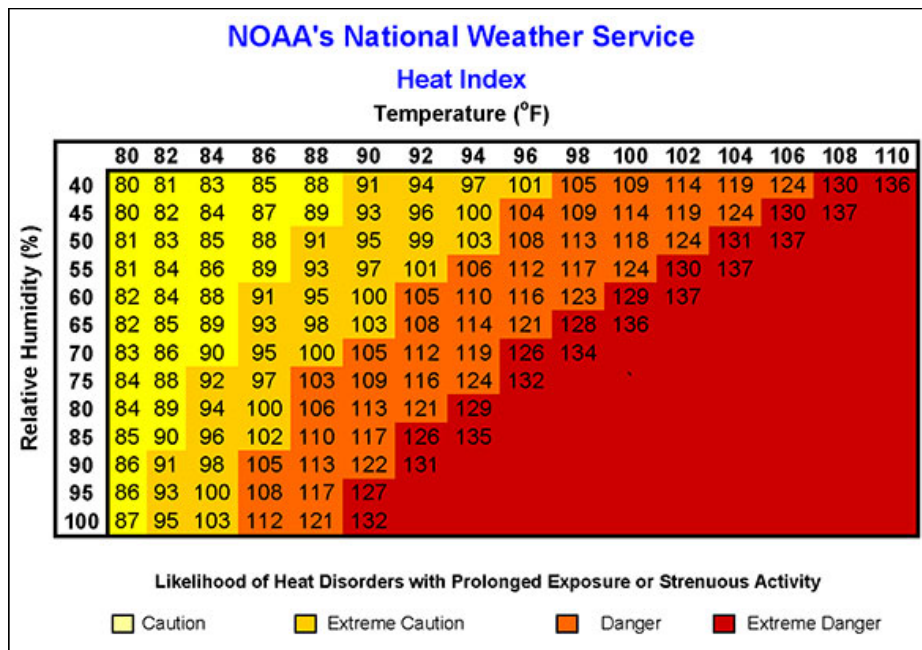


What is the 'heat index' 'wet bulb' and why you should care

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You've all heard the term "heat index" used in a weather forecast on those hot, humid summer days, but do you know what it actually measures and why it's important to our health?

In simplest terms, the heat index is the "feels-like" temperature, or how hot it really feels when the relative humidity is factored in with the actual air temperature.

Your body cools itself by the evaporation of perspiration from your skin. On a hot, humid day, less evaporation of sweat occurs, diminishing the body's ability to cool itself.

The Dunham Environmental Health is monitoring the Heat index and will report the Heat Category as needed to help prevent heat injury. The Heat Index is reported when it reaches Category 3. Once it hits this level, you should consider limiting or even cancelling outdoor activities, especially for young children and others with pre-existing health conditions.

The process is not done by a regular thermometer reading or what the temperature is but by a special device that is calibrated to monitor the Heat Index



The Dunham Environmental Health Office monitors the heat index using this monitor, set up near the Army Community Services building on Wright Ave.



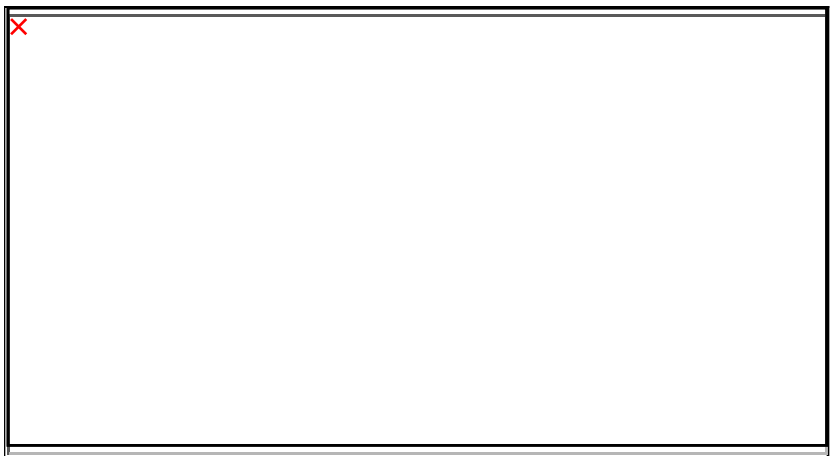
When the body gets too hot, it begins to perspire or sweat to cool itself off. If the perspiration is not able to evaporate, the body cannot regulate its temperature. Evaporation is a cooling process. When perspiration is evaporated off the body, it effectively reduces the body's temperature. When the atmospheric moisture content (i.e. relative humidity) is high, the rate of perspiration from the body decreases. In other words, the human body feels warmer in humid conditions.

The opposite is true when the relative humidity decreases because the rate of perspiration increases. The body actually feels cooler in arid conditions. There is direct relationship between the air temperature and relative humidity and the heat index, meaning as the air temperature and relative humidity increase (decrease), the heat index increases (decreases).

What is "wet bulb?"

Wet Bulb Globe Temperature (WBGT) is a composite temperature used to estimate the effect of *temperature, humidity, wind speed*, and solar radiation (e.g., sunlight). The WBGT index was developed in 1956 by the United States Marine Corps at Parris Island to reduce heat stress injuries in recruits. It is determined with special equipment and calculated to reflect components of air, humidity and wind that affect 'actual temperature' experienced by personnel.

Once the "wet bulb" level hits 3, notices are sent to building managers, directors and fire responders so they can make denetminations about planning outdoor activities. For more information on how to prevent heat illness check out [this guide](#).



U.S. Army War College Archives - News Article - 26 July 2016