

# It's HOT out there!

## Sizzling facts

**Over-exposure to heat kills more Americans each year than do hurricanes, lightening, tornadoes, floods, and earthquakes combined.** An average of 300 people annually.

**Heatstroke** (also called sunstroke) **can cause death or permanent disability.** Seek medical attention immediately.

**Heatstroke can occur very quickly, within 10 to 15 minutes.** If the body can't adequately cool itself for too long, body temperature can suddenly zoom to the danger point, 103 degrees Fahrenheit or higher.

Unlike heat exhaustion, characterized by profuse perspiring and clammy, cool, pale skin, the more dangerous **heatstroke is characterized by lack of perspiration and dry, warm, red skin.**

**High humidity and little air movement increase the risk of heat exhaustion or heatstroke.** Evaporation of sweat is our bodies' primary cooling mechanism. On still, humid days, sweat evaporates slowly. •

WORKING OUTDOORS during the hot, muggy, dog days of summer can be hazardous to your health. If your body gets overheated and isn't cooled adequately through the evaporation of perspiration, you can get very—even dangerously—sick.

**Heat rash** is simply uncomfortable and annoying. **Heat exhaustion** is more serious and should be treated promptly to avoid the most dangerous heat-related illness, **heatstroke**. Symptoms and treatment for these conditions are listed on the following page.

### Who's at risk?

*Everyone* who works (or plays!) in the heat and humidity can suffer from heat-related trauma. If you have any of the following conditions, however, you're particularly susceptible:

- Obesity. Or just some extra pounds. (Your body's already stressed.)
- Heart disease or poor circulation. (Ditto.)

- Several days' exposure to high temperatures and inadequate fluid intake.
- Sunburn.
- Illness and/or fever.
- Prescription drugs. (Check with your pharmacist to determine if your medications could affect your body's response to heat.)

### Supervisors

On blistering days help your workers stay healthy. Provide a heat-safe work environment and schedule, as outlined below.

### For more information

Learn more about heat-related illnesses through the National Center for Environmental Health's website, which provided much of the information for this article. NCEH is a program of the Centers for Disease Control and Prevention (CDC), an agency of the Department of Health and Human Services. [www.cdc.gov/nceh/hsb/extremeheat/](http://www.cdc.gov/nceh/hsb/extremeheat/). •

## Protect and prevent

TAKING A FEW SIMPLE precautions in hot weather will protect most people from heat-related illness:

**Drink, drink, drink**—water, fruit juice, or sport drinks—up to a quart an hour. (*Don't* wait until you're thirsty to drink. No alcohol or caffeine, light on the sugar. Avoid very cold drinks when you're hot; they can cause stomach cramps.)

**Wear** lightweight, light-colored, loose-fitting clothing with long sleeves and pantlegs, a wide-brimmed hat, sunglasses, and a broad-spectrum sunscreen.

**Slow down.**

**Avoid** extremely strenuous activity in the heat.

**Rest** frequently in cool, shaded areas.

**Use** fans, ventilation, and air conditioning whenever possible. (A few hours in air conditioning can help your body stay cooler when you return to the hot outdoors. Don't work in hot, unventilated environments.)

**Limit** outdoor work to morning and evening hours.

### Be a buddy

Different people tolerate heat to varying degrees. Keep an eye on your co-workers. If they display symptoms of heat exhaustion or heatstroke, listed in the table, take immediate action. •

	Heat rash	Heat exhaustion	Heatstroke (sunstroke)
Definition	Skin irritation caused by excessive sweating	Illness due to overheated body, sometimes following several days' exposure to high temperatures and inadequate fluid intake. Monitor victim closely!  If untreated, may progress to heatstroke.	<b>Life-threatening</b> medical emergency caused by excessive, and often sudden, rise in body temperature when the body cannot cool itself. The fever can permanently damage internal organs or cause death.
Symptoms	<ul style="list-style-type: none"> <li>- Red clusters of pimples or small blisters</li> <li>- Commonly affects neck, upper chest, groin, and elbow creases.</li> </ul>	<b>Symptoms may include any or all of these.</b>	
		<ul style="list-style-type: none"> <li>- Tiredness, sluggishness, weakness (<i>often early symptoms</i>)</li> <li>- Heavy sweating</li> <li>- Pale, cool, clammy skin</li> <li>- Nausea</li> <li>- Headache</li> <li>- Muscle cramps</li> <li>- High body temperature</li> </ul>	<ul style="list-style-type: none"> <li>- Extreme confusion, dizziness, disorientation; incoherent speech</li> <li>- Unconsciousness</li> <li>- No sweating</li> <li>- Red, hot, dry skin</li> <li>- Nausea</li> <li>- Throbbing headache</li> <li>- Strong, rapid pulse</li> <li>- Small pupils</li> <li>- Extremely high fever</li> </ul>
Core Body Temperature	<i>Normal</i>	<i>Up to 102° F</i>	<i>Can occur =&gt; 103° F</i>
Treatment	<ul style="list-style-type: none"> <li>- Keep affected area dry</li> <li>- Provide a cooler, drier environment</li> <li>- Use dusting powder to ease discomfort</li> <li>- Don't use ointments or creams</li> </ul>	<b>Do not administer alcohol rub or fever-reducing medication.</b>	
		<p>(Unless he's fainted, someone with heat exhaustion can treat himself.)</p> <ul style="list-style-type: none"> <li>- Drink, drink, drink cool (not too cold) beverages (nonalcoholic, no caffeine, low sugar)</li> <li>- Take a cool shower or bath</li> <li>- Move to a cooler area: a shaded or air conditioned environment</li> <li>- Rest</li> <li>- Provide air movement (a breeze, fan)</li> <li>- Switch to lightweight clothing</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Get immediate medical attention</b> on site or transport to emergency room</li> <li>- Lower body temperature immediately by <ul style="list-style-type: none"> <li>- removing clothing</li> <li>- moving to shaded or air-conditioned environment</li> <li>- immersing in cool bath or applying cool, wet towels</li> <li>- increasing air flow</li> </ul> </li> </ul>