

Heat Wave

Heat waves can create potentially life-threatening situations.

Understanding the Terms

A *heat wave* is a prolonged period of excessive heat and humidity. The National Weather Service steps up its procedures to alert the public during these periods of excessive heat and humidity.

The *heat index* is number in degrees Fahrenheit that tells how hot it really feels when relative humidity is added to the actual air temperature. Exposure to full sunshine can increase the heat index by 15°F.

Heat cramps are muscular pains and spasms due to heavy exertion. They usually involve the abdominal muscles or legs. The loss of water from heavy sweating causes the cramps.

Heat exhaustion typically occurs when people exercise heavily or work in a warm 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 is life-threatening! 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. *Sunstroke* is another term for heat stroke.

During a Heat Wave

Slow down. Avoid strenuous activity. If you must do strenuous activity, do it during the coolest part of the day, which is usually in the morning between 4 a.m. and 7 a.m.

Stay indoors as much as possible. If air conditioning is not available, stay on the lowest floor, out of the sunshine. Remember, electric fans do not cool the air, but they do help sweat evaporate, which cools your body.

Wear lightweight, light-colored clothing. Light colors will reflect away some of the sun's energy.

Drink plenty of water regularly and often. Your body needs water to keep cool.

Drink plenty of fluids even if you do not feel thirsty.

Water is the safest liquid to drink during heat emergencies. Avoid drinks with alcohol or caffeine in them. They can make you feel good briefly, but make the heat's effects on your body worse. This is especially true about beer, which actually dehydrates the body.

Eat small meals and eat more often. Avoid foods that are high in protein, which increase metabolic heat.

Avoid using salt tablets unless directed to do so by a physician.

Signals of Heat Emergencies

Symptoms of *heat exhaustion* include cool, moist, pale or flushed skin; heavy sweating; headache; nausea or vomiting; dizziness; and exhaustion. Body temperature will be near normal.

Symptoms of *heat stroke* include hot, red skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing. Body temperature can be very high - sometimes as high as 105°F. If the person was sweating from heavy work or exercise, skin may be wet; otherwise, it will feel dry.

Treatment

If a person is suffering from heat cramps, 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. Electrolyte replacement fluids should be diluted by at least half with water. Do not give liquids with alcohol or caffeine in them, as they can make conditions worse.

If heat exhaustion occurs, get the person out of the heat and into a cooler place. 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. Let the victim rest in a comfortable position, and watch carefully for changes in his or her condition.

Heat stroke is a life-threatening situation! Help is needed fast. Call 911 or your local emergency number. 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, is vomiting, or there are changes in the level of consciousness, do not give anything to eat or drink.