EXTREME HEAT PRECAUTIONS
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Why

Each year approximately 175 Americans die from extreme heat. In 1995, a heat wave struck Chicago, leading to the deaths of nearly 750 people during a single week. The Chicago heat wave tragically demonstrated that heat and humidity can be a deadly combination. These factors put a lot of stress on the human body and can lead to serious health conditions such as heat exhaustion, heat stroke, or even death.

How

Heat kills by pushing the human body beyond its limits. In extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.

Where

Heat waves have the potential to cover a large area, exposing a high number of people to a hazardous combination of heat and humidity. In fact, heat is

typically the leading cause of weather related fatalities each year. High temperatures and humidity are common in numerous locations across the country.

Prevention

Heat-related deaths and illness are preventable yet annually many people succumb to extreme heat. Extreme heat caused 7,415 heat-related deaths in the United States from 1999 to 2010. Extreme heat kills more people than hurricanes, floods, tornadoes and lightning combined, according to the National Weather Service.

KEY SAFETY TIPS:

- Drink plenty of water; even if you do not feel thirsty. Avoid drinks with caffeine. Persons who have epilepsy or heart, kidney, or liver disease; are on fluid-restricted diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
- Never leave children or pets alone in closed vehicles.
- Take cool showers or baths.
- Check on family, friends, and neighbors who do not have air conditioning and who spend much of their time alone.
- Check on your animals frequently to ensure that they are not suffering from the heat.
- At risk populations: People aged 65 and older; People with chronic medical conditions; Infants and children; People living in urban areas.
- Go to a designated public shelter if your home loses power during periods of extreme heat. Stay on the lowest floor out of the sunshine if air conditioning is not available.
- To find the nearest public shelter:
    - Call 211 and ask for the nearest cooling center
    - Or: Log on to www.211sandiego.org/new/
        - Select "Search"
        - Enter your 5 digit zip code AND scroll to bottom of page and enter "Cooling Centers" in the 'Search By Keyword' box; Then select the Search button
    - Text **SHELTER** + your ZIP code to **43362** (4FEMA) to find the nearest shelter in your area (example: ***shelter 92121***)

- Check the weather/listen to NOAA Weather Radio for critical updates from the National Weather Service (NWS).
    - www.nws.noaa.gov/nwr/
    - See Page Six for a description and list of frequencies

SAFETY TIPS IF YOU HAVE TO GO OUTSIDE

- Avoid strenuous work during the warmest part of the day. Use a buddy system when working in extreme heat, and take frequent breaks.
- Don't wait until you're thirsty to drink more fluids.
- Drink from two to four cups of water every hour while working or exercising outside.
- Dress in loose-fitting, lightweight, and light-colored clothes that cover as much skin as possible. Avoid dark colors because they absorb the sun's rays.
- Protect face and head by wearing sunblock and a wide-brimmed hat.
- Postpone outdoor games and activities.
- Stay indoors as much as possible and limit exposure to the sun.

ADDITIONAL SAFETY TIPS

- Eat well-balanced, light, and regular meals. Avoid using salt tablets unless directed to do so by a physician.
- Limit intake of alcoholic beverages.
- Avoid extreme temperature changes.
- Consider spending the warmest part of the day in public buildings such as libraries, schools, movie theaters, shopping malls, and other community facilities. Circulating air can cool the body by increasing the perspiration rate of evaporation.
- Download the FEMA App for heat advisories and safety tips.
    - http://www.fema.gov/mobile-app
    - You can also download the app via text messaging:
        - If you have an Apple device: Text **APPLE** to **43362** (4FEMA)
        - If you have an Android device: Text **ANDROID** to **43362**
        - If you have a Blackberry device: Text **BLACKBERRY** to **43362**

SAFETY TIPS BEFORE EXTREME HEAT ARRIVES

- To begin preparing, you should build an emergency kit (See Page Seven)

- Know those in your neighborhood who are older, young, sick or overweight. They are more likely to become victims of excessive heat and may need help.
- Be aware that people living in urban areas may be at greater risk from the effects of a prolonged heat wave than are people living in rural areas.
- Get trained in first aid to learn how to treat heat-related emergencies.

TIPS TO PREPARE YOUR HOME

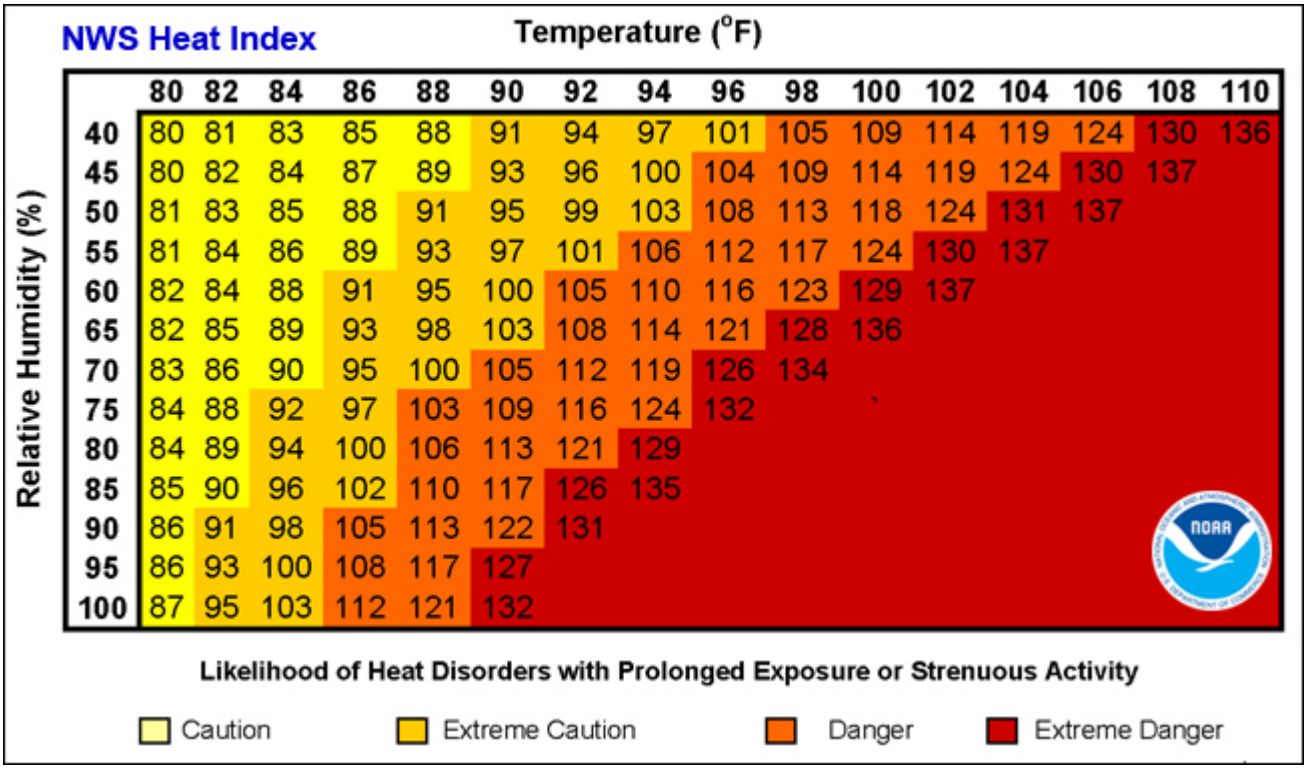
- Install window air conditioners snugly; insulate if necessary.
- Check air-conditioning ducts for proper insulation.
- Install temporary window reflectors (for use between windows and drapes), such as aluminum foil-covered cardboard, to reflect heat back outside.
- Weather-strip doors and sills to keep cool air in.
- Cover windows that receive morning or afternoon sun with drapes, shades, awnings, or louvers. (Outdoor awnings or louvers can reduce the heat that enters a home by up to 80 percent.)

HEAT RELATED TERMS

Familiarize yourself with these terms to help identify an extreme heat hazard:

- Heat Wave - Prolonged period of excessive heat, often combined with excessive humidity.
- Heat Cramps - Muscular pains and spasms due to heavy exertion. Although heat cramps are the least severe, they are often the first signal that the body is having trouble with the heat.
- Heat Exhaustion - Typically occurs when people exercise heavily or work in a hot, humid place where body fluids are lost through heavy sweating. Blood flow to the skin increases, causing blood flow to decrease to the vital organs. This results in a form of mild shock. If not treated, the victim's condition will worsen. Body temperature will keep rising and the victim may suffer heat stroke.
- Heat Stroke - A life-threatening condition. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly.
- Sun Stroke - Another term for heat stroke.

- Excessive Heat Watch - Conditions are favorable for an excessive heat event to meet or exceed local Excessive Heat Warning criteria in the next 24 to 72 hours.
- Excessive Heat Warning - Heat Index values are forecast to meet or exceed locally defined warning criteria for at least 2 days (daytime highs=105-110° Fahrenheit).
- Heat Advisory - Heat Index values are forecast to meet locally defined advisory criteria for 1 to 2 days (daytime highs=100-105° Fahrenheit).
- Heat Index - A number in degrees Fahrenheit (F) that tells how hot it feels when relative humidity is added to the air temperature. Exposure to full sunshine can increase the heat index by 15 degrees.
- As you can see from the chart below, high humidity levels combined with hot conditions can be extremely dangerous. Limit your outdoor activities during these periods.



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

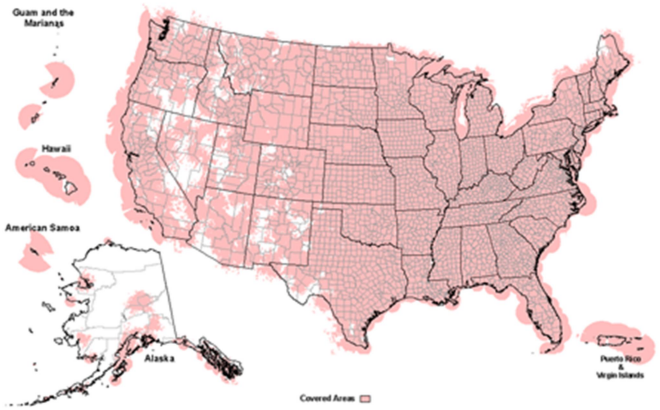
Working with the Federal Communication Commission's (FCC) Emergency Alert System , NWR is an "All Hazards" radio network, making it your single source for comprehensive weather and emergency information. In conjunction with Federal, State, and Local Emergency Managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as AMBER alerts or 911 Telephone outages).

Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the National Oceanic and Atmospheric Administration (NOAA), part of the Department of Commerce. NWR includes 1025 transmitters, covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. NWR requires a special radio receiver or scanner capable of picking up the signal. Broadcasts are found in the VHF public service band at these seven frequencies (MHz):

162.400	162.425	162.450	162.475	162.500	162.525	162.550

NOAA Weather Radio

All Hazards Coverage



Build A Kit

A disaster supplies kit is simply a collection of basic items your household may need in the event of an emergency.

Try to assemble your kit well in advance of an emergency. You may have to evacuate at a moment's notice and take essentials with you. You will probably not have time to search for the supplies you need or shop for them.

You may need to survive on your own after an emergency. This means having your own food, water and other supplies in sufficient quantity to last for at least 72 hours. Local officials and relief workers will be on the scene after a disaster but they cannot reach everyone immediately. You could get help in hours or it might take days.

Websites With More Detail:

https://www.ready.gov/food
https://www.ready.gov/water
http://www.fema.gov/media-library/assets/documents/90354

Additionally, basic services such as electricity, gas, water, sewage treatment and telephones may be cut off for days or even a week, or longer. Your supplies kit should contain items to help you manage during these outages.

SOURCES USED:

https://www.ready.gov/heat

http://www.nws.noaa.gov/com/weatherreadynation/summer_safety.html

http://www.nws.noaa.gov/os/heat/heat-illness.shtml

http://www.redcross.org

https://www.cdc.gov/extremeheat/

http://www.nws.noaa.gov/nwr/

http://211sandiego.org/new/

APPS:

http://www.redcross.org/get-help/prepare-for-emergencies/mobile-apps

http://www.fema.gov/mobile-app

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aprohoroff@yahoo.com