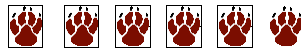




MSU-ES Dawg Tracks

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Safety Tips: Heat Illness & Farm Work



Welcome to Mississippi! Summer is here and the sun is beaming, which is a “heads up” to prepare for the real heat coming down the pipe. Farmers, gardeners, and outdoor enthusiasts spend the majority of their time outdoors - some by choice and occupation, others for pleasure. We need the sun to sustain our crops and pastures, but it can also be terror for us. A “heads up” on the cause, effect and treatment follows:

CAUSES OF HEAT ILLNESS-

Heat illness is the result of one or more of the body’s cooling systems failing to operate correctly. Everyone, young and old, is at risk for heat illness, as well as people with heart and circulatory problems, the obese, people consuming alcohol, drugs or prescription. Also people not acclimated to working in the heat, are at risk. There are several ways that the body has for cooling itself. These are:

- **Conduction** – The heat transfer of two objects in contact with each other. An example is ice contacting with skin.
- **Convection** – The occurrence of air surrounding the skin being replaced by cooler air, which is why fans seem to make it cooler.
- **Radiation** – This happens when the body loses heat to cooler surroundings, which is why air conditioning cools us. When one of these cooling systems fails, the result is heat illness.

TYPES OF HEAT ILLNESS-

- **Heat Rash** – This is the least severe heat illness. This is caused when sweat fails to evaporate from the skin and clogs the pores. Heat rash can develop into an infection. To prevent this from happening, wear lightweight, breathable clothing, such as cotton, and try to keep the skin dry. If heat rash develops, treat it with corn starch and remain in a cool place.
- **Heat Syncope** – Syncope is the same as fainting and usually happens to people not accustomed to the heat. This happens when the body pumps warm blood to the skin surface to remove heat by conduction, convection or radiation. If a person remains still, reducing the blood may pool in the lower part of the body, reducing blood flow to the brain, resulting in fainting. If this should happen, get the victim to a cool place, lie them down, elevate the feet to start blood recirculation to the heart and brain and call a doctor.
- **Heat cramps** – The stomach and legs are usually affected and can be extremely painful. This is caused by the loss of body fluids and electrolytes by sweating, which can upset the body’s chemical balance. Cramps happen after or during physical activity. To treat cramps, drink plenty of water and massage the muscles.

Don’t eat salt tablets!! Doctors used to think that because cramps resulted from our bodies losing water and salt by sweating, the tablets would help prevent them. They now know, however, that too much salt in our system may aggravate heat illness, as it causes the body to retain water.

- **Heat Exhaustion** – This results from the loss of body fluids and salts from sweating and decreased blood flow to the brain and other organs. Symptoms include pale, clammy skin, dizziness, headaches, cramps, nausea or vomiting, weakness, confusion or even unconsciousness. To treat heat exhaustion move the victim to a cool place, elevate their feet and call for medical help immediately. If he or she can drink, give them plenty of cool fluids while waiting for medical help.
- **Heat Stroke** – This happens as a complete failure of the body’s temperature-regulating mechanisms and is a medical emergency. Symptoms include hot, dry skin, a 105 degree temperature or higher, confusion, anger, chills, nausea, dizziness, unconsciousness, convulsions and delirium. The victim falling into a coma is also a possibility. **Heat stroke can be fatal if not treated immediately!** If this should happen in your presence, call for help immediately. Remove the victim’s outer clothing and immerse him or her in cool water. If a pool isn’t available get a sponge or cloth and wipe them with cool water until medical help arrives. Do not give the victim anything to drink.

PREVENTING HEAT ILLNESS –

- Drink water regularly as you work – about every 15 minutes or so. Don’t wait until you are thirsty.
- Avoid alcohol or caffeinated drinks, as they cause a faster dehydration.
- Wear light-weight and loose clothing and light colors that reflect the sunlight.
- Take periodic breaks – try not to push yourself.
- In the spring and early summer, start out slowly and gradually work into the heat. It doesn’t matter how old or young you are or what kind of physical shape your body is in, you can be a candidate for heat illness.

As we stated earlier, heat illness is a potentially fatal disease affecting all of us in the farming industry. If you practice the tips listed above while working outdoors, drink lots of water, take occasional breaks, pace yourself with gradual adjustment to the heat in early spring. That will greatly decrease your chances for heat illness.

Ted Gordon – Risk Mgmt. / Loss Control Mgr.
MAFES / MSU-ES (662) 566-2201
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