

# Heat Wave



## HOW CAN I PROTECT MYSELF DURING EXCESSIVE HEAT WARNINGS?

The best ways to be protected from the ill effects of excessive heat are to dress appropriately, stay indoors, refrain from strenuous work or exercise during the hottest part of the day, and stay hydrated. Spending at least two hours a day in air conditioning significantly decreases a person's risk of heat-related illnesses.

Heat can kill by pushing the human body beyond its limits. Under normal conditions, the body's internal thermostat produces perspiration that evaporates and cools the body. However, in excessive heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.

Elderly people, young children, and those who are sick or overweight are more likely to become victims of excessive heat. Certain medications may "turn off" the sweating mechanism in some people, thus making it very difficult for them to cool down by sweating. Use common sense, and use the buddy system, frequently contact those individuals who are at a greater risk and help them obtain relief from the heat and humidity.

The duration of excessive heat plays an important role in how people are affected by a heat wave. Studies have shown a significant rise in heat-related illnesses when excessive heat lasts more than two days.

People living in urban areas may be at greater risk from the effects of a prolonged heat wave than are people living in rural regions. An increased health problem, especially for those with respiratory difficulties, can occur when stagnant atmospheric conditions trap pollutants in urban areas, thus adding unhealthy air to excessively hot temperatures. In addition, asphalt and concrete store heat longer and gradually release heat, resulting in significantly higher temperatures, especially at night—an occurrence known as the "urban heat island effect."

Pets, horses, and livestock are also susceptible to difficulties from excessive heat. Animals do not perspire and rely on panting, wetting down, shade, cool earth, and drinking water for cooling. Animals cannot explain their needs, so it is up to people to take extra care that during heat waves, their needs are met.

## IF YOU ARE AT RISK

- **Discuss with members of your household the precautions they should take to stay safe in excessive heat.** Everyone should know what to do in the places where they spend time. Some places may not be air conditioned or safe during a heat wave, so plan alternatives.
- **If your home does not have air conditioning, choose other places you could go to get relief from the heat during the warmest part of the day.** Schools, libraries, theaters, and other community facilities often provide air-conditioned refuge on the hottest days. See if your area designates cooling centers. Air conditioning provides the safest escape from excessive heat.
- **Plan how you can change daily activities to avoid strenuous work during the warmest part of the day.** Ill effects of heat can quickly overcome the healthiest people, if they perform strenuous work during the warmest parts of the day. Symptoms of dehydration are not easily



recognized and are often confused with symptoms of other conditions. Dehydration occurs fast and makes you ill very quickly.

- **Discuss with a physician any concerns about members of the household who are taking medications or have medical conditions that may cause poor blood circulation or reduced ability to tolerate heat.** A physician can advise you about temporary changes to medication or other activities that can relieve the effects of heat.
- **Plan to check on family, friends, and neighbors who do not have air conditioning or who spend much of their time alone.** Elderly persons who live alone or with a working relative might need assistance on hot days.
- **Plan to wear lightweight, light-colored clothing.** Light colors will reflect away the sun's rays more than dark colors, which absorb the sun's rays.
- **Ensure that your animals' needs for water and shade are met.** Bring companion animals into cooler areas.

## **DURING A HEAT WAVE**

- **Listen to NOAA Weather Radio or local radio or television stations for up-to-date information.**
- **Never leave children or pets alone in closed vehicles.** Temperatures inside a closed vehicle can reach more than 140°F (60° C) within minutes. Exposure to such high temperatures can kill in minutes. Even on days that feel pleasantly warm outside, temperatures in a closed vehicle can raise high enough to kill children and pets.
- **Slow down. Avoid strenuous activity.** Reduce, eliminate, or reschedule strenuous activities. High-risk individuals should stay in cool places. Get plenty of rest to allow your natural "cooling system" to work. If you must do strenuous activity, do it during the coolest part of the day, which is usually in the early morning. Many heat emergencies are experienced by people exercising or working during the hottest part of the day.
- **Take frequent breaks if you must work outdoors.** Frequent breaks, especially in a cool area, can help people tolerate heat better.
- **Use a buddy system when working in excessive heat.** Partners can keep an eye on each other and can assist each other when needed. Sometimes exposure to heat can cloud judgment, and, if you work alone, you may not notice this.
- **Avoid too much sunshine.** Sunburn slows the skin's ability to cool itself. The sun will also heat the inner core of your body, resulting in dehydration. Use a sunscreen lotion with a high sun-protection factor (SPF) rating.
- **Postpone outdoor games and activities.** Excessive heat can threaten the health of athletes, staff, and spectators of outdoor games and activities.
- **Avoid extreme temperature changes.** A cold or even a cool shower taken immediately after coming indoors from hot temperatures can result in hypothermia, particularly for elderly and very young people.
- **Stay indoors as much as possible.** If air conditioning is not available, stay on the lowest floor, out of the sunshine. Even in the warmest weather, staying indoors, out of sunshine, is safer than long periods of exposure to the sun.

- **Keep heat outside and cool air inside.** Close any registers that may allow heat inside. Install temporary reflectors, such as aluminum foil-covered cardboard, in windows and skylights to reflect heat back outside.
- **Conserve electricity not needed to keep you cool.** During periods of excessive heat, people tend to use a lot more power for air conditioning. Conserve electricity not used to keep you cool so power can remain available and reduce the chance of a communitywide outage.
- **Vacuum air conditioner filters weekly during periods of high use.** Air conditioner filters can become clogged or filled with dirt, making them less efficient. Keeping them clean will allow your air conditioner to provide more cool air.
- **If your home does not have air conditioning, go to a public building with air conditioning each day for several hours.** Air conditioned locations are the safest places during excessive heat because electric fans do not cool the air. Fans do help sweat evaporate, which gives a cooling effect. However, when temperatures exceed 90° F (32° C), fans become ineffective in reducing heat-related illness.
- **Dress appropriately.** Wear loose-fitting, lightweight, light-colored clothing that will cover as much skin as possible. Lightweight, light-colored clothing reflects heat and sunlight and helps maintain normal body temperature. Cover as much skin as possible to avoid sunburn and the over-warming effects of sunlight on your body. Protect your face and head by wearing a wide-brimmed hat. A hat will keep direct sunlight off your head and face. Sunlight can burn and warm the inner core of your body.
- **Drink plenty of fluids even if you do not feel thirsty.** Drink regularly and often. Your body needs water to keep cool. Water is the safest liquid to drink during heat emergencies. Injury and death can occur from dehydration, which can happen quickly and be unnoticed until too late. Symptoms of dehydration are often confused with symptoms of other conditions.
- **People who have epilepsy or heart, kidney, or liver disease; who are on fluid restricted diets; or who have a problem with fluid retention should consult a doctor before increasing liquid intake.**
- **Avoid drinks with alcohol or caffeine.** They can make you feel good for a little while, but they dehydrate the body.
- **Eat small meals and eat more often.** Large, heavy meals are more difficult to digest and cause your body to increase internal heat to aid digestion, worsening overall conditions. Avoid foods that are high in protein, such as meats and nuts, which increase metabolic heat.
- **Avoid using salt tablets unless directed to do so by a physician.** Salt causes the body to retain fluids, resulting in swelling. Salt impedes sweating, which helps keep you cool.
- **Check on your animals frequently** to ensure that they are not suffering stress from the heat. Make sure they are indoors or in the shade. Use fans to cool areas that are not air conditioned or open to breezes. Provide plenty of water for drinking as well as for cooling the animals. If you see signs of heat stress, call your veterinarian. Very young and older animals, as well as animals with short snouts, are more susceptible to problems with heat.

