

MAFES Dawg Tracks



May 5, 2008

Preventing Heat Stress



Some subjects are like our Bibles - we need to study and discuss them daily. I believe heat prevention is surely one that we need to discuss every year, as it seems that our seasons are getting warmer. The honorable Al Gore says that we are experiencing global warming. My opinion is that weather, like other activities, is cyclical and we're in the heat cycle now. Regardless, we all know that the hot time of year is just around the corner for us in the northern part of paradise.

Heat puts our bodies under stress, as does physical activity. Physical activity is another name for farm workers. Heat combines with physical stress to cause loss of body fluids, fatigue and other conditions. It can lead to a number of heat-related illnesses and sometimes death.

Heat stress can occur at any time where the temperature is elevated in your immediate environment. Even in cool weather, you may be working in warm areas, indoors or outdoors. We should be aware of the factors that cause heat stress and the precautions that help to prevent it. There are six main factors that can cause heat stress:

- Temperature
- Humidity
- Movement of air
- Radiant temperature of the surroundings
- Clothing
- Physical activity

If we adjust or control ourselves to these factors, we can reduce the chance of stress. The first thing we should do is to make a gradual adjustment to the heat, which in fancy terms is called acclimatization. We acclimatize to a range of temperatures, but as the heat rises, we need to reacclimatize to the new conditions. As temperatures turn down and get cooler, it is just as important that we adjust to these conditions as well. Although it isn't very popular with the inner sanctum, when the weather begins to sneak up into the 90's, we need to take some precautions to protect ourselves, such as:

- Increase our frequency of breaks for rest and cooling down.
- Look at scheduling the work for early start ups and early afternoon stops during the hottest periods.
- Keep plenty of cold drinking water and electrolyte drinks for those people that rely on them. As mentioned in other areas, good cold water is sufficient to replace the fluids.
- Everyone should acquaint themselves with the symptoms and signs of heat stress.

COMMON SENSE DRESSING PRECAUTIONS SHOULD INCLUDE:

- Wear lightweight clothing, which allows moisture to evaporate.
- Wear a wide-brimmed hat. This will allow the body to reduce the temperatures and give protection from sunburn.

- If you plan to spray and will be wearing a TYVEK suit, be careful that you cool down more often than with regular street clothing. TYVEK limits evaporation, so heat stress could happen more quickly.
- This tip isn't very popular, but does help in heat stress reduction. During the hot times, eat smaller portions at meal time.

RECOGNIZING THE THREE TYPES OF HEAT-RELATED ILLNESSES:

- **Heat Cramps** – Recognizing this condition, the victim will experience painful muscle cramps which are caused by loss of body salt through excessive perspiration. To help prevent them, drink non-alcoholic, caffeine-free fluids while working in a hot environment. Check with your doctor before using salt tablets. Electrolyte beverages, like "Gatorade" or "PowerAde" will accomplish this as well as good cold drinking water. If a person is suffering from **heat cramps**, they should be watched carefully for more signs of heat stress. If they persist, seek medical attention.
- **Heat Exhaustion** – This is a sign of inadequate salt and water intake, which controls the body's cooling system. Symptoms are: heavy sweating, cool and moist skin, weak pulse, blurred vision, irritable or upset, confused and clumsy demeanor. Heat Exhaustion affects the ability to use sound judgment. If you sense this, get medical attention; keep the victim cool until help arrives.
- **Heat Stroke** – This is the deadliest of all heat stress conditions. This occurs (1) when the body's cooling system shuts down, (2) body temperature rises, (3) the skin becomes hot, red, and dry, (4) a fast pulse, and (5) complaints of dizziness and headaches are present. Later stages of **heat stroke** will cause loss of consciousness and may lead to convulsions. If a heat stroke occurs, seek medical attention. Keep the victim cool and offer short sips of cool water while waiting for help.

We can control heat stress if we follow the cautions and tips above. Water is the best defense against heat exhaustion and you should keep plenty of it available in the hot part of the season.

HAVE A GOOD HOT AND HEAT CONTROLLED SPRING AND SUMMER!

**~AS TEMPERATURES RISE~
STAY SAFETY WISE!**

BE ALERT – ACCIDENTS HURT!