Heat Affects Older People More. Here's How to Stay Safe.

If you're over 65, it's important to take high temperatures seriously.

By Dana G. Smith

July 20, 2023

We are experiencing the hottest days in history. Heat waves have blanketed the Northern Hemisphere this week, with temperatures reaching 100 degrees Fahrenheit on three continents.

Extreme heat can be deadly for anyone, but older adults are uniquely vulnerable. In the heat wave that suffocated Europe in the summer of 2022, people age 65 and older accounted for approximately 90 percent of heat-related deaths.

Experts say that three factors combine to increase older adults' risk: biological changes that occur naturally with age, higher rates of age-related chronic diseases and greater use of medications that can alter the body's response to heat.

Here's how to gauge the risk for a heat-related illness for you or a loved one and how to stay safe.

How heat affects an aging body

The human body has two main mechanisms to cool itself: sweating and increasing blood flow to the skin. In older adults, those processes are compromised — they sweat less and they have poor circulation compared with younger adults.

"Because older individuals are not able to release the heat as well, their core temperature goes up faster and higher," said Craig Crandall, a professor of internal medicine specializing in thermoregulation at the University of Texas Southwestern Medical Center. "And we know

that core temperature is the primary driver for heat-related injury and death."

These changes don't suddenly emerge when someone reaches 65; they start gradually in middle age, said Glen Kenny, a professor of physiology at the University of Ottawa. "It's a slow decline," he said. But you start to see noticeable differences "by the age of 40, no question."

Chronic conditions that are more common in old age, most notably cardiovascular disease and diabetes, can exacerbate these issues. A diseased heart isn't able to pump as much blood, further reducing blood flow to the skin. And if the nerves become affected in people with severe diabetes, the body might not receive the message that it needs to start sweating. (Younger people with these conditions are also at a heightened risk for heat-related problems.)

As people age, they also stop feeling as thirsty and so they tend to drink less. In hot conditions, that can cause them to become dehydrated faster, which is "hugely detrimental for temperature control," Dr. Crandall said.

In addition, some older adults, particularly if they have some form of dementia or cognitive decline, may not perceive temperature changes as well. As a result, they won't respond appropriately to heat, both biologically (through sweating) and behaviorally (by moving to someplace cool).

Finally, certain medications can affect people's hydration, blood flow and even the sweat response, so be sure to ask your doctor about any medications you're taking.

Of course, not everyone the same age responds to heat in the same way. Older adults who are physically fit are typically more resilient, Dr. Crandall said, because they have better blood flow and they sweat more than their sedentary peers.

How to stay safe

People often think that heat needs to be extreme (say, over 100 degrees) to cause illness, but in older adults, signs of heat exhaustion can emerge when temperatures are as low as 80 degrees.

"Twenty-year-olds can go out in 80-degree weather for hours and generally be OK," said Dr. Angela Primbas, a geriatrician at U.C.L.A. Health. "That's not true for older adults."

Physical exertion increases a person's risk for heat illness because the body starts to generate even more heat. On hot days, Dr. Primbas said, older adults and people with serious health conditions should limit outdoor activities like walking and gardening to the

cooler mornings and evenings, take frequent breaks and drink plenty of water. Listen to your body, too: If the activity starts to feel harder than normal, that's a signal to stop and find a place to cool down.

Signs of dehydration or heat exhaustion include dizziness, lightheadedness, headache, a racing heart or feeling lethargic. Low energy — if someone is not talking or interacting as much as usual — is especially important to watch out for in people with cognitive impairment, who may not realize how hot they are or be able to express it.

While older adults face unique challenges when it comes to heat, the ways to cool down are the same for any age. If you or a loved one start to experience any of the above symptoms, the best thing you can do is to go somewhere that has air-conditioning, Dr. Kenny said. The indoor temperature doesn't have to be "subzero," he added, just aim for 77 degrees or below. If AC isn't available in the home, check if there's a local cooling center.

In the absence of air-conditioning, water is "extremely helpful in reducing our risk for heat-related injury," Dr. Crandall said. He advised rubbing an ice cube over your skin, spraying yourself with cool water, drenching your shirt, or taking a cool shower or bath.

Whatever you do, take heat seriously. It's the No. 1 cause of weather-related deaths in the United States, and many of those fatalities are preventable.

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A version of this article appears in print on , Section D, Page 7 of the New York edition with the headline: Heat's a Risk For Seniors