

Heat Stroke: Causes, Risks and Prevention

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Transcript

[0:00 Introduction]

Dr. Erin Gallagher: If you think you are safe in the shade this summer, think again. Here's what you need to know about heat stroke. I'm Dr. Erin Gallagher, a family physician and an Assistant Professor in the Department of Family Medicine at McMaster University.

[0:13 Heat stroke and heat exhaustion]

Dr. Erin Gallagher: We run into problems when our bodily processes for cooling off are overwhelmed. Our body maintains a specific temperature, which is regulated by our brain because our organs work optimally at these temperatures. Our body cools off by dilating our blood vessels, bringing that core body heat to our skin's surface to be dissipated into the environment. It's harder to transfer heat from the body with warmer and more humid temperatures.

When you suffer from heat exhaustion, your body's cardiac output is unable to keep up with the rest of the body's systems. You might experience feeling fatigued, lightheaded, a headache, nausea, vomiting, diarrhea, and muscle cramps.

Heat stroke is a more serious medical emergency and includes neurological symptoms like changes in mental and physical behaviours and, in more serious cases, seizures, bleeding disorders, organ failure, coma, and death.

[1:05 Who is most at risk?]

Dr. Erin Gallagher: Young children and older adults are at the greatest risk for heat-related illnesses. Children's bodies aren't efficient at cooling off, and when they're really young, they don't have the same ability to make decisions and physically remove themselves from the heat source. Similarly, older adults are not as efficient in these processes but may also be on certain medications that make them more prone to heat-related illness, particularly medications that influence the heart, blood vessels, and volume of blood in the system, such as a diuretic or a water pill.

[1:34 Prevention]

Dr. Erin Gallagher: Preventing heat-related illness centers around removing yourself from the heat source and staying hydrated. Here are five tips to protect you from heat stroke this summer.

Tip 1: Avoid being outside during the hottest times of the day, typically between 11 and 3, and optimize shaded areas when you're outdoors.

Tip 2: Stay hydrated with regular intake of water even before you start feeling thirsty.

Tip 3: Eat regular and smaller meals with higher water content, like fruits and vegetables.

Tip 4: Avoid or limit certain substances like caffeine and alcohol.

Tip 5: Keep cool by wearing loose, light-coloured clothing. You should also take advantage of wet spaces such as pools, lakes, and splash pads.

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