

## The Heat is On!

I know this week has offered a much needed break from the Kansas humid heat, but the forecast is offering a reprise of the earlier July misery. That brings to mind the need to be aware of the multiple heat illnesses that can drag us down. The Center for Disease Control (CDC) reports that from 2006-2010 about 2,000 U.S. resident died each year from weather-related conditions with 31% of the deaths attributed to exposure to excessive natural heat.

The most dangerous heat-related illness is **heat stroke**. When the body becomes unable to control its temperature and the body's temperature rises rapidly, the sweating mechanism's failure leads to heat stroke because the body is unable to cool down. The CDC explains that when heat stroke occurs, the body's temperature can rise to 106°F or more within a matter of 10 – 15 minutes. If emergency treatment is not sought out, heat stroke can cause death or permanent disability. Some of the symptoms that accompany heat stroke include: confusion, loss of consciousness, hot and dry skin, seizures, or very high body temperatures (106°F or higher). Call 911 if you suspect you heat stroke for yourself or someone you are out in the heat with. Heat stroke is fatal if not treated immediately.

Another heat-related illness can also have serious effects but is not as severe. **Heat exhaustion** results from the body's response to an excessive loss of water and salt; usually through excessive sweating. Populations that are more prone to heat exhaustion are those who have high blood pressure, work in a hot environment, or are elderly. Symptoms of heat exhaustion include: headache, nausea, dizziness, weakness, irritability, thirst, and heavy sweating, among others. Head to your doctor's office or a clinic for treatment of this heat-related illness.

**Rhabdomyolysis** is another heat-related illness that is a medical condition associated with heat stress and prolonged physical exertion that results in the rapid breakdown, rupture, and death of muscle. When this occurs, electrolytes and large proteins are released into the bloodstream and can cause irregular heart rhythms and seizures as well as damage to the kidneys. Symptoms of Rhabdomyolysis include: muscle cramps/pains, abnormally dark colored urine, weakness, exercise intolerance and asymptomatic (i.e. showing no symptoms at all.) A blood test can verify if you have rhabdomyolysis.

It wasn't until I read through the CDC information that I realized I had possibly experienced heat syncope last week during the Geary County Free Fair. I just thought my random dizzy spells were age (no comments about my age, please!) **Heat syncope** is a fainting episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. When your body has not had much

time to acclimate to a temperature change or you experience dehydration, heat syncope can show the following symptoms: fainting (short duration), dizziness, or light-headedness. Not to worry – with rest, rehydration, and longer exposure to a cooler climate, I feel back at the top of my game this week!

Finally, there are two remaining heat-related illnesses I want to share information on. **Heat cramps** and **heat rash** are also common illnesses that accompany exposure to excessive heat. The symptoms for these two illnesses are more obvious to a person because they can either feel or see the effects more readily. I remember experiencing these when I would get back into training for school sports following a summer of fun. I just basically had to tough out these two illnesses while trying to keep cool and dry.

The best solution to heat-related illnesses is prevention. Here are a few tips to help you prevent sickness in the midst of our hot Kansas summer:

- 1) Drink plenty of fluids – increasing your normal daily consumption. The best fluid to drink is water. It helps your body's cooling system work more effectively. Don't wait until you are thirsty! Thirst is the first symptom of dehydration. CAUTION: If your doctor has limited your daily liquid intake, ask them how much you should drink while the weather is hot.
- 2) Avoid alcoholic and sugary beverages. These types of drinks have the opposite effect that water has – they cause you to lose more body fluid.
- 3) Stay indoors in a cooler environment. If your home doesn't have air conditioning, go to a store or the public library to cool off – even if you can only stay for an hour or two, your body will have time to refresh itself while you read.
- 4) Although an electric fan's swift air can ease the discomfort, when temperatures are in the high 90's, fans will not prevent heat-related illnesses. Taking a cool shower or bath is a better alternative.
- 5) Wear light-weight and light-colored clothing. These reflect the sun away from your body and allow for air to flow over your covered skin.

There are some populations that are more vulnerable to heat-illness than others. Infants and young children, people over the age of 65, people with mental illness, and those who are already physically ill or have a history of heart problems or high blood pressure. These folks should take extra care to find a place to stay out of the heat and limit any outdoor activity to morning or later in the evening.

It is important that you don't ignore what your body is saying to you. Be aware of your comfort level and look for ways to avoid too much exposure to excessive heat. If you are concerned that you are experiencing one of these heat-related illnesses, seek medical attention. Be smart and stay cool! Until next time, keep living resourcefully!