



Summer Heat Precautions

A Prevention Guide to Promote Your Personal Health and Safety

What Is Extreme Heat?

Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a “dome” of high atmospheric pressure traps hazy, damp air near the ground. Droughts occur when a long period passes without substantial rainfall. A heat wave combined with a drought is a very dangerous situation.

During Hot Weather

To protect your health when temperatures are extremely high, remember to keep cool and use common sense. The following tips are important:

Drink Plenty of Fluids

During hot weather, you will need to increase your fluid intake, regardless of your activity level. Don't wait until you're thirsty to drink. During heavy exercise in a hot environment, drink two to four glasses (16-32 ounces) of cool fluids each hour. **Warning:** If your doctor generally limits the amount of fluid you drink or has you on water pills, ask how much you should drink when the weather is hot. Don't drink liquids that contain alcohol or large amounts of sugar – these actually cause you to lose more body fluid. Also, avoid very cold drinks, because they can cause stomach cramps.

Replace Salt and Minerals

Heavy sweating removes salt and minerals from the body. These are necessary for your body and must be replaced. If you exercise, drink two to four glasses of cool, non-alcoholic fluids each hour. A sports beverage can replace the salt and minerals you lose in sweat. However, if you are on a low-salt diet, talk with your doctor before drinking a sports beverage or taking salt tablets.

Wear Appropriate Clothing and Sunscreen

Wear as little clothing as possible when you are at home. Choose lightweight, light-colored, loose-fitting clothing. Sunburn affects your body's ability to cool itself and causes a loss of body fluids. It also causes pain and damages the skin. If you must go outdoors, protect yourself from the sun by wearing a wide-brimmed hat (also keeps you cooler) along with sunglasses, and by putting on sunscreen of SPF 15 or higher (the most effective products say “broad spectrum” or “UVA/UVB protection” on their labels) 30 minutes prior to going out. Continue to reapply it according to the package directions.

Schedule Outdoor Activities Carefully

If you must be outdoors, try to limit your outdoor activity to morning and evening hours. Try to rest often in shady areas so that your body's thermostat will have a chance to recover. If you are not accustomed to working or exercising in a hot environment, start slowly and pick up the pace gradually. If exertion in the heat makes your heart pound and leaves you gasping for breath, stop all activity immediately. Get into a cool area to rest, especially if you become lightheaded, confused, weak or faint.

Stay Cool Indoors

Stay indoors and, if possible, stay in an air-conditioned place. If your home does not have air conditioning, go to the shopping mall or public library – even a few hours spent in air conditioning can help your body stay cooler when you go back into the heat. Electric fans may provide comfort, but when the temperature is high, fans will not prevent heat-related illness. Taking a cool shower, bath or moving to an air-conditioned place is a better way to cool off. To keep your home cool, avoid using your stove and oven.

Use a Buddy System

When working in the heat, monitor the condition of your co-workers and have someone do the same for you. Heat-induced illness can cause a person to become confused or lose consciousness. If you are age 65 or older, have a friend or relative call to check on you twice a day during a heat wave. If you know someone in this age group, check on them at least twice a day.

Monitor Those at High Risk

Although anyone at any time can suffer from heat-related illness, some people are at greater risk:

- Infants and children up to four years of age are sensitive to the effects of high temperatures and rely on others to regulate their environments and provide adequate liquids
- People 65 years of age or older may not compensate for heat stress efficiently and are less likely to sense and respond to change in temperature
- Overweight people may be prone to heat sickness because they tend to retain more body heat
- People who overexert during work/exercise may become dehydrated and prone to heat sickness
- People who are physically ill, especially with heart disease or high blood pressure, or who take certain medications for depression, insomnia or poor circulation, may be affected by extreme heat

Adjust to the Environment

Be aware that any sudden change in temperature, such as an early summer heat wave, will be stressful to your body. You will have a greater tolerance for heat if you limit your physical activity until you become accustomed to it. If you travel to a hotter climate, allow several days to become acclimated before attempting any vigorous exercise, and work up to it gradually.

Use Common Sense

Remember to keep cool and use common sense:

- Avoid hot foods and heavy meals – they add heat to your body
- Drink plenty of fluids and replace salts and minerals in your body
- Dress infants and children in cool, loose clothing and use hats or umbrellas to shade their faces and heads
- Limit sun exposure during mid-day hours and in places of potential severe exposure, like beaches
- Do not leave infants, children or pets in a parked car
- Provide plenty of fresh water for your pets, and leave the water in a shady area

Hot Weather Health Emergencies

Even short periods of high temperatures can cause serious health problems. Doing too much on a hot day, spending too much time in the sun, or staying too long in an overheated place can cause heat-related illnesses. Know the symptoms of heat disorders and sun overexposure, and be ready to give first-aid.

Heat Stroke

Heat stroke occurs when the body is unable to regulate its temperature. The body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided.

Warning signs of heat stroke vary but may include the following:

- An extremely high body temperature (above 103°F, orally)
- Red, hot, and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Confusion
- Unconsciousness

If you see any of these signs, you may be dealing with a life-threatening emergency. Have someone call for immediate medical assistance while you begin cooling the victim. Do the following:

- Get the victim to a shady area
- Cool the victim rapidly using whatever methods you can. For example, immerse the victim in a tub of cool water; place the person in a cool shower; spray the victim with cool water from a garden hose; sponge the person with cool water; or, if the humidity is low, wrap the victim in a cool, wet sheet and fan him or her vigorously
- Monitor body temperature, and continue cooling until the body temperature drops to 101-102°F
- If emergency personnel are delayed, call the hospital emergency room for further instructions
- Do not give the victim fluids to drink
- Get medical assistance as soon as possible

Sometimes a victim's muscles will begin to twitch uncontrollably because of heat stroke. If this happens, keep the victim from injuring himself, but do not place any object in the mouth and do not give fluids. If there is vomiting, make sure the airway remains open by turning the victim on his or her side.

Heat Exhaustion

Heat exhaustion is a milder form of heat-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. It is the body's response to an excessive loss of the water and salt contained in sweat. Those most prone to heat exhaustion are elderly people, people with high blood pressure, and people working or exercising in a hot environment.

Warning signs of heat exhaustion include the following:

- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness
- Dizziness
- Headache
- Nausea or vomiting
- Fainting

The skin may be cool and moist. The victim's pulse rate will be fast and weak, and breathing will be fast and shallow. If heat exhaustion is untreated, it may progress to heat stroke. Seek medical attention immediately if the symptoms are severe or the victim has heart problems or high blood pressure. Otherwise, help the victim cool off, and seek medical attention if symptoms worsen or last longer than one hour.

Cooling measures that may be effective include the following:

- Cool, nonalcoholic beverages, as directed by your physician
- Rest

- Cool shower, bath, or sponge bath
- An air-conditioned environment
- Lightweight clothing

Heat Cramps

Heat cramps usually affect people who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture. The low salt level in the muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Heat cramps are muscle pains or spasms – usually in the abdomen, arms, or legs – that may occur in association with strenuous activity. If you have heart problems or are on a low-sodium diet, get medical attention for heat cramps.

If medical attention is not necessary, take these steps:

- Stop all activity, and sit quietly in a cool place
- Drink clear juice or a sports beverage
- Do not return to strenuous activity for a few hours after the cramps subside, because further exertion may lead to heat exhaustion or heat stroke
- Seek medical attention for heat cramps if they do not subside in one hour

Sunburn

Sunburn should be avoided because it damages the skin and may lead to skin cancer. Although the discomfort of sunburns is usually minor and healing often occurs in about a week, more severe sunburns may require medical attention. Symptoms of sunburn are well known – the skin becomes red, painful, and abnormally warm after sun exposure.

Consult a doctor if the sunburn affects an infant younger than one year old or if the victim is running a fever, experiences severe pain, or develops fluid-filled blisters.

Also, remember these tips when treating sunburn:

- Avoid repeated sun exposure
- Apply cold compresses or immerse the sunburned area in cool water
- Apply moisturizing lotion to affected areas. Do not use salve, butter, or ointment
- Do not break blisters

Heat Rash

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather. It can occur at any age but is most common in young children.

Heat rash looks like a red cluster of pimples or small blisters. It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creases.

The best treatment for heat rash is to provide a cooler, less humid environment. Keep the affected area dry. Dusting powder may be used to increase comfort, but avoid using ointments or creams — they keep the skin warm and moist and may make the condition worse.

Treating heat rash is simple and usually does not require medical assistance. Other heat-related problems can be much more severe.

This information provided courtesy of the U.S. Centers for Disease Control