

Take precautions to avoid heat-related illness

By Brandi Janssen

Jul 12, 2015

A few summers back, I sat with a group of older farmers during a lunch at the Nelson Pioneer Farm in Mahaska County.

They talked, as farmers do, about the weather and what was happening on their farms. One commented that the heat had really taken a toll on him that year. He found himself getting dehydrated and noticing more fatigue on hot days than in years past.

Some days, he had experienced dizziness after a long period of work, and he was becoming concerned about working on his own out in the heat. Even though he kept a cooler of water in his truck, he found it difficult to drink enough during the day to offset the effects of the weather.

The National Institute for Occupational Safety and Health (NIOSH) reports outdoor workers and individuals over the age of 65 are at high risk for heat-related illness. Physical exertion during hot weather, combined with dehydration can lead to severe health complications.

There are several conditions related to heat stress. They range from heat exhaustion, which can cause heavy sweating, fatigue, dizziness, nausea, muscle cramps or slightly elevated body temperature, to heat stroke, a serious heat-related disorder that can cause hallucinations, chills, confusion and elevated body temperature.

In addition, some people may experience heat rash, a localized skin irritation caused by excessive sweating during hot, humid weather. Fainting from the heat is called heat syncope. This can occur after standing for long periods in the heat or suddenly rising from a seated or lying position.

Sometimes, health professionals recommend people avoid working outdoors during the hottest period of the day. Unfortunately, that advice doesn't always work for farmers who have little choice but to make hay while the sun shines.

People are also reading...

- 1 **All are welcome**
- 2 **Kansas City-area farmers present Super Bowl charcuterie**

3 Winterizing your grain storage: Chief Agri's guide to cold-weather care

4 Squirrel tournament long tradition

Iowa's Center for Agricultural Safety and Health (I-CASH) has just kicked off a series of campaigns that raise awareness about seasonally related health and safety issues. This summer, we're addressing heat stress and sun exposure.

Even though farmers can't avoid working outside in the heat, they can prevent heat stress by taking a few precautions.

First, start your day by wearing light colored, loose-fitting breathable clothing. Cotton is best because synthetic fabrics like polyester do not breathe well. Long sleeves have the added benefit of protecting your skin from sun exposure. If you're working in full sun, a hat with a full brim will not only reduce the sun exposure to your ears and neck, the shade provided by the brim may help you feel cooler.

Second, gradually build up to heavy work during the summer's hottest days. Doing work that is physically intensive on the first hot day of the year could make you more susceptible to heat stress. If you know it is going to be a hot week, build up your work load slowly. This process of acclimatization will help you work safely on the hottest days.

Finally, drink lots of water and don't be afraid to take breaks. Drink before you feel thirsty, about a cup of water every 15-20 minutes. There are 2 1/2 cups of water in a standard 20-ounce bottle, so you should be drinking slightly more than that per hour.

That may seem like a lot of water, but heavy sweating during our humid Iowa summers can quickly lead to dehydration. On average, a person sweats between 27 and 47 ounces, about 4 to 6 cups, of fluid during heavy physical exertion. It's worth it to take regular breaks to consume all that water, preferably in the shade.

On some farms, such as specialty fruit and vegetable operations, it makes sense to avoid the heat of mid-day, such as when harvesting. Both vegetables and workers are stressed when harvest occurs during the hottest periods.

In other cases, like making hay and managing livestock, the work goes on all day long, regardless of the weather. In these cases, take breaks, drink water and wear appropriate clothing to minimize your chances of heat stress.

Brandi Janssen, Ph.D., directs Iowa's Center for Agricultural Safety and Health at the University of Iowa. She can be reached at brandi-janssen@uiowa.edu or 319-335-4190.