HEAT STRESS: PROTECTING YOUR EMPLOYEES AND COMPLYING WITH CALIFORNIA'S STRICT REQUIREMENTS

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Regional Sales Manager, Portacool
Heat Stress Agenda

- Recognizing heat stress factors and illnesses
- Hydration
- Site assessment
- Heat stress program and New OSHA standards
- Review / Q&A
Why/How do we protect our employees?

- Law
- Productivity/Accuracy
- Greatest Asset
- Morale/Thank you

- Understand
  - Heat stress, their environment, and the upcoming regulations
- Train
  - What to do before heat exhaustion or worse happens
- Assess
  - Your current HIPP and where you can improve
- Mandate
  - Protect our workers from themselves
Heat Stress Factors

MAJOR FACTORS CONTRIBUTING TO HEAT STRESS
+ HIDDEN FACTORS

- Weather
  Air temperature, humidity, air speed, radiant surfaces

- Isolation
  Working alone and/or remote locations

- Clothing
  PPE

- Work Rate
  Strenuous work, when and how often breaks scheduled

- Monitoring & Controls
  Reactive controls, poor monitoring, wrong choice of heat stress variables / indices to monitor

- The Individual
  Acclimatisation, age, medical conditions

- Education
  Lack of knowledge on signs of heat stress & dehydration, amount of water to drink

- Culture
  Working without breaks, drinking energy drinks & alcohol
Importance of Hydration

- Self Regulation
  - You know your body best
- Alarms/Timers reminding self or workers to hydrate
- The body can lose up to one quart of water per hour
- Your thirst will NOT replace the water you’re losing
- 5-7 ounces of fluids every 15 min.
- MUST replace your minerals with electrolyte drinks
# Heat Related Illnesses

<table>
<thead>
<tr>
<th>Heat Illness</th>
<th>Description</th>
<th>Treatment</th>
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<tbody>
<tr>
<td><strong>Heat Rash</strong></td>
<td>Itchy Skin</td>
<td>Keep skin clean and dry</td>
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<td></td>
<td>Prickly and swollen skin</td>
<td>Rest in cool area</td>
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<td></td>
<td>Sweat gland plugged</td>
<td>Drink water</td>
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<td></td>
<td></td>
<td>Keep clothes dry</td>
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<td><strong>Heat Cramps</strong></td>
<td>Muscle cramps in legs</td>
<td>Rest breaks in cooler environment</td>
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<td>Muscle cramps in stomach</td>
<td>Drive water</td>
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<td></td>
<td>Salt loss from excessive sweating</td>
<td>Remove PPE and loosen clothing</td>
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<td></td>
<td>Have worker lie down</td>
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<tr>
<td><strong>Heat Exhaustion</strong></td>
<td>Fatigued</td>
<td>Rest in cool area</td>
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<tr>
<td></td>
<td>Tired</td>
<td>Drink water</td>
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<tr>
<td></td>
<td>Weak</td>
<td>Have worker lie down, knees raised</td>
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<td></td>
<td>Dizzy</td>
<td>Seek medical aid</td>
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<td></td>
<td>Clammy skin</td>
<td>Notify supervisor</td>
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<tr>
<td><strong>Heat Stroke</strong></td>
<td>Life threatening &gt; 105°</td>
<td>Seek immediate medical attention</td>
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<td>Vital functions break down</td>
<td>Rest in cool area</td>
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<td></td>
<td>Can result in permanent brain damage or death</td>
<td>Loosen clothing</td>
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<td></td>
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<td>Put damp sheets over person</td>
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<td>Create air movement to reduce core temp</td>
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<td></td>
<td>DO NOT place under extreme cold</td>
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<td>Call ambulance</td>
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</table>
Site Assessment - Discovery

- Ideal Outcome
- What they do?
- 3 Things
- Critical Areas
- Air Flow
- Heat Mitigation
- Equipment
- Current Cooling Equipment
Site Assessment - Recommendation

- Existing conditions to improve
- HIPP recommendation
- PPE
  - Cooling Vests, cooling towels, reflective clothing,
- Engineering controls
  - Fans, air conditioners, misters, evaporative coolers
Heat Related Indoor OSHA Standards - New

State of California - Department of Industrial Relations
Heat Illness Prevention in Indoor Places of Employment
Advisory Meetings
General Industry Safety Orders
Chapter 4, subchapter 7, new section

If you have questions regarding these meetings, please contact Amalia Neidhardt at (916) 574-2993.

April 22, 2019
Revised Draft Standard

After careful review of the comments received on the draft standard posted on January 29, 2019, further revisions have been made. Cal/OSHA is preparing rulemaking documents based on this draft. No further changes prior to rulemaking are anticipated.

Revised draft standard 2019.4.22
https://www.dir.ca.gov/dosh/doshreg/Heat-illness-prevention-indoors/
Heat Related Indoor OSHA Standards - New

Scope and Application.

(1) This standard applies to all indoor work areas where the temperature equals or exceeds 82 degrees when employees are present.

(2) Conditions under which an indoor work area is subject to subsection (e):
   (1) (A) The temperature equals or exceeds 87 degrees when employees are present; or
   (2) (B) The heat index equals or exceeds 87 degrees when employees are present; or
   (3) (C) Employees wear clothing that restricts heat removal and the temperature equals or exceeds 82 degrees
   (4) (D) Employees work in a high radiant heat work area and the temperature equals or exceeds 82 degrees.

Other requirements of the draft standard would include:

HIPP (Heat Illness Prevention Program)
Emergency Response Procedures
Recording of daily temperatures and heat index
Acclimation
H2O and Cool down areas below 82 degrees
Administrative or engineering controls to be below standards limits
Recap / Q&A

- Education/Information
- Site assessment
- HIPP & OSHA

Thank you