

Heat injuries on the rise

December 7 2010, By Amy Sutton



Outdoor exercise and physical activity increase the risk for heat-related injuries, including dangerous heat stroke. A new study finds that heat-injury rates are on the rise for all age groups, and football-playing boys are among the most vulnerable.

Part of the problem is people neglecting to take commonsense precautions – like staying hydrated – and knowing when to come in out of the sun.



"There's a lot of attention paid to heat-related injuries in athletes, but we wanted to examine exertional heat-related injuries in a general population and find out what activity they were doing when they experienced it," said Lara McKenzie, Ph.D., lead study author, at the Center for Injury Research and Policy at Nationwide Children's Hospital in Columbus, Ohio.

Unlike classic heat-related injuries, exertional heat-related injuries -including heat cramps, fainting from heat, heat exhaustion, heat stress
and heat stroke from exercise, sports participation or outdoor activities
like yard work – do not require extreme ambient temperatures to cause
injury, according to McKenzie.

Using emergency department admission data from the U.S. Consumer Product Safety Commission, the researchers estimated that a total of 54,983 people sought treatment for exertional heat-related injuries during the 10-year study period.

Exertional heat-related injuries increased about 134 percent between 1997 and 2006. Three-quarters of all exertional heat-related injuries occurred while playing sports or exercising, reports the study in the January 2011 issue of the *American Journal of Preventive Medicine*.

"We're only looking at injuries that were treated in the emergency department. It's probably one slice of a much larger pie, when you consider those that may be treated in urgent care centers, at family physicians or who treat themselves," McKenzie said.

Karen Scharlatt, D.O., a pediatric emergency medicine physician at Phoenix Children's Hospital, said that although the data were interesting, the authors lacked a solid explanation for the increase. She was not affiliated with the study.



Interestingly, climate changes do not appear to play a role. Though rates of exertional heat-related injuries more than doubled during the study period, annual average temperatures during the summer months did not change significantly, McKenzie said.

Researchers also found that nearly half of all injuries occurred among those ages 19 and under, and 48 percent of all exertional heat injuries in boys under 19 happened while playing football.

"Kids don't take the time to keep themselves hydrated and sit down and rest if they're not feeling well. Adults have more awareness of their bodies. Kids don't want to stop doing what they're doing. Make them take breaks and drink water, instead of waiting until they ask. Coaches need to be proactive and have mandatory stopping and hydration sessions," Scharlatt said.

More information: Nelson NG, et al. Exertional heat-related injuries treated in emergency departments in the U.S., 1997–2006. *Am J Prev Med* 40(1), 2011.

Provided by Health Behavior News Service

Citation: Heat injuries on the rise (2010, December 7) retrieved 24 April 2024 from https://medicalxpress.com/news/2010-12-injuries.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.