National Institute on Aging



Irene used to be a schoolteacher. Now retired, she loves to work in her garden. Because she has always spent hours outside, digging, weeding, and planting, she believes the heat and humidity of midwestern summers doesn't bother her. Then last year an unusual heat wave hit her area for a week. Every day the temperature was over 100° F. and the humidity was at least 90%. Irene's house only has one large fan. It just wasn't enough to fight the effect of the heat and humidity on her body. Five days into the heat wave, her daughter came over because Irene sounded confused on the phone. She found her mom passed out on

the kitchen floor. The ambulance came quickly when called, but Irene almost died. She had heat stroke, the most serious form of hyperthermia. Almost every summer there is a deadly heat wave in some part of the country. Too much heat is not safe for anyone. It is even riskier if you are older or if you have health problems. It is important to get relief from the heat quickly. If not, you might begin to feel confused or faint. Your heart could become stressed, and sometimes this causes death.

Your body is always working to keep a balance between how much heat it makes and how much it loses. Your brain is the thermostat. It sends and receives signals to and from parts of your body that affect temperature, such as the spinal cord, muscles, blood vessels, skin, and glands that make

substances known as hormones. Too much heat causes sweating. When the sweat dries from your skin, the surface of your body cools and your temperature goes down. Being in heat for too long can cause many illnesses, all grouped under the name *hyperthermia* (hy-per-ther-mee-uh):

- Heat cramps are the painful tightening of muscles in your stomach area, arms, or legs. Cramps can result from hard work or exercise. While your body temperature and pulse usually stay normal during heat cramps, your skin may feel moist and cool. Take these cramps as a sign that you are too hot — find a way to cool your body down. Be sure to drink plenty of fluids, but not those containing alcohol or caffeine.
- Heat edema is a swelling in your ankles and feet when you get hot. Putting your legs up should help. If that doesn't work fairly quickly, check with your doctor.
- Heat syncope is a sudden dizziness that may come on when you are active in the heat. If you take a form of heart medication known as a beta blocker or are not used to hot weather, you are even more likely to feel faint when in the heat. Putting your legs up and resting in a cool

place should make the dizzy feeling go away.

- Heat exhaustion is a warning that your body can no longer keep itself cool in the hot air surrounding it. You might feel thirsty, dizzy, weak, uncoordinated. nauseated. and sweat a lot. Your body temperature is still normal, and your pulse might be normal or raised. Your skin feels cold and clammy. Resting in a cool place, drinking plenty of fluids, and getting medical care should help you feel better soon. If not, this condition can progress to heat stroke.
- Heat stroke is an emergency it can be life threatening! You need to get medical help right away. Getting to a cool place is very important, but so is treatment by a doctor. Many people die of heat stroke each year.
 Older people living in homes or apartments without air conditioning or good airflow are at most risk. So are people who don't drink enough water or those with chronic diseases or alcoholism.

The Signs of Heat Stroke

- fainting, possibly the first sign,
- body temperature over 104° F,
- a change in behavior confusion, being grouchy, acting strangely, or staggering,
- dry flushed skin and a strong rapid pulse or a slow weak pulse,
- not sweating, despite the heat, acting delirious, or being in a coma.

Who Is at Risk?

Around 200 people die each year during very hot weather. Most are over 50 years old. The temperature outside or inside does not have to hit 100° F for you to be at risk for a heat-related illness. Health problems that put you at risk include:

- Heart or blood vessel problems, poorly working sweat glands, or changes in your skin caused by normal aging.
- Heart, lung, or kidney disease, as well as any illness that makes you feel weak all over or causes a fever.

- High blood pressure or other conditions that make it necessary for you to change some of the foods you eat. For example, if you are supposed to avoid salt in your food, your risk of heatrelated illness may be higher. Check with your doctor.
- Conditions treated by drugs such as diuretics, sedatives, tranquilizers, and some heart and blood pressure medicines. These may make it harder for your body to cool itself by perspiring.
- Taking several drugs for a variety of health problems. Keep taking your prescriptions, but ask your doctor what to do if the drugs you are taking make you more likely to become overheated.
- Being quite a bit overweight or underweight.
- Drinking alcoholic beverages.



How Can I Lower My Risk?

Things you can do to lower your risk of heat-related illness:

- Drink plenty of liquids water ٠ or fruit and vegetable juices. Every day you should drink at least eight glasses to keep your body working properly. Heat tends to make you lose fluids so it is very important to drink at least that much, if not more, when it is hot. Avoid drinks containing caffeine or alcohol. They make you lose more fluids. If your doctor has told you to limit your liquids, ask him or her what you should do when it is very hot.
 - If you live in a home or apartment without fans or air conditioning, be sure to follow these steps to lower your chance of heat problems:
 - open windows at night;
 - create cross-ventilation by opening windows on two sides of the building;
 - cover windows when they are in direct sunlight; and

- keep curtains, shades or blinds drawn during the hottest part of the day.
- Try to spend at least 2 hours a day (if possible during the hottest part of the day) someplace air-conditioned — for example, the shopping mall, the movies, the library, a senior center, or a friend's house if you don't have air conditioning.
- Check with your local area agency on aging to see if there is a program that provides window air conditioners to seniors who qualify.
- If you think you can't afford to run your air conditioner in the summer, contact your local area agency on aging. Or, ask at your local senior center. They may know if there are any programs in your community to aid people who need help paying their cooling bills. The Low Income Home Energy Assistance Program (LIHEAP) is one possible source.

Ask a friend or relative to drive you to a cool place on very hot days if you don't have a car or no longer drive. Many towns or counties, area agencies, religious groups, and senior citizen centers provide such services. If necessary, take a taxi. **Don't** stand outside waiting for a bus.

- Pay attention to the weather reports. You are more at risk as the temperature or humidity rise or when there is an air pollution alert in effect.
- Dress for the weather. Some people find natural fabrics such as cotton to be cooler than synthetic fibers. Lightcolored clothes reflect the sun and heat better than dark colors. If you are unsure about what to wear, ask a friend or family member to help you select clothing that will help you stay cool.

- Don't try to exercise or do a lot of activities when it is hot.
- Avoid crowded places when it's hot outside. Plan trips during non-rush hour times.

What Should I Remember?

Headache, confusion, dizziness, or nausea when you're in a hot place or during hot weather — these could be a sign of a heat-related illness. Go to the doctor or an emergency room to find out if these are caused by the heat or not. To keep heat-related illnesses from becoming dangerous heat stroke, remember to:

- Get out of the sun and into a cool place — it would be best if it is air-conditioned.
- Offer fluids, but avoid alcohol and caffeine. Water and fruit and vegetable juices are best.
- Shower or bathe, or at least sponge off with cool water.
- Lie down and rest, if possible in a cool place.
- Visit your doctor or an emergency room if you don't cool down quickly.

Resources

To find your local area agency on aging look in the telephone book or contact:

National Association of Area Agencies on Aging

1112 Sixteenth Street, NW Suite 100 Washington, DC 20036 202-296-8130 http://www.n4a.org Eldercare Locator: 1-800-677-1116

For information on LIHEAP, contact your state LIHEAP office. For that number, call your local area agency on aging or write or look on the Internet:

Office of Community Services

Administration for Children and Families Department of Health and Human Services Aerospace Building 5th Floor West 370 L'Enfant Promenade, SW Washington, DC 20447 http://www.acf.dhhs.gov/programs/ liheap/liheap.htm The National Institute on Aging has free information on health and aging:

NIA Information Center

PO Box 8057 Gaithersburg, MD 20898-8057 1-800-222-2225 1-800-222-4225 (TTY) http://www.nih.gov/nia





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