HEAT ILLNESS

Requirements

- Title 8, section 3395
- District’s Heat Illness prevention Plan
- AP4032 – Operation of Schools During Hot Weather
- Landscapers, Maintenance and athletic personnel are covered by this standard
Components of Heat Illness Prevention

- Access to water
- Access to shade
- Written procedures including emergency procedures
- Training

Heat Can Be Fatal

- In California
  - 2012 – 4 fatalities
  - 2013 – 5 fatalities

- In US
  - 2012 – 25 fatalities
  - 2013 – 19 fatalities
What is Heat Illness

- The body’s inability to cool itself
- The body normally is able to cool itself by sweating
- During hot weather, especially with high humidity sweating by itself is not enough
- Body temperature can rise to a dangerous level if precautions are not taken
- Heat illnesses include heat rash, heat cramp, heat exhaustion and heat stroke being the most extreme

Environmental Factors

There are several environmental factors that can effect the amount of stress a worker can experience in a hot environment.

- Temperature
- Humidity
- Air Velocity
- Radiant Heat
Who is at Risk?

- Workers exposed to hot & humid conditions are at risk of heat illness, especially those doing heavy work tasks or using bulky protective clothing and equipment.
- Some workers may be at greater risk if they have not built up a tolerance to hot conditions.

Where is the Water?

Access to sufficient amounts of cool potable drinking water shall be available at all times regardless of outdoor temperature.
Keeping Hydrated

- Drink at least one quart per employee per hour for the entire shift
- Avoid coffee, tea and other caffeinated beverages that can dehydrate the body
- Don’t wait until you’re thirsty to drink water

Take a Break

- Take frequent breaks in the shade or air conditioned areas
- Have areas of shade available at all times
Access to shade at school sites is readily available – use it

- At undeveloped location – vacant lots provide shade by using:
  - Umbrellas
  - Canopies
  - Other portable devices

- Structures or objects that may block sun but which also contain heat, such as an automobile without the air-conditioning turned on, do not qualify as shade

Shade Areas

Check the Weather Report

- Job pre-planning should include tracking the weather
- Weather information should be used to modify work schedule, increase the number of water/rest breaks or cease work early if necessary

WWW.NWS.NOAA.GOV
Or
WWW.TEATHER.GOV
Heat Safety App is available for several different types of phones

Procedures During High Heat

For personnel that must work at one of the undeveloped or unstaffed district sites the following must be in effect:

- Ensure effective communication takes place by
  - Verbal
  - Observation
  - Electronic means

- Observing employees for alertness and signs or symptoms of heat illness

- Reminding employees throughout the shift to drink plenty of water

- Close supervision of a new employee by a supervisor or designee for the first 14 days of the employee's employment
Acclimatization

- Newly hired employees need time to acclimate during periods of heat
- Modify the work schedule or reschedule non-essential duties during hot summer months
- Know how to recognize immediately signs/symptoms of heat illness

Heat-related illness is Preventable
- Stay somewhere cool
- Drink plenty of water
- Avoid sugar, alcohol & caffeinated beverages
- Wear light weights, light colored clothing

Warning Signs

<table>
<thead>
<tr>
<th>Heat Exhaustion</th>
<th>Heat Stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paleness</td>
<td>Extremely high body temp (103° F+)</td>
</tr>
<tr>
<td>Tiredness</td>
<td>Red, hot, dry skin (with no sweating)</td>
</tr>
<tr>
<td>Weakness</td>
<td>Rapid, strong pulse</td>
</tr>
<tr>
<td>Dizziness</td>
<td>Throbbing headache</td>
</tr>
<tr>
<td>Headache</td>
<td>Dizziness</td>
</tr>
<tr>
<td>Fainting</td>
<td>Nausea</td>
</tr>
<tr>
<td>Muscle Cramps</td>
<td>Confusion</td>
</tr>
<tr>
<td>Heavy Sweating</td>
<td>unconsciousness</td>
</tr>
<tr>
<td>Nausea or vomiting</td>
<td></td>
</tr>
</tbody>
</table>

Watch Out
If left untreated, heat exhaustion can progress into heat stroke
Seek medical attention immediately once you recognize the symptoms
First-Aid for Heat Exhaustion

- Move to a cooler location
- Drink cool (not icy) water – take small sips
- Loosen clothing and apply cool, wet towels to the body
- If vomiting do not give any more fluids
- Seek medical attention immediately!

First-Aid For Heat Stroke

- Have person lie down
- Apply cold compresses
- Move them to a cooler location
- Use fan to lower temperature
- Seek Medical Attention
Remember the Following

- Wear lightweight, light colored clothing
- Use sunscreen, hat and sunglasses
- As strain from heat increases, body temperature and heart rate can rise rapidly
- Exposure to heat can be serious no matter what the age
- Drink plenty of water throughout the day
- Know what to do when a worker exhibits signs and symptoms of heat illness

Don’t Let It Come Down To This

Have Any Questions?

Have any questions? Contact the safety Office at 858-627-7348 or go to the Safety Management Website

More information can be found on the following websites

- OSHA
  https://www.osha.gov/SLTC/heatillness/index.html
- CA-OSHA
  https://www.dir.ca.gov/dosh/heatillnessinfo.html
- Center for Disease Control
  http://www.cdc.gov/extremeheat/