

MAFES Dawg Tracks



March 16, 2009 Safety Tips: Heat Illness & Farm Work



Spring is just around the corner, and then we have the great summer months of Mississippi to look forward to. Farmers, because of their occupation, are required to spend the majority of their time outdoors, especially in the spring, summer and fall when it's planting time, spraying, fertilizing and harvesting time.

The sun helps to sustain our crops, but at the same time can be a terror for us. The heat, and the problems it can cause us, is worth a review and a "heads up" each year.

WHAT CAUSES HEAT ILLNESS?

Heat illness is the result of one or more of the body's cooling systems failing to operate correctly. We are all at risk for heat illness; young and old, people with heart and circulatory problems, the obese, people consuming alcohol, drugs or prescription drugs. 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 of this is contacting ice with the skin.
- **Convection** – The occurrence of air surrounding the skin is 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 mechanisms fails, the result is heat illness.

TYPES OF HEAT ILLNESS:

- **Heat Rash** – This is the least severe heat illness. It 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 your skin dry. If heat rash develops, treat it with cornstarch 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, radiation, and convection. If a person remains sedentary or still, the blood may pool in the lower part of the body, reducing blood flow to the brain, resulting in fainting. If this happens, get the victim to a cool place, lie 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 can happen during or after physical activity. To treat the cramps, drink a lot of water and massage the affected 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 through 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 a possibility. **Heat stroke can be fatal if not treated immediately.** If this should happen in your presence, call for medical 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 under medical 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're thirsty.
- Avoid alcohol and caffeinated drinks, as they cause a faster dehydration.
- Wear light-weight, loose clothing and light colors that reflect 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 everyone in the farming community. We can control it while we are working outdoors by drinking a lot of water, take occasional breaks, pace yourself and adjust gradually to working in the heat.

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**PRACTICE PERSONAL SAFETY –
WATCH OUT FOR THE HEAT!**

Quench the thirst – Safety First!!