

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 goosebumps 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

- Wear lightweight, light-colored, loose-fitting clothing.
- Stay in an air-conditioned place as much as possible. 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 going back into the heat.
- Try to limit your outdoor activity to when it's coolest, like morning and evening hours. Rest often in shady areas so your body has a chance to recover.
- Protect yourself from the sun by wearing a wide-brimmed hat, sunglasses, and sunscreen of SPF 15 or higher (apply 30 minutes before going outside). Continue to reapply sunscreen according to the package directions.
- Do NOT leave children or pets in car.
- Avoid hot and heavy meals because they add heat to your body.
- Stay hydrated by drinking plenty of fluids. Do not wait until you are thirsty to drink.
- Avoid sugary and alcoholic drinks – they cause you to lose more body fluid.
- 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 65 years of age or older, people who are overweight, people who overexert during work or exercise, and people who are physically ill, especially with heart disease and 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: <https://www.cdc.gov/disasters/extremeheat/heattips.html>
- Burlington County Health Department at 609- 265-5548 or the website at <http://www.co.burlington.nj.us/health>