

PUBLIC HEALTH FACT SHEET

Heat-Related Illnesses



Burlington County Health Department

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Public Health
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Burlington County Health Department
Health Starts Here

What happens to the body as a result of exposure to extreme heat?

People suffer heat-related illness when the body's temperature control system is overloaded. 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 fast. Very high body temperatures may damage the brain or other organs. Several things affect the body's ability to cool itself during hot weather such as high humidity and when sweat does not evaporate as quickly, preventing the body from releasing heat. Other things that can prevent the body from cooling down include old age, youth (age 0-4), obesity, fever, dehydration, heart disease, mental illness, poor circulation, sunburn, prescription drug use, and alcohol use.

What is a heat exhaustion?

Heat exhaustion is caused by exposure to high temperatures, particularly when combined with high humidity and strenuous physical activity. Without quick treatment, heat exhaustion can lead to heatstroke, a life-threatening condition.

What are the signs of heat exhaustion?

Symptoms may develop suddenly, or over time. Possible signs and symptoms include: cool, moist skin with goose bumps when in the heat; heavy sweating; fainting; dizziness; fatigue; weak, rapid pulse; low blood pressure upon standing; muscle cramps; nausea; headache.

How is heat exhaustion treated?

In most cases, you can treat heat exhaustion yourself by doing the following:

- Rest in a cool place. Getting into an air-conditioned building is best, but at the very least, find a shady spot or sit in front of a fan.
- Drink cool fluids. Stick to water or sports drinks. Avoid alcoholic beverage and soda, which can lead to more dehydration.
- Try cooling measures. If possible, take a cool shower, soak in a cool bath, or put towels soaked in cool water on your skin.
- Loosen clothing. Remove any unnecessary clothing and make sure your clothes are lightweight and nonbinding.

What is heatstroke?

Heatstroke is caused by your body overheating and is unable to cool down. It is usually a result of long exposure to or physical activity in high temperatures. Heatstroke can occur if your body temperature rises to 104°F or higher.

Heatstroke requires emergency medical treatment.

What are the signs of heatstroke?

- High body temperature- temperature of 104°F is the main sign of heatstroke
- Altered mental state of behavior- confusion, agitation, slurred speech, irritability, seizures and coma can all be a result of heatstroke

- Alteration in sweating- Heatstroke brought on by hot weather will cause skin to be hot and dry to the touch. However, heatstroke caused by strenuous exercise will cause skin to feel moist.
- Nausea and vomiting
- Flushed skin- skin may turn red as temperature increases
- Rapid breathing
- Racing heart rate- pulse may significantly increase because heat places extra stress on your body.
- Headache

How is heatstroke treated?

Heatstroke requires immediate medical treatment. Call 911. Untreated heatstroke can quickly damage your brain, heart, kidneys, and muscles. The longer treatment is delayed, the more likely damage will be lasting. While waiting for emergency response, move to a cooler environment, take off any unnecessary clothing, put cool cloths or water on your body, and do not give fluids, especially very cold ones.

General tips for preventing heat – related illnesses

- Drink plenty of fluids. Avoid alcohol and caffeine, and see your doctor about whether you need additional salt.
- Spend whatever time possible in air-conditioned areas, even if only a few hours each day.
- Make sure to eat enough food (light meals).
- When possible, lower activity levels in very hot weather.
- Because the elderly are particularly at risk to the effects of heat, their caretakers should visit at least twice a day and monitor them closely for signs of heat illness.
- Because young children under five years of age are also sensitive to heat's effects, parents and caretakers should be careful not to overdress them, and to give them plenty of fluids.
- Wear a hat when outdoors.
- Exercise early or late in the day.
- Remember, the heat can affect some pets. Ask your veterinarian for advice.
- In cases of heat emergencies, you should call your doctor, or visit your local emergency room.

Who is most at risk for heat related illnesses?

Infants and young children, people over the age of 65, people who have a mental illness, those who are physically ill, especially with heart disease or high blood pressure.

What should I do if I work in a hot environment?

Pace yourself. If you are not used to working or exercising in a hot environment, start slowly and then pick up the pace. Get properly acclimated to the weather (gradually work for longer periods of time in hot weather). If activity in the heat makes your heart pound and leaves you gasping for breath, STOP all activity. Get into a cool area or at least in the shade, and rest, especially if you become lightheaded, confused, weak, or faint. Drink 2 to 4 cups of water every hour; do not wait until you are thirsty.

Where can go for more information?

- Your doctor, nurse or clinic
- The Centers for Disease Control and Prevention (CDC) website at: <http://www.cdc.gov/>
- The Mayo Clinic website at <http://www.mayoclinic.org>
- Burlington County Health Department at 609- 265-5548 or the website at <http://www.co.burlington.nj.us/dept/health>