## **Beat the Heat**

## Staying Safe in Extreme Conditions

As temperatures soar this summer, it is critical to stay informed and prepared for extreme heat conditions. Use this guide to learn more about extreme heat and find best practices for preventing and treating heat-related illnesses.

#### What is Extreme Heat?

Extreme heat describes temperatures that are significantly hotter than average. Generally, this means temperatures above 90 degrees that last more than two days (Ready.gov). Some areas of the country may never hit 90 degrees this summer, but can still experience heat that feels "extreme" based on their normal weather conditions. High levels of humidity can make outdoor temperatures feel even hotter.

Extreme heat also causes stagnant air, which can lead to higher air pollution and decreased air quality. Navigating poor air quality requires taking additional precautions beyond what's included in this guide. Find best practices for protecting your health during periods of poor air quality in the Public Health Communications Collaborative's "Understanding Air Quality" guide.

#### What Causes Heat-Related Illness?

Heat-related illness occurs when a person's body temperature rises faster than it can cool itself down. Many factors can increase body temperature during extreme heat, including dehydration, living and working in spaces without air conditioning, and intense physical activity.

## Who is Most Affected by Heat-Related Illness?

The following groups are most likely to experience a heat-related illness during high temperatures.

- People who work outside, kids, and athletes are more likely to be physically active for long periods of time when it is hot outside.
- Infants, young kids, and pets rely on caregivers to keep them in safe temperatures during extreme heat.
- Adults aged 60 years and older do not adjust as well to sudden temperature changes as younger people.
- People without air-conditioned houses or cars are less equipped to maintain a safe temperature in their living spaces. Likewise, many people who work in places without air conditioning do high-energy tasks in extreme temperatures. For example, many factories, warehouses, and delivery vehicles do not have air conditioning.
- People in hotter parts of the country are exposed to extreme heat more frequently than others.
- People with chronic health conditions can be less likely to sense and respond to changes in temperature and more likely to take prescription medicines that impact how their body regulates its temperature and sweat.
- People with reduced mobility and people with limited access to transportation are less able to travel to an air-conditioned location.
- Pregnant people's bodies must work harder to cool themselves and their baby. Pregnancy can also cause dehydration, which increases the risk of heat-related illness.

#### **Preparing for Extreme Heat**

During periods of extreme heat, your body has to work harder to keep you cool. Use these tips to prepare for extreme heat and stay safe when it is hot outside.





<b>⊘</b> Do	× Don't
<b>Drink water</b> throughout the day—approximately 8 ounces every 15 to 20 minutes.	<b>Don't choose sugary drinks</b> (soda, juice, sports drinks), energy drinks, or alcohol instead of water.
Take cool showers or baths to reduce your body temperature.	<b>Don't use the oven frequently</b> , as it can raise the temperature in your home.
Use an air conditioner to cool your home, if possible.  If your home does not have air conditioning, you can cover windows with drapes or shades, and add weatherproofing strips around windows to keep in cool air. Close your windows when it's hotter outside than inside. If it's cooler outside and the air quality is good, consider opening the windows and turning on an exhaust fan or window fan, which will help remove hot air and replace it with cooler air.  If you are unable to afford your cooling costs, contact the Low Income Home Energy Assistance Program.	If possible, don't rely on cooling fans as a primary cooling device. They create airflow and may increase your comfort level, but do not necessarily reduce temperatures.
When possible, <b>stay in a cool, indoor space</b> . Identify air-conditioned places in the community, such as libraries, shopping malls, or a cooling center offered by your local public health department.	Don't do high-energy activities outdoors during periods of extreme heat. If you have to be outside or work outside, try to avoid the hottest part of the day (approximately 3–4 p.m.) and take frequent breaks in the shade or in air conditioning to rest and hydrate.
Check on neighbors, older people, or loved ones who may not be prepared for extreme heat conditions, or may be at higher risk for heat-related illness.	Don't leave pets or children unattended in cars. If you need to take your pets outside, try to avoid dark asphalt or pavement that can burn their paws.
If you are outside, find shade and wear loose-fitting, lightweight, and light-colored clothing.  Wear a hat to cover your face and head. Apply sunscreen with SPF 15 or higher and UVA and UVB (broad-spectrum) protection every 2 hours.	Don't use sunscreen as your only defense against extreme heat. Sun protection keeps your skin safe but doesn't reduce body temperatures.

# Signs of Heat-Related Illness and What To Do If You're Experiencing Symptoms

Knowing if you're experiencing the symptoms of heat-related illness—and what actions to take next—is essential to protecting your health during extreme heat.

Heat-Related Illness		Symptoms	What to Do
MODERATE	Heat Rash	Red clusters of small blisters that look like pimples on the skin (usually on the neck, chest, groin, or in elbow creases)	<ul> <li>Stay in a cool, dry place and keep the rash dry.</li> <li>Use cornstarch, arrowroot powder, or oat flour to soothe the rash.</li> </ul>
	Sunburn	<ul> <li>Painful, red, and warm skin</li> <li>Blisters on the skin</li> </ul>	<ul> <li>Stay out of the sun until your sunburn heals.</li> <li>Put cool cloths on sunburned areas or take a cool bath.</li> <li>Put moisturizing lotion or aloe on sunburned areas.</li> <li>Do not break blisters.</li> </ul>
	Heat Cramps	Heavy sweating during intense physical activity, in addition to muscle pain or spasms	<ul> <li>Stop physical activity and move to a cool place.</li> <li>Drink water.</li> <li>Wait for cramps to go away before you do any more physical activity.</li> </ul>
SEVERE	Heat Exhaustion	Heavy sweating, in addition to:  Cold, pale, and clammy skin Fast, weak pulse Nausea or vomiting Muscle cramps Tiredness or weakness Dizziness Headache Fainting (passing out)	<ul> <li>Move to a cool place, loosen your clothes, and sip water.</li> <li>Put cool, wet cloths on your body or take a cool bath.</li> <li>Get medical help right away if you are throwing up, your symptoms get worse, or your symptoms last longer than 1 hour.</li> </ul>
	Heat Stroke	<ul> <li>High body temperature (103°F or higher)</li> <li>Hot, red, dry, or damp skin</li> <li>Fast, strong pulse</li> <li>Headache</li> <li>Dizziness</li> <li>Nausea</li> <li>Confusion</li> <li>Losing consciousness (passing out)</li> </ul>	<ul> <li>Call 911 right away—heat stroke is a medical emergency.</li> <li>Move the person to a cooler place.</li> <li>Help lower the person's temperature with cool cloths or a cool bath.</li> <li>Do not give the person anything to drink.</li> </ul>

 $\underline{\textbf{Source: Symptoms of Heat-Related Illnesses-Centers for Disease Control and Prevention}}$ 

A note about sweating: Sweating is a common—and often normal—bodily response to exercise, physical activity, or being in hot indoor and outdoor spaces. But during periods of extreme heat, if excess sweating is paired with any other symptoms of heat cramps or heat exhaustion, pause and follow the recommendations above.

For more information, visit the following resources:

- Protecting Against Extreme Heat: Health Action Alliance
- Check Your Local HeatRisk: U.S. Centers for Disease Control and Prevention