

MAFES Dawg Tracks



May 7, 2007

Safety Tips: Prevent Heat Stress



It's hot weather time in Mississippi!

Heat stress can and is extremely dangerous, if not controlled. Especially, with pesticide handlers that are outfitted in Tyvex or other protective clothing that don't breathe. Extra caution should be taken to take periods of "cool down" time to protect yourself. No only is it necessary to be careful with pesticide protective clothing, but also by working out in the heat with normal clothing.

Heat stress is a buildup of body heat generated either internally by muscle use or externally by the environment. So, heat stroke or heat exhaustion occurs when the body is overcome with heat. As the heat increases, the body temperature and heart rate rises painlessly. Two degrees increase of body heat can affect metal functioning. Five degrees increase of body heat can result in serous illness or death. During the hot season, heat illness may be the underlying cause of other types of injuries, such as heart attacks, falls, and equipment accidents. Statistics show that more Workers' Compensation claims derive from heat illness from agriculture workers than any other occupation.

The most serious heat related illness is a heat stroke. The symptoms of a heat stroke are confusion, convulsions, irrational behavior, coma, and death. Over 10% of heat stroke victims die, regardless of health or age. Children seem to be more susceptible to heat strain than adults. In some cases, heat strokes have caused heat sensitivity and varying brain and kidney damage. I, personally, have never seen the brain damage or kidney damage, but have seen cases where the person is ultra-sensitive to heat for many years after they experienced a heat alteration.

PREVENTING HEAT STRESS WILL:

- **Protect Health** -- Heat illness is preventable and treatable before it is life threatening.
- **Improve Safety** -- Any degree of heat stress can alter your functioning.
- **Increase Productivity** -- People work slower and less efficiently when they are suffering from heat stress.

KEY ELEMENTS FOR CONTROLLING HEAT STRESS ARE:

- Drink one glass of water every 15 to 30 minutes worked, depending upon the degree of heat and humidity. This is the best way to replace body fluids.
- Read medical labels to know what caused the body to react to the sun and heat.
- Avoid alcohol and drugs. They increase the effects of heat.
- Start in the spring and gradually build up your heat tolerance.

- Take breaks to cool down. It may not be possible sometimes, but 10 minutes every 2 to 2 ½ hours will make a world of difference in your protection.
- Going along with the previous statement, adapt your work and your pace to the temperature of the weather.
- Provide heat stress training to employees and supervisors.
- If possible, use special protective cooling vests under pesticide handling clothing.
- Be familiar with heat stress first aid techniques.

HEAT STRESS FIRST AID:

- Move the victim to a cool place. Remove heavy clothing, if worn. Lightweight clothing poses no problem.
- Use any available means to cool the victim. Ice packs, wet towels or wet fabric, and place them in the areas with ample blood supply, such as the armpits, neck, and groin areas. If wet towels or fabric are used, be sure to keep them wet with cool water.
- To prevent hypothermia, continue cooling the victim until their temperature drops to below 102 degrees Fahrenheit.
- Keep the head and shoulders slightly elevated
- Seek medical attention immediately. All heat stroke victims need hospitalization.
- Take care of seizures, if they occur.
- Do not give the victim aspirin or acetaminophen.

HEAT EXHAUSTION FIRST AID:

- Move the victim to a cool place.
- Keep the victim lying down with their legs straight and elevated 8-12 inches.
- Cool the victim by applying cold packs, wet towels, or wet fabrics. Fan the victim as well.
- Give the victim cold water if he or she is fully conscious.
- If their condition hasn't changed in 30 minutes, seek medical help.

SIGNS / SYMPTOMS OF HEAT STROKE:

- Dry, hot skin
- Very high body temperature.

SIGNS / SYMPTOMS OF HEAT EXHAUSTION:

- Moist clammy skin
- Normal or subnormal temperature

**THE BEST SAFETY DEVICE IS A
SAFE WORKER!!**

Think Smart before You Start!