

Education

Heat Illness

What are heat illnesses?

Heat illness occurs when your body becomes overheated, usually when you are outside in very hot or humid weather. Heat illness includes heat cramps, heat exhaustion, and the most serious, heatstroke. You are at high risk for heat illness if you are an older adult, are overweight, have heart disease, have high blood pressure or chronic illnesses, or work in a hot environment.

How do they occur?

Heat illness usually happens after long exposure to hot temperatures. It can also be caused by working in an extremely hot environment, a high fever associated with illness, or exercising too strenuously.

Overdressing, overeating, dehydration, or drinking too much alcohol can also contribute to becoming overheated.

What are the symptoms?

As your body gets hotter and is unable to cool down, symptoms progress. First, you may become dehydrated and get heat cramps. If not treated, your symptoms could become more severe and you could eventually develop a more serious problem, such as heat exhaustion or heatstroke.

Heat cramps: Symptoms of heat cramps include muscle pains or spasms (most commonly in the abdominal, arm, or leg muscles).

Heat exhaustion: Symptoms of heat exhaustion include:

- dizziness
- weakness
- nausea or vomiting
- muscle aches
- headaches
- increased sweating.

Heatstroke is a life-threatening condition in which the body temperature rises rapidly to 104°F (40°C) or higher and the body's heat-regulating mechanism breaks down. Heatstroke may cause damage to the kidneys, heart, lungs, muscles, liver, intestines, and brain. Symptoms of heatstroke:

- no sweating
- confusion and disorientation
- erratic behavior
- agitation
- seizures
- coma
- injury to body organs.

How are they treated?

Heat cramps: Heat cramps are treated by drinking a lot of fluids, massaging the cramped area, and stretching the cramping muscles. Heat cramps may improve more rapidly if you drink a sports drink that contains salt and other electrolytes, rather than water.

Heat exhaustion: The first aid procedures for heat exhaustion are:

- Stop exercising or any activity.

- Lie down and rest in a shady or cool place.
- Loosen your clothing
- Drink plenty of cool non-alcoholic fluids, such as water, clear juice or a sports drink (do NOT give iced drinks). If you cannot sip fluids, you probably need intravenous fluids in a first aid station or a hospital.
- Cool your body with a fan, spray, or washcloth, or sit in a cool bath.
- Seek medical attention if the symptoms get worse or last longer.

Heatstroke: Emergency medical treatment is necessary for heatstroke. If you think someone has heatstroke, call 911 or a doctor immediately. Follow the treatment for heat exhaustion until medical help arrives. A person with heatstroke needs to be brought to a hospital for further treatment and checked for organ damage.

How can I prevent heat illness?

- Avoid strenuous activity in hot or humid weather.
- Stay out of the hot sun
- Wear a hat if working in intense sun and wear light-colored clothing.
- Take time to get used to a new climate before being very active or staying in the sun.
- Wear light-colored, loose-fitting clothing in hot weather.
- Drink plenty of water whenever you spend a lot of time in the sun or in a hot environment. Drink extra water when you sweat, even if you aren't thirsty.
- Open windows, or use a fan or air conditioner to improve air circulation.
- Limit food intake to small meals, and limit alcohol intake and activity when it is very hot or when you're not used to a hot climate.
- If you take medicines, talk to your health care provider to see if these medicines could make problems in the heat worse.

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