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.

Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children and those who are sick or overweight are more likely to succumb to extreme heat.

Conditions that can induce heat-related illnesses include stagnant atmospheric conditions and poor air quality. Consequently, people living in urban areas may be at greater risk from the effects of a prolonged heat wave than those living in rural areas. Also, asphalt and concrete store heat longer and gradually release heat at night, which can produce higher nighttime temperatures known as the "urban heat island effect".

A heat wave is an extended period of extreme heat, and is often accompanied by high humidity. These conditions can be dangerous and even life-threatening for humans who don't take the proper precautions.

**Before Extreme Heat**

- To begin preparing, you should build an emergency kit and make a family communications plan.
- 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.)
- Keep storm windows up all year.
- Listen to local weather forecasts and stay aware of upcoming temperature changes.
- Know those in your neighborhood who are elderly, 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.
- 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 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.
  
  **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).

During Extreme Heat

- Listen to NOAA Weather Radio for critical updates from the National Weather Service (NWS).
- Never leave children or pets alone in closed vehicles.
- Stay indoors as much as possible and limit exposure to the sun.
- Stay on the lowest floor out of the sunshine if air conditioning is not available.
- Postpone outdoor games and activities.
- 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.
- Eat well-balanced, light, and regular meals. Avoid using salt tablets unless directed to do so by a physician.
- 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.
- Limit intake of alcoholic beverages.
- 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 a wide-brimmed hat.
- Avoid strenuous work during the warmest part of the day. Use a buddy system when working in extreme heat, and take frequent breaks.
- Check on family, friends, and neighbors who do not have air conditioning and who spend much of their time alone.
- Avoid extreme temperature changes.
- Check on your animals frequently to ensure that they are not suffering from the heat. Go to a designated public shelter if your home loses power during periods of extreme heat. Text SHELTER + your ZIP code to 43362 (4FEMA) to find the nearest shelter in your area (example: shelter 12345).