Heat Illness Prevention

There are a few components of the Heat Illness Prevention Plan that everyone needs to be aware of to stay safe and healthy. This plan is predominately for those employees who work outdoors, but it is also good advice for everyone who spends time outside in the heat.

Water

Is there plenty of fresh, cool drinking water located as close as possible to employees working outdoors? Is there a plan for refilling water containers throughout the day? Enough fresh water should be provided so that each employee can drink at least 1 quart per hour.

Encourage everyone to drink water throughout the day. Cal/OSHA data indicates that even though drinking water was present at most worksites, 96% of those who died due to the heat suffered from dehydration. These are accidents that don't need to happen. Water is a key preventative measure against heat illness.

It is essential to keep water nearby for employees instead of drinks with caffeine and sugar, as these can dehydrate a person even more. Add ice to the water and increase the number of water breaks.

Shade

Is a shade structure available at all times (regardless of the weather) for workers to rest and cool down? Is the shade structure up and ready when the weather forecast is 85°F or higher? Is there a plan in place for checking the weather forecast? You can be prepared and anticipate heat waves by checking the heat index at www.nws.noaa.gov/om/heat/index.shtml.

Access to shade should be provided for at least 5 minutes of rest when an employee believes he or she needs a preventative recovery period. You should not wait until you feel sick to do so.

Shade is defined as blockage of direct sunlight. Shade is sufficient when objects do not cast a shadow in the shaded area and there is sufficient space for the employee to be comfortable. Shade is not adequate when the temperature in the shaded are prevents cooling. You must avoid sources of shade such as metal sheds or parked cars that are hot from sitting in the sun. Also, tractors and other machinery do not qualify as sources of shade and have the potential to create an even greater hazard.

Consider some easy-to-assemble portable sources of shade, such as umbrellas, canopies, or other temporary structures. Buildings, canopies and trees all can qualify for shade as long as they block the sunlight and are either ventilated or open to air movement.

Training

Have you been trained on heat illness? This information is one form of training. If you are working outdoors in the heat, your supervisor may provide additional training.

Have you been following a plan to get used to the hot weather before working full days in the heat? Adjusting to physical activity, or acclimatization, is an important step in preparing for working outdoors during the hot months of the year. Your body needs time to adapt to increased heat and humidity,

especially when you are engaged in heavy physical exertion. Typically, people need 4 to 14 days to adjust fully to significant increases in heat. Cal/OSHA data reveals that most workplace deaths related to heat illness that occur involve new employees who were on the job only one to four days and were unaccustomed to working in hot or humid weather.
There are no specific requirements as to how employees should acclimate, but it is suggested that employees, especially new ones, be allowed to adjust to hot weather by gradually increasing to a full work shift and pace. On very hot days, other good strategies include timing the shift so that more work can be done during cooler parts of the day, increasing the number of water and rest breaks, and using a "buddy system" so that workers and supervisors can monitor each other. Wearing loose fitting, light-colored clothing and a wide-brimmed hat, when it's feasible, provide cooling benefits.

Definitions

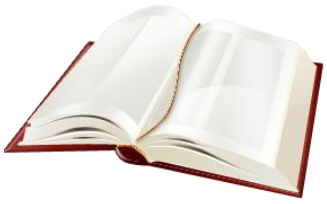
Heat stroke is the most serious health problem for workers in hot environments and is caused by the failure of the body's internal mechanism to regulate its core temperature. Sweating stops and the body can no longer rid itself of excess heat. Victims of heat stroke will die unless treated promptly.
Symptoms include:

- Mental confusion, delirium, loss of consciousness, convulsions or coma;
- A body temperature of 106^{o}F or higher; and
- Hot, dry skin, which may be red, mottled or bluish.

Heat exhaustion results from loss of fluid through sweating when a person has failed to drink enough fluids or take in enough salt, or both. A person with heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea or headache. The skin is clammy and moist, the complexion pale or flushed and the body temperature normal or slightly higher.
Heat cramps are painful muscle spasms and are caused when workers drink large quantities of water but fail to replace their bodies' salt loss. Tired muscles used for performing the work are usually the ones most susceptible to cramps.
Fainting may be a problem when a worker who is not acclimated to a hot environment simply stands still in the heat.
Heat rash (also called prickly heat) may occur in hot, humid environments where sweat is not easily removed from the surface of the skin by evaporation. Heat rash that is extensive or infected can be so uncomfortable that it inhibits sleep and impedes a worker's performance, or can even result in temporary or permanent disability.

If someone displays the symptoms of heat illness, cool them down as quickly as you can by using cool water, cold compresses, etc. If symptoms persist, call 911.

Emergency Plan



Who should be notified in an emergency? You should notify your supervisor and Public Safety. If emergency personnel are needed, Public Safety will guide them to the campus site where the injured worker is located.

Remember:

- **Drink water frequently**
- **Rest in the shade for at least 5 minutes, as needed**
- **Look out for one another and immediately report any symptoms**