Summer Safety & Heat Prevention

EDM Services, Inc.

July 30th, 2010

Heat-Related Illnesses

- **Heat Rash-**
  Symptoms: red, bumpy rash that can be itchy.
  Treatment: Rest in a cool place and keep skin dry and clean.

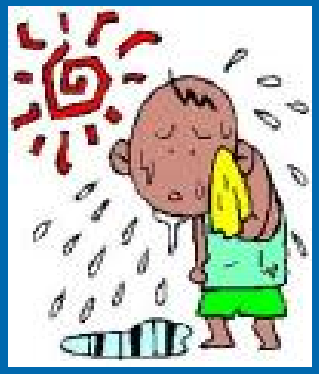
- **Heat Cramps-**
  Symptoms: painful muscle cramps.
  Treatment: Drink electrolyte fluids to replace lost water and salt.

- **Heat Exhaustion-**
  Symptoms: weakness, dizziness, or nausea; clammy skin; complexion pale or flushed; vomiting and loss of consciousness in sever cases.
  Treatment: Rest in a cool place and drink plenty of fluids, preferably electrolyte fluids to replace lost salt as well as body fluids.

- **Heatstroke- (Life Threatening)**
  Symptoms: worker stops sweating; skin hot and dry' confusion, convulsions, and loss of consciousness possible.
  Treatment: Call for an ambulance immediately; remove heavy outer clothing and keep victim cool by soaking clothes with water or spraying clothes with water or spraying with mists of water. Give liquids if conscious.

Working In The Field

- Reschedule outside work when conditions are too hot.
- Take more frequent or longer breaks to prevent from getting overheated.
- Reduce physical demands so that the body doesn't have to work so hard.
- Limit the number of hours worked in the hot sun and pace yourself.
- Allow your body time to adjust to the hot conditions and drink plenty of fluids.

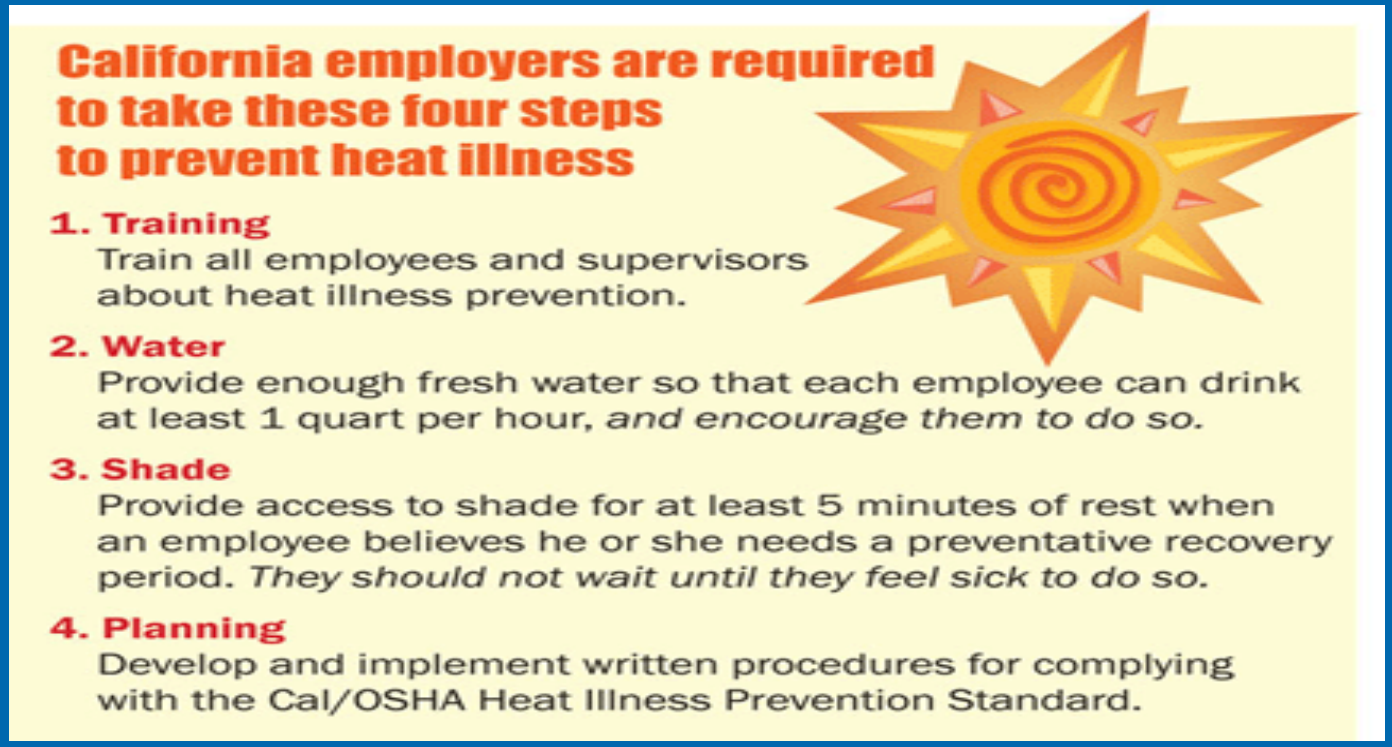


Monitor Your Body

- Heart rate should be within a safe range. About 110 beats per minute at excerption. Resting heart rate after 5 minutes should be lower.
- Body temperature at the end of your shift to ensure it is in safe range should not be anymore than 99.7 degree's Fahrenheit.
- Body water loss by weighing workers at the end of a shift should not be more than 1.5 percent of a worker's total weight. Example if you started your shift weighing 150 lbs, a total weight loss of 2.25 pounds is safe. Anything more than that can lead to dehydration and sickness.

Best Prevention Tips

- Practice Pre-hydration: Before your work starts you should drink up to 16 oz of fluid and drink 8oz every 20 minutes.
- Drink the right stuff. Water vs. flavored water? Do not drink alcohol.
- Become acclimated to the heat slowly.
- Take off the hat. Body heat releases out of the top of the head.
- Wear the right fabric. Loose, thin, white synthetic t-shirts are best.
- Don’t remove PPE (personal protective equipment).



Facts:

- Heat waves kill about 700 Americans each year—more than hurricanes, tornadoes, floods, and earthquakes combined.
- Temps above 90 degrees for several days in a row, risks of heat stroke rise sharply—especially if the weather is humid.
- Humans release body heat by sweating, but hot, humid weather slows sweating.
- Young children and elderly people are at high risk for heat-related illness because their bodies do not adjust readily to changes in temperature
- Hot weather promotes the formation of ground-level ozone, an air pollutant that irritates eyes and lungs and is a major component of smog

State of California CAL OSHA Department of Industrial Relations

Cal/OSHA Heat Illness Prevention for Indoor Working Environments

"5 Must-Train preventive steps"

1. **Frequent drinking of water**
2. **Rest in cooler areas**
3. **Give time to acclimatize**
4. **Know signs and symptoms**
5. **Know emergency steps**

Employers with employees near sources of heat or inside buildings with limited cooling capabilities must ensure that their Injury and Illness Prevention Program is effective and in writing (i.e. work areas with risk of heat illness have been identified and evaluated, and appropriate corrective measures and training have been implemented to protect workers).

Examples include foundries, ovens, dryers, boilers, warehouses without AC.

Title 8 § 3203 (Injury and Illness Prevention Program,) directs employers to address all health or safety hazards within their worksite including heat illness. Other regulations that apply include, but are not limited to: T8 § 3363 Water Supply, T8 § 3400 Medical Services and First Aid.

Cal/OSHA has created this handout to raise awareness about indoor heat illness among employers and workers with a goal of reducing the number of heat illnesses. Cal/OSHA studies reveal that heat illness and even heat fatalities can occur indoors. The studies also show effective reduction of heat illness depends on written procedures, access to water, access to cooler areas, acclimatization and weather monitoring, emergency response and employee and supervisor training.

HEAT ILLNESS PREVENTION STEPS INCLUDE:

Written Procedures:
Per T8 §3203, all preventive steps, methods and procedures used by the employer to address indoor heat illnesses must be stated in the company's Injury and Illness Prevention Program (IIPP). These written procedures must indicate how to conduct worksite evaluation, how conditions or practices will be corrected if necessary, and how information is to be communicated to workers.

Frequent Drinking of Water:
Water is a key preventive measure against heat illness. Employers need to facilitate and encourage the frequent drinking of water, and to be on the lookout for work situations that interfere with access to water, especially during a heat wave!

Resting in Cooler Areas:
Rest breaks provide time for cooling and the opportunity to drink water. Workers must have access to rest breaks in cooled or air conditioned areas and away form the sources of heat, particularly during a heat wave!

Acclimatization and Weather Monitoring:
Acclimatization is a gradual and temporary adjustment of the body to work in the heat. People need several days to adjust when working conditions are significantly hotter than they are used to. The weather is another significant factor and requires monitoring by employers and supervisors. Institute additional water and rest breaks during a heat wave. Indoor workers face a higher risk of heat illness during periods of high temperatures, if they are working in a building that is not temperature controlled.

Being Prepared for Emergencies:
Written procedures must include steps to be followed in an emergency, which will ensure a rapid effective response, including instructing workers on how to reach 911 despite possible language barriers, how to give instructions to find the worksite and how to administer first aid while an ambulance is in route.

Employee and Supervisor Training:
All workers and supervisors need to know about the importance of frequent drinking of water and resting in cooled areas, the signs and symptoms of heat illness, how to respond and who to report to when someone feels sick and may need to go to the hospital. A Cal/OSHA heat illness study revealed that supervisor training made a significant difference in the outcome of heat illness cases: victims whose supervisors were not trained on heat illness prevention were twice as likely to die as victims whose supervisors had received training. Hence, the effectiveness of your Heat Illness Prevention Procedures depends greatly on how you train your supervisor.

For more information call 1-800-963-9424 or go to www.dir.ca.gov/dosh **08-00602**