Preventing Heat Illnesses

There are steps you as an employer can take to help prevent heat illnesses. A Heat Illness Prevention Program has a number of key elements outlined below.

Designate someone to oversee things

Identify someone trained in the hazards, physiological responses to heat, and controls. This person can develop, implement and manage the program.

Hazard identification

Hazard identification involves recognizing heat hazards and the risk of heat illness due to high temperature, humidity, sun and other thermal exposures, work demands, clothing or PPE and personal risk factors.

Occupational factors that may contribute to heat illness

- High temperature and humidity
- Low fluid consumption
- Direct sun exposure (with no shade) or extreme heat
- Limited air movement (no breeze or wind)
- Physical exertion
- Use of bulky protective clothing and equipment

Water. Rest. Shade.

Ensure that cool drinking water is available and easily accessible. Remember that certain beverages like caffeine and alcohol can lead to dehydration.
Encourage workers to drink a liter of water over an hour. That's about 1 cup every 15 minutes.
Make sure there is a fully shaded or air-conditioned area available for resting and cooling down.

Acclimatization

Acclimatization is the physical change that allows your body to build a tolerance to working in the heat. It occurs by gradually increasing workloads and exposure and taking frequent breaks for water and rest in the shade. Full acclimatization may take up to 14 days or longer depending on the individual.

New workers and those returning from a long absence should begin with 20% of the workload on the first day, increasing incrementally by no more than 20% each subsequent day.

During a rapid change in weather, like a heat wave, even experienced workers should take it easy. On the first day of work in excessive heat , they should do about 50% of the normal work load and time spent in the hot environment. They should do 60% on the second day, 80% on day three, and 100% on the fourth day.

For more information and additional risk management and prevention tools, visit: **fwcruminsurance.com**

Modified work schedules

Altering work schedules may reduce worker's exposure to heat. For instance:

- Reschedule all non-essential outdoor work for days with a reduced heat index
- Schedule the more physically demanding work during cooler parts of the day
- Rotate workers and split shifts, and/or add extra workers
- Work/Rest cycles, using established industry guidelines
- Stop work if the risk of heat illness is too high

Keep in mind that very early start times may result in increased fatigue. Also, early morning hours tend to have higher humidity levels.

Training

Provide training in a language and manner workers understand. This includes information on health effects of heat, the symptoms of heat illness, how and when to respond to symptoms, and how to prevent heat illness.

Monitoring for symptoms

Establish a system to place and communicate to supervisors and workers. You should consider the following when creating an emergency plan:

- What to do when someone is showing signs of heat illness.
- How to contact emergency help.
- How long it will take for help to arrive and training workers on what to do until then
- Consider seeking advice from a healthcare professional while preparing a plan

Engineering controls specific to indoor workplaces

Indoor workplaces may be cooled by using air conditioning or increased ventilation, assuming that cooler air is available from the outside.

Other methods to reduce indoor temperature include:

- Providing reflective shields to redirect radiant heat
- Insulating hot surfaces.
- Decreasing water vapor pressure by doing things like sealing steam leaks and keeping floors dry.
- Using fans to increase the air speed around workers. This will improve the heat exchange between their skin and the air, unless the air temperature is higher than the skin. (Do not increase air speeds above 300 feet per minute because this may actually have a warming effect.

Industrial hygiene personnel can look at the degree of heat stress caused by the work environment and make recommendations for reducing heat exposure.