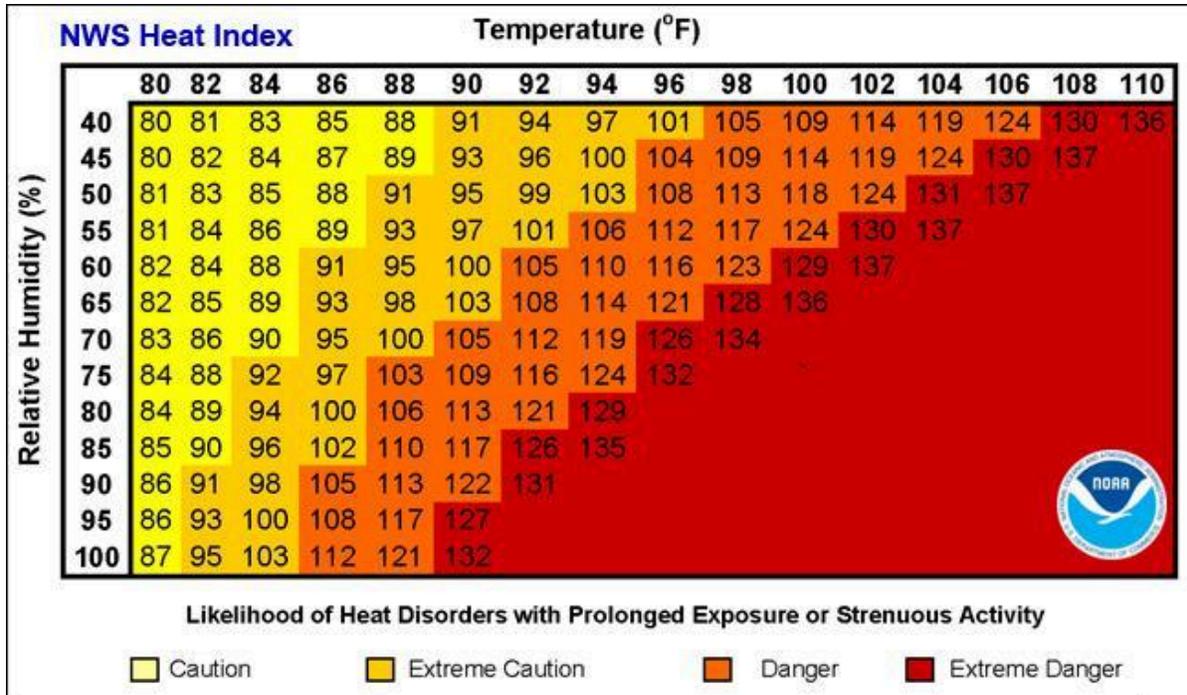




# National Weather Service

## Definitions for EXTREME HEAT

**HEAT INDEX (APPARENT TEMPERATURE)** is what the temperature “feels like: based on both air temperature and humidity. This index was devised for shady, light wind conditions. Exposure to full sunshine can increase Heat Index values by up to 15°F.



### **HEAT ADVISORY: Dangerous heat conditions expected**

- Heat Indices of 95 degrees or more for 2 consecutive hours
  - Eastern New York
  - Southern Vermont
- Heat Indices 95-99 degrees for 2 consecutive days or 100-104 degrees for any duration
  - Berkshires
  - Litchfield County



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## Definitions for EXTREME HEAT

**EXCESSIVE HEAT WATCH /BE PREPARED/:** Extremely dangerous heat conditions possible

**EXCESSIVE HEAT WARNING /TAKE ACTION/:** Extremely dangerous heat conditions expected

- Heat indices of 105+ degrees for at least 2 consecutive hours

Heat Exhaustion	Heat Stroke
<b>ACT FAST</b> <ul style="list-style-type: none"><li>• Move to a cooler area</li><li>• Loosen clothing</li><li>• Sip cool water</li><li>• Seek medical help if symptoms don't improve</li></ul>	<b>ACT FAST</b> <b>CALL 911</b> <ul style="list-style-type: none"><li>• Move person to a cooler area</li><li>• Loosen clothing and remove extra layers</li><li>• Cool with water or ice</li></ul>
<i>Dizziness</i> <i>Thirst</i> <i>Heavy Sweating</i> <i>Nausea</i> <i>Weakness</i>	<i>Confusion</i> <i>Dizziness</i> <i>Becomes Unconscious</i>
<i>Heat exhaustion can lead to heat stroke.</i>	<i>Heat stroke can cause death or permanent disability if emergency treatment is not given.</i>

Stay Cool, Stay Hydrated, Stay Informed!

Logos: NOAA, CDC, NIOSH, NCEM

**NWS HeatRisk** - is an **experimental** color-numeric-based index that provides a forecast risk of heat-related impacts to occur over a 24-hour period.

It takes into consideration”

- How unusual the heat is for the time of the year
- The duration of the heat including both daytime and nighttime temperatures
- If those temperatures pose an elevated risk of heat-related impacts based on data from the CDC

Humidity plays a significant role in making warm temperatures feel even more oppressive. Unfortunately, there are not an adequate number of weather stations across the country which report humidity values for a long enough period of time to be used directly in the HeatRisk approach. But there are many more stations that report temperature. Because of



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this, we use well known physical relationships of temperature to dew point temperature (humidity) to approximate the role of humid air. This is done by considering:

- How unusually warm the overnight temperatures are (more humid air usually leads to warmer overnight low temperatures than are typical for an area, even traditionally humid areas)
- How large the difference is between overnight lows and daytime high temperatures (the difference tends to be larger the less humid the air is).

**WET BULB GLOBAL TEMPERATURE (WBGT)** - Measures heat stress on the body in direct sunlight taking into account: temperature, dewpoint (humidity), wind and sky cover. It's designed for acclimatized, active, outdoor communities such as outdoor workers.

### HOW DOES WBGT differ from HEAT INDEX

#### WET BULB GLOBE TEMPERATURE

The Wet Bulb Globe Temperature (WBGT) is a parameter that estimates the effect of temperature, relative humidity, wind, and solar radiation on humans.

#### HEAT INDEX

The traditional measure of what the temperature feels like to the human body when relative humidity is combined with the air temperature, also known as apparent temperature.

	WBGT	HEAT INDEX
Measured in the sun	●	●
Measured in the shade	●	●
Uses temperature	●	●
Uses relative humidity	●	●
Uses wind	●	●
Uses cloud cover	●	●
Uses sun angle	●	●

