WHAT YOU NEED TO KNOW ABOUT HEAT STRESS

Working in hot conditions increases your risk of developing a heat related disorder. This handout highlights what you need to know about heat stress.

HEAT STRESS CAUSES BODY REACTIONS

- Your body reacts to high external temperature by circulating blood to the skin which increases skin temperature and allows your body to give off its excess heat through the skin. However, if your muscles are being used for physical labor, less blood is available to flow to the skin and release the heat.

- Sweating is another way your body maintains a stable internal body temperature in the hot environments. However, sweating is effective only if the humidity level is low enough to permit evaporation and if the fluids and salts lost are adequately replaced.

When your body cannot dispose of excess heat because you are working in high temperatures with high humidity, it will store it. When this happens, your body’s core temperature rises and the heart rate increases. As your body continues to store heat, you will begin to lose concentration and have difficulty focusing on a task, may become irritable or sick and often loses the desire to drink. The next stage is most often fainting and death is possible if the person is not removed from the heat stress.

Signs of heat stress include:
- mental confusion, delirium, loss of consciousness, convulsions or coma
- a body temperature of 106 degrees F or higher
- hot dry skin which may be red, mottled, or bluish.
- extreme weakness or fatigue, giddiness, nausea, or headache
- skin is clammy and moist, the complexion pale or flushed, and the body temperature normal or slightly higher.
- Fainting (heat syncope)

If you suspect a coworker or yourself are experiencing signs of heat stress, call 911!

PREVENTING HEAT STRESS

Most heat-related health problems can be prevented or the risk of developing them reduced. Following a few basic precautions should lessen heat stress.

1. Cooling fans can reduce heat in hot conditions.

2. Drink plenty of drinking water -- as much as a quart per hour

3. Alternating work and rest periods with longer rest periods in a cool area can help workers avoid heat stress. If possible, heavy work should be scheduled during the cooler parts of the day and appropriate protective clothing provided.

4. Acclimatization to the heat through short exposures followed by longer periods of work in the hot environment can reduce heat stress. New employees and workers returning from an absence of two weeks or more should have 5-day period of acclimatization. This period should begin with 50 percent of the normal workload and time exposure the first day and gradually building up to 100 percent on the fifth day.