

Dos and Don'ts to prevent Heat Related Illnesses:

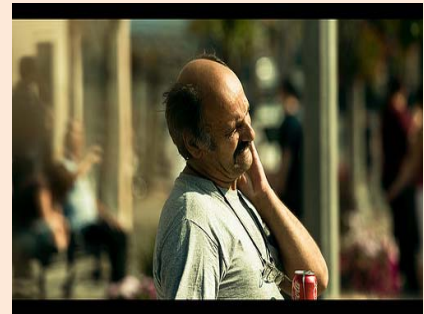


People suffer heat-related illness when their bodies are unable to compensate and properly cool themselves. The body normally cools itself by sweating. But under some conditions, sweating just isn't enough. In such cases, a person's body temperature rises rapidly. Very high body temperatures may damage the brain or other vital organs.

Several factors affect the body's ability to cool itself during extremely hot weather. When the humidity is high, sweat will not evaporate as quickly, preventing the body from releasing heat quickly. Other conditions related to risk include age, obesity, fever, dehydration, heart

disease, mental illness, poor circulation, sunburn, and prescription drug and alcohol use.

Since heat-related deaths are preventable, people need to be aware of who is at greatest risk and what actions can be taken to prevent a heat-related illness or death. The elderly, very young ones, people with mental illnesses and chronic diseases are at the highest risk. However, even young and healthy individuals can succumb to heat if they participate in strenuous physical activities during hot weather. Air-conditioning is the number one protective factor against heat-related illness and death. If a home is not air-conditioned, people can reduce their risk for heat-related illness by spending time in public facilities that are air-conditioned.



Summertime activity, whether on the playing field or the construction site, must be balanced with measures that aid the body's cooling mechanisms and prevent heat-related illness. This pamphlet tells how you can prevent, recognize and cope with heat-related health problems.

During Hot Weather

To protect your health when temperatures are extremely high, remember to keep your 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 of cool fluids each hour.

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.

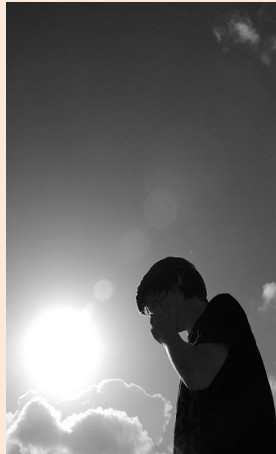
Replace Salt and Minerals

Heavy sweating removes salt and minerals from the body. These are necessary for your body and must be replaced. If you must exercise, drink two to four glasses of cool, non-alcoholic fluids every 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

Choose lightweight, light-colored, loose-fitting clothing. Cottons and Linens are the safest. 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.

Pace Yourself

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 that activity. Get into a cool area or under the shade and rest awhile, especially if feel lightheaded, confused, and weak or dizzy.

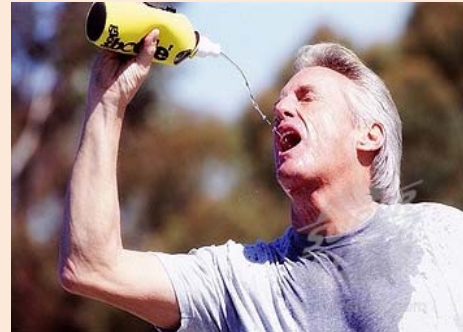
Stay Cool Indoors

Stay indoors, if at all 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. Call your local health department to see if there are any heat-relief shelters in your area. Electric fans may provide comfort, but when the temperature is high, fans will not prevent heat-related illness. Taking a cool shower or bath or moving to an air-conditioned place is a much better way to cool off. Use your stove and oven less to maintain a cooler temperature in your home.

Monitor Those at High Risk

Although any one at any time can suffer from heat-related illness, some people are at greater risk than others.

- ❖ 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.
- ❖ People who are overweight may be prone to heat sickness because of their tendency to retain more body heat.
- ❖ People who overexert during work or exercise may become dehydrated and susceptible to heat sickness.
- ❖ People who are physically ill, especially with heart disease or high blood pressure, or who take certain medications, such as 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 the heat. If you travel to a hotter climate, allow several days to get acclimatized before attempting any vigorous exercise, and work up to it gradually.

Do Not Leave Children in Cars

Even in cool temperatures, cars can heat up to dangerous temperatures very quickly. Even with the windows open, interior temperatures can rise almost 20 degrees Fahrenheit within the first 10 minutes. Anyone left inside is at risk for serious heat-related illnesses or even death. Children who are left unattended in parked cars are at greatest risk for heat stroke, and possibly death. When traveling with children, remember to do the following:

- ❖ Never leave infants, children or pets in a parked car, even if the windows are open.
- ❖ When leaving your car, check to be sure everyone is out of the car. Do not overlook any children who have fallen asleep in the car.

Use Common Sense

Remember to keep your 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. Do not take salt tablets unless under medical supervision.

- ❖ Dress infants and children in cool, loose clothing and keep their heads and faces covered with hats or an umbrella.
- ❖ Limit sun exposure during mid-day hours and in places of potential severe exposure such as 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. Exerting 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 overexposure to the sun and be ready to give first-aid treatment.



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.

Recognising Heat Stroke

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



What to Do

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' down of the patient. Do the following:

- ❖ Transfer the patient to a shady area.

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



Sometimes a patient's muscles might begin to twitch uncontrollably as a result of heat stroke. If this happens, keep the patient 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 patient 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.

Recognizing Heat Exhaustion

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 patient'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 any of the following occurs:

- ❖ Symptoms are severe
- ❖ The patient has heart problems or high blood pressure

Otherwise, help the patient to cool off, and seek medical attention if symptoms worsen or last longer than an hour.

What to Do

Cooling measures that may be effective include the following:

- ❖ Cool, non-alcoholic beverages
- ❖ 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 may be the cause of heat cramps. Heat cramps may also be a symptom of heat exhaustion.

Recognizing Heat Cramps

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.



What to Do

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 1 hour.

Sunburn

Sunburn should be avoided because it damages the skin. Although the discomfort is usually minor and healing often occurs in about a week, a more severe sunburn may require medical attention.

Recognizing Sunburn

Symptoms of sunburn are well known: the skin becomes red, painful, and abnormally warm after sun exposure.

What to Do

Consult a doctor if the sunburn affects an infant younger than 1 year of age or if these symptoms are present:

- ❖ Fever
- ❖ Fluid-filled blisters
- ❖ Severe pain

Also, remember these tips when treating sunburn:

- ❖ Avoid repeated sun exposure.
- ❖ Apply cold compresses or immerse the sunburned area in cool water.
- ❖ Apply lacto calamine / moisturizing lotion to affected areas. Do not use salt, butter or creamy ointments



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.

Recognizing Heat Rash

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.



What to Do

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.

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

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