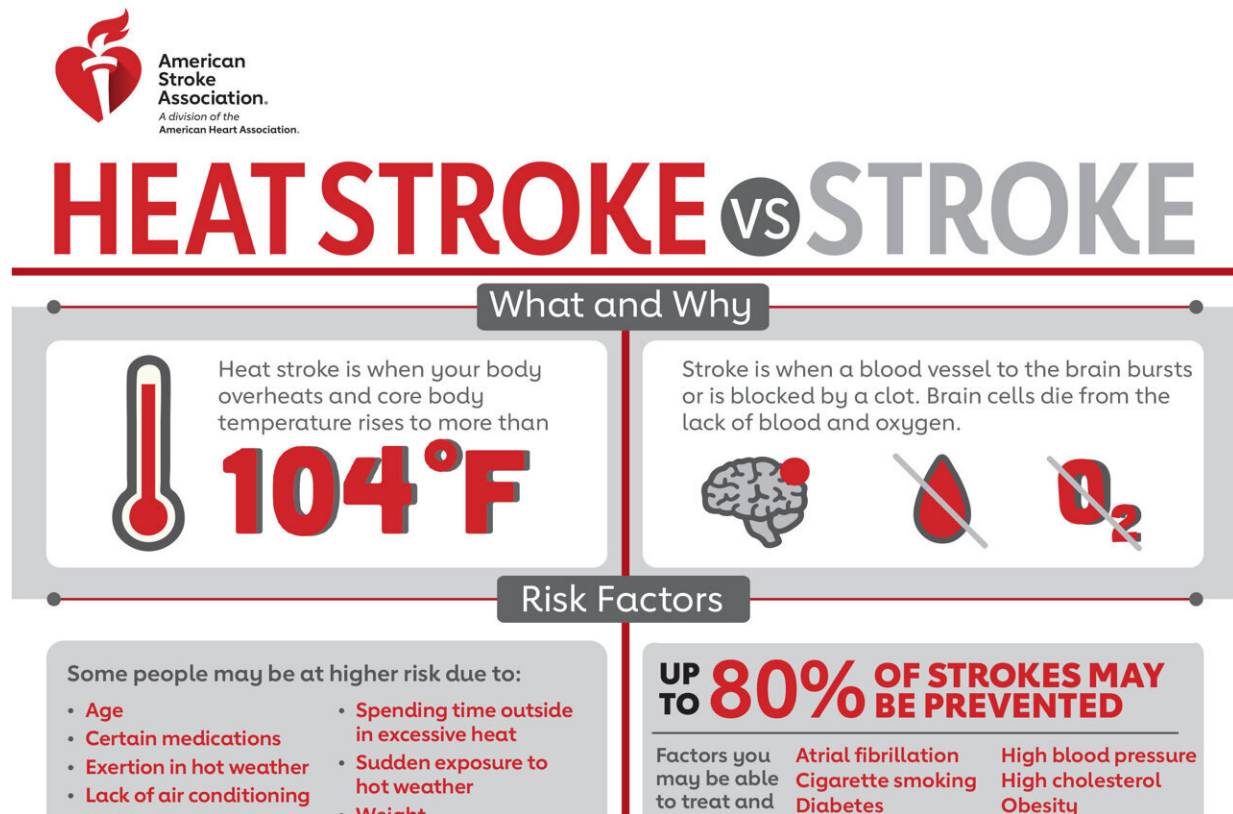


# Extreme heat warning: Keep cool to be heart-healthy when temperatures rise

June 22 2023



**American Stroke Association**  
A division of the American Heart Association.

## HEAT STROKE VS STROKE

### What and Why

**Heat stroke** is when your body overheats and core body temperature rises to more than **104°F**.

**Stroke** is when a blood vessel to the brain bursts or is blocked by a clot. Brain cells die from the lack of blood and oxygen.

### Risk Factors

Some people may be at higher risk due to:

- Age
- Certain medications
- Exertion in hot weather
- Lack of air conditioning
- Spending time outside in excessive heat
- Sudden exposure to hot weather
- Weight

**UP TO 80% OF STROKES MAY BE PREVENTED**

Factors you may be able to treat and

- Atrial fibrillation
- Cigarette smoking
- Diabetes
- High blood pressure
- High cholesterol
- Obesity

Credit: American Heart Association

Mother nature is at it again as record high temperatures are bringing summer heat early this year around much of the U.S., and the American Heart Association, a global force for longer, healthier lives for all, is

urging people to take extra steps to protect their hearts. Precautions are especially important for older adults and people with high blood pressure, obesity or a history of heart disease and stroke.

Temperatures exceeding 100°F or even temperatures in the 80's with high humidity can cause a dangerous heat index that can be hard on the heart. Heat and dehydration cause the heart to work harder, trying to cool itself by shifting blood from major organs to underneath the skin. This shift causes the heart to pump more blood, putting it under significantly more stress. Hydration helps the heart more easily pump blood through the blood vessels to the muscles and it helps the muscles work efficiently.

[Scientific research](#) published in *Circulation*, the flagship journal of the American Heart Association, found that when temperatures reach extremes of an average daily temperature of 109 degrees Fahrenheit, the number of deaths from [cardiovascular disease](#) may double or triple. [Another research study](#), featured at the American Stroke Association's International Stroke Conference 2019, suggests that the more temperatures fluctuate during the summer, the more severe strokes may become.

"While heat-related deaths and illnesses are preventable, more than 700 people in the United States are killed by extreme heat every year, according to the U.S. Centers for Disease Control and Prevention. If you have heart disease or have had a stroke or you're older than 50 or overweight, it's extremely important to take special precautions in the heat to protect your health," said Donald M. Lloyd-Jones, M.D., Sc.M., FAHA, past president of the American Heart Association and chair of the department of preventive medicine, the Eileen M. Foell Professor of Heart Research and professor of preventive medicine, medicine and pediatrics at Northwestern University's Feinberg School of Medicine in Chicago.

"Some medications like [angiotensin receptor blockers](#) (ARBs), angiotensin-converting enzyme (ACE) inhibitors, beta blockers, calcium channel blockers and diuretics, which affect blood pressure responses or deplete the body of sodium, can exaggerate the body's response to heat and cause you to feel ill in [extreme heat](#). But don't stop taking your medicines. Learn how to keep cool and talk to your doctor about any concerns."

Even if you aren't taking medications for a cardiovascular condition, it is important to take precautions in the heat. While infants and the elderly are more vulnerable to problems from heat, extreme temperatures can cause health issues for anyone.

"Staying hydrated is key. It is easy to get dehydrated even if you don't think you're thirsty," Lloyd-Jones said. "Drink water before, during and after going outside in hot weather. Don't wait until you feel thirsty. And the best way to know if you are getting enough fluid is to monitor your urine output and make sure the urine color is pale, not dark or concentrated."

The American Heart Association suggests that everyone follows these top five hot weather precautions:

- **Watch the clock:** It's best to avoid the outdoors in the early afternoon (about noon to 3 p.m.) because the sun is usually at its strongest, putting you at higher risk for heat-related illnesses.
- **Dress for the heat:** Wear lightweight, light-colored clothing in breathable fabrics such as cotton, or a newer fabric that repels sweat. Add a hat and sunglasses. Before you get started, apply a water-resistant sunscreen with at least SPF 15, and reapply it every two hours.
- **Drink up:** Stay hydrated by drinking a few cups of water before, during and after going outside or exercising. Avoid caffeinated

or alcoholic beverages.

- Take regular breaks: Find some shade or a cool place, stop for a few minutes, hydrate and start again
- Follow the doctor's orders: Continue to take all medications as prescribed.

It's important to know the signs and symptoms when you may be experiencing too much heat.

Symptoms of heat exhaustion:

- headaches
- heavy sweating
- cold, moist skin, chills
- dizziness or fainting (syncope)
- a weak and rapid pulse
- muscle cramps
- fast, shallow breathing
- nausea, vomiting or both

If you experience these symptoms, move to a cooler place, stop exercising and cool down immediately by dousing yourself with cold water and re-hydrating. You may need to seek medical attention.

If you experience symptoms of a heat stroke, call 9-1-1 and medical attention right away.

Symptoms of heat stroke:

- warm, dry skin with no sweating
- strong and rapid pulse
- confusion and/or unconsciousness
- high fever

- throbbing headaches
- nausea, vomiting or both

Heat stroke is not the same as a stroke. Stroke happens when a blood vessel to the brain either bursts or is blocked by a clot, causing a decrease in oxygen flow to the brain.

While taking precautions is key, it's still important to find ways for the whole family to stay active in the [heat](#) of summer. Try walking, swimming, biking, skating, jumping rope, building a backyard obstacle course, or organizing a neighborhood soccer game. Even gardening, pushing a stroller or walking the dog counts. Adjusting your activity time to early morning or later in the evening can also help. If being outside is just too much on some days, find indoor locations where you can be active, such as a shopping mall, gym or community recreation center.

It's also important to keep cool as you refuel. Try light, healthy pre- and post-workout snacks that can also help you stay cool, such as:

- Chilled or frozen fruit
- Homemade popsicles made from 100 percent fruit juice
- Fruit smoothies
- Cold salads loaded with vegetables, beans, legumes and [heart](#)-healthy fish like albacore tuna or salmon
- Crisp, chilled raw veggies like cucumber, carrot or celery with a light, cool dip
- Cold sparkling water with a splash of 100% fruit juice or slices of citrus or cucumber

Provided by American Heart Association

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