A CUP OF HEALTH WITH CDC

Beat the Heat

Heat-Related Deaths Among Crop Workers — United States, 1992–2006
Recorded: June 24, 2008; posted: June 26, 2008

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC — safer, healthier people.

[Susan Laird] Welcome to *A Cup of Health with CDC,* a weekly feature of the MMWR, the Morbidity and Mortality Weekly Report. I'm Susan Laird, filling in for your host, Dr. Robert Gaynes.

Working in the great outdoors is a way of life for millions of Americans. During the hot, hazy days of summer, working under the blazing sun can be deadly. Heat-related illnesses claim the lives of hundreds of people each year. Those who work outside are especially at risk.

Dr. Kelly Loringer is a researcher with the National Institute for Occupational Safety and Health. She's joining us today by phone to discuss how outdoor workers can avoid heat-related illness. Welcome to the show, Dr. Loringer.

[Dr. Loringer] Thank you.

[Susan Laird] Dr. Loringer, how many people die each year from heat-related illness?

[Dr. Loringer] From 1992 to 2006, there were 423 occupational heat-related deaths.

[Susan Laird] You conducted a study on heat-related illness in people who work outdoors, with a particular focus on crop workers. What did you find?

[Dr. Loringer] Well, we found that out of those 423 occupational deaths, 68 of them were in crop workers. And that represents nearly a rate of 20 times greater than for all the other U.S. civilian workers who died from heat stroke during that time period of 1992 to 2006.

[Susan Laird] What other outdoor jobs or activities might lead to similar problems?

[Dr. Loringer] Any worker who is working outdoors is potentially at risk for heat-related illness. For example, those who work in construction outdoors would be at risk, those who work on the roadways, those who work in landscaping businesses, or even policemen or other security services who are working outside. And they don't have to be working outside all day long to be at risk. Anytime when they're out there, just even for a short amount of time when it's hot and humid, they're susceptible to getting heat-related illness.

[Susan Laird] Can you tell us what the signs are that someone's getting overheated?

[Dr. Loringer] Yes, well, there are different levels of heat illness, and the first can start out with a heat rash, a prickly heat sometimes people refer to it, just small red blisters on the skin, and heat

cramps are another early sign of a heat illness. Painful spasms in the muscles, in legs, arm, the body and that can also occur with strenuous activity. And then there's heat exhaustion, which is heavy sweating, paleness, fatigue, weakness, dizziness, nausea, vomiting. Heat exhaustion is important to recognize because if that's not taken care of, that can easily lead into heat stroke, which is a medical emergency. If someone is suffering from heat stroke, the immediate medical assistance must be provided; otherwise, death can occur. And some of the symptoms of heat stroke are just red, hot, dry skin. There's no sweating — sweating has stopped — and sometimes if outdoor workers have been sweating a lot, that can be difficult to determine because their clothes are all wet from previous sweat. They can have a rapid, strong pulse, throbbing headache. They can be disoriented — that's usually a good sign — disoriented, confusion; they can be combative or aggressive, have incoherent speech.

[Susan Laird] How can employers help protect their workers from heat-related problems?

[Dr. Loringer] Well, employers can develop and implement a heat stress management program. The program should include several facets. It definitely should include some training — for supervisors and employees alike, for both — to prevent, recognize, and treat heat illness, and of course, this training should be should be in a language and at a literacy level that the workers can understand. Other things the employer should include in a program are a heat acclimatization program; they need to be sure to encourage employees to drink. It's not enough just to have the water there, but they're required, usually by law, to have, but they have to monitor the conditions and make sure that the employees are actually drinking. They need to provide access to shade; it's not just enough to drink water. The body, when the body begins overheating, the most important thing is to have that body cooled down. And water can help with that but they need to be in the shade, air-conditioning preferably, if it's available. Providing prompt medical attention is also very important and even recognizing.Employees need to be able to tell when their their co-worker is suffering maybe from the minor or even more severe effects of heat illness and then provide prompt medical attention. That just may be giving them some water while they're calling 9-1-1 to get more advanced medical care to them.

[Susan Laird] Where can listeners get more information about heat-related illness?

[Dr. Loringer] Listeners can go to the CDC website at www.cdc.gov, and they can click on "E" in the A to Z Index, and then click on "Extreme Heat." And once there, there are other resources for not only occupational or for not only for employers but also for the general public on heat stress and heat-related illnesses.

[Susan Laird] Dr. Loringer, thanks for sharing this information with our listeners today.

[Dr. Loringer] Thank you for having me.

[Susan Laird] That's it for this week's show. Be sure and join us next week. Until then, be well. This is Susan Laird for *A Cup of Health with CDC.*

[Announcer] For the most accurate health information, visit www.cdc.gov or call 1-800-CDC-INFO, 24/7.