

# SAFETY TIP OF THE WEEK

## ZERO HARM

### Safety Talk - Heat Stress

Excessive exposure to a hot work environment can cause a variety of heat related physical disorders. To keep internal body temperatures within safe limits, the body sheds excess heat by increasing blood circulation and releasing water onto the skin by the sweat glands. Evaporation of sweat cools the skin, eliminating large quantities of heat from the body. Several internal and external factors affect the ability of the body to control temperature. Internal factors include amount of physical exertion, illness, medication and how accustomed to heat your body has become External factors include air temperature, humidity, types of clothing, and air flow. If the body cannot regulate its internal temperature - physical effects such as heat stroke can occur. As the Humidity or moisture content in the air rises, the evaporation of sweat become less – therefore, the body cannot rid itself of excess heat as well.

#### **Heat related illnesses include;**

Transient Heat Fatigue, Heat Rash & Cramps, Fainting, Heat Exhaustion, and Heat Stroke

**Transient heat fatigue** is a temporary state of discomfort which included both mental and physical strain caused by prolonged exposure to hot environments. Symptoms include a decline in task performance, coordination and alertness. The severity of transient heat fatigue can be lessened by a period of gradual adjustment to the hot environment.

**Heat rash**, also known as prickly heat, occur in hot, humid environments where sweat is not easily removed from the surface of the skin by evaporation. This causes the skin to remain wet most of the time. The sweat ducts become plugged, and a skin rash soon appears. When the rash is extensive it can become complicated by infection This condition can be prevented by resting in a cool place part of each day and by regularly rinsing and drying the skin.

**Heat cramps** are painful spasms of the muscles that may occur during heavy sweating and intake of large quantities of water. Drinking large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Low salt level in the muscles causes painful cramps. The affected muscles may be part of the arms, legs, or abdomen, but tired muscles (those used in performing the work) are usually the ones most susceptible to cramps. Cramps may occur during or after work hours and may be relieved by drinking salted liquids

**Fainting** is caused by lack of oxygen to the brain. People who are not accustomed to hot environments and who stand erect and immobile in the heat may faint. As the body attempts to control internal temperature, the blood vessels in the skin and lower areas become enlarged. Blood then pools in the lower body rather than returning to the heart to be pumped to the brain. After lying down, most people fully recover. Simply moving around can prevents blood from pooling and will prevent fainting from the heat.