

# Extreme Heat



Heat kills by pushing the human body beyond its limits. In extreme heat and high humidity (which is when the air has moisture and feels sticky), the body must work extra hard to maintain a normal temperature and keep the body comfortable. A heat wave is an extended period of extreme heat, and there is often high humidity. These conditions can be dangerous for people who don't take care of themselves properly.

## People at Risk

Sickness can occur if someone has been in extreme heat for too long, or has over-exercised for his or her age or physical condition. Extreme heat can be more dangerous for older people, the very young, and people who are sick or overweight. People who live in cities can be at greater risk because concrete and asphalt store heat for longer and release it throughout the night, so nights don't get as cool as in areas with less concrete.

Heat is the number one weather-related killer in the United States.

## Before Extreme Heat

- § Cover windows that receive morning or afternoon sun with drapes, shades, awnings, or louvers. (Outdoor awnings or louvers can reduce the heat that enters the home by 80%)
- § Weather-strip doors and sills to keep cool air in. Keep storm windows up all year.

## During Extreme Heat

- § Stay indoors as much as possible and limit exposure to the sun.
- § Stay on the lowest floor if air conditioning is not available.
- § Consider spending the warmest part of the day in public buildings such as libraries, movie theaters, shopping malls, and other community facilities.
- § Avoid strenuous work during the warmest part of the day. Use a buddy system when working in extreme heat, and take frequent breaks.
- § Dress in loose-fitting lightweight and light-colored clothes that cover as much skin as possible.
- § Protect face and head by wearing a wide-brimmed hat.
- § Eat well-balanced, light, and regular meals. Avoid using salt tablets unless directed to do so by a physician.
- § Drink plenty of water. 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.
- § Check on family, friends, and neighbors who do not have air conditioning and who spend their time alone.

§ **Never** leave children or pets alone in closed vehicles.

## Heat Cramps

Heat Cramps are muscular pains and spasms due to heavy exertion. Heat cramps are often the first signal that the body is having trouble with the heat.

Get the person to a cooler place and have him or her rest in a comfortable position. Lightly stretch the affected muscle and replenish fluids. Give a half glass of cool water every 15 minutes. Do not give liquids with alcohol or caffeine in them, as they can make conditions worse.



## Heat Exhaustion

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.

Signs of heat exhaustion include:

- § Cool moist, pale or flushed skin
- § Heavy sweating
- § Headache
- § Nausea or vomiting
- § Dizziness
- § Exhaustion
- § Body temperature will be near normal

Get the person to a cooler place and have him or her rest in a comfortable position. Remove or loosen tight clothing and apply cool, wet cloths, such as towels or sheets. If the person is conscious, give cool water to drink. Make sure the person drinks slowly. Give a half glass of cool water every 15 minutes. Do not give liquids that contain alcohol or caffeine. Watch carefully for changes in his/her condition.

## Heat Stroke

Heat Stroke is 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.

Signs of Heat Stroke include:

- § Hot, red skin, dry unless sweating from recent strenuous activity
- § Changes in consciousness
- § Rapid, weak pulse
- § Rapid, shallow breathing
- § Body temperature will be high

Because Heat Stroke is a life threatening condition, help is needed fast. Call 9-1-1 or take the person to the nearest emergency department. Move the person to a cooler place. Quickly cool the body. Immerse victim in a cool bath, or wrap wet sheets around the body and fan it. Watch for signals of breathing problems. Keep the person lying down and continue to cool the body any way you can. If the victim refuses water or is vomiting or if there are changes in the level of consciousness, do not give anything to eat or drink.

## Keep Pets Safe in Extreme Heat

**Never** leave your pets in a parked car, not even for a minute. Not even with the car running and air conditioner on. On a warm day, temperatures inside a vehicle can rise rapidly to dangerous levels. On an

85-degree day, for example, the temperature inside a car with the windows opened slightly can reach 102 degrees within 10 minutes. After 30 minutes, the temperature will reach 120 degrees. Your pet may suffer irreversible organ damage or die.

**Limit exercise on a hot day.** Take care when exercising your pet. Adjust intensity and duration of exercise in accordance with the temperature. On very hot days, limit exercise to early morning or evening hours, and be especially careful with pets with white-colored ears, who are more susceptible to skin cancer, and short-nosed pets, who typically have difficulty breathing. Asphalt gets very hot and can burn your pet's paws, so walk your dog on the grass if possible. Always carry water with you to keep your dog from dehydrating.

**Provide ample shade and water.** Any time your pet is outside, make sure he or she has protection from heat and sun and plenty of fresh, cold water. In heat waves, add ice to water when possible. Tree shade and tarps are ideal because they don't obstruct air flow. A doghouse does not provide relief from heat—in fact, it makes it worse.

