HEAT ILLNESS PREVENTION TRAINING

2014

Risk Management/Environmental Health & Safety
Convey requirements of 8 CCR 3395.

Training must be provided to all field personnel supervisory and non-supervisory employees.

Identifying, evaluating and controlling exposures, symptoms, control measures, the importance of drinking water, risk factors, emergency procedures, and University procedures.
Working conditions that create a possibility for heat illness:

- Working in direct sunlight
- Temperature above 85 deg. [Cal OSHA Trigger]
- Elevated humidity
- PPE that slows cooling
- Workload & Duration
Heat Index Chart
What do YOU Need?

- Water
- Shade
- Rest
Risk Factors

- Unaccustomed to working in heat.
- Physical exertion - work at a pace that can be sustained.
- Medications.
- Wearing PPE that traps body heat.
- Overweight generates more heat.
- Over age 65, may have less body water and lower sweat efficiency.

Work Together when possible, especially in remote Areas.
Employers required to provide sufficient access potable water at the beginning of the work shift.

Provide one quart per employee per hour per shift.

- 1 quart X 8 hrs. = 2 Gallons for every employee/day.

- 1 quart = 2 pints
Drink water **before** and **during** work in the heat. Electrolyte drinks are OK. Other beverages will not replenish your body!

Avoid alcohol, sugary, carbonated and caffeinated drinks.
Employees … “suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes.”

(Cal OSHA)

…such access to shade shall be permitted at all times…
5-Minute cool-down rest period per hour.

Alternate cooling methods if shade is not readily available.

> 85 deg. accessible shade close to work.

A vehicle can provide shade if there is effective and operating A/C.

If No A/C, then NO Vehicle!
Heat Illness Symptoms

Heat Exhaustion
- Headache
- Feeling faint, dizzy, weak
- Nausea
- Muscle cramps
- **Cool skin, heavy sweating**, increased pulse

Heat Stroke
- **Hot, dry skin**
- Rapid breathing
- Delirium
- Convulsions
- Unconsciousness or marked abnormal mental status

Another Cal OSHA trigger: >95 deg. F
Supervisors observe workers for heat illness symptoms and ensure communication exists for relaying problems.
Heat Cramps

- Heat cramps- occurs when the body has lost:
  - too much salt to sweating
  - is low on other electrolytes.

- What to do- drink Water.
Heat Exhaustion

- **Heat exhaustion** - the body can’t replace fluids/salt lost in sweating.

- **What to do** - Move to a cool place.
  - Loosen clothing, apply wet compress to skin.
  - Drink Water slowly
  - Elevate feet 8-12 inches.
Heat Stroke - the body no longer sweats, fluid is reserved for core functions (blood flow and respiration). Dangerous increase in body temperature (>105 deg.).

Can lead to delirium, convulsions, unconsciousness and death.

Call 911!
Review Program at Employee Pre-Job/Task Meetings

- Ensure that there is at least 2 gallons of water/each employee/8 hour shift.
- Point out areas that may provide shade at your work site—Trees, Vehicles, umbrellas, etc.
- Review & discuss periods of excessive temperature/humidity.
- Discuss how employees recognize symptoms and call for help—Use a buddy system.
A Brief Video Reinforcement

http://www.youtube.com/watch?v=9iyvlkVQm14
Plan and Discuss what to do in advance of an employee’s complaint or visible signs of heat stress, heat exhaustion or heat stroke.

- Communications, buddy systems, radios, phones
- Local treatment: water, shade, rest
- Clinic evaluation. What transport?

Emergency (heat stroke):
- get to shade
- cool body down fast.
- Call 911
- all actions immediate
Report all injuries to your Supervisor.

Additionally – heat-related injury/illness MUST be reported to Risk Mg/EHS office.

- Section 6.8.5. in University Heat Illness Prevention Program.
- The Supervisor and/or Leadperson shall notify the University EHS Office and the Workers’ Compensation Coordinator upon the identification and diagnosis of an employee suffering symptoms or exposure to a heat-related illness. This shall occur as soon as practical but no longer than 24 business hours from event.
The most dangerous form of Heat related illness is?

- A) Heat Cramps
- B) Heat Stroke
- C) Heat Exhaustion
The most dangerous form of Heat related illness is?

- A) Heat Cramps
- B) Heat Stroke
- C) Heat Exhaustion

Heat Stroke is the most dangerous and can be fatal.
The best type of beverage to help prevent heat stress is?

- A) Gatorade
- B) Beer
- C) Water
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- A) Gatorade
- B) Beer
- C) Water

Water is the best defense against heat related illnesses.
Who is at Risk?

- You may be more likely to experience heat stress if you are..
  - A) over weight
  - B) Older
  - C) Not use to working in the heat.
  - D) All of the above
Who is at Risk?

- You may be more likely to experience heat stress if you are:
  - A) over weight
  - B) Older
  - C) Not use to working in the heat.
  - D) All of the above
The symptoms of heat stroke are:
- A) Slow pulse, numbness in extremities
- B) Chills, high body temperature, and lack of sweating.
- C) Dilated pupils.
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- A) Slow pulse, numbness in extremities
- B) Chills, high body temperature, and lack of sweating.
- C) Dilated pupils.

Call 911 or transport employee to nearest hospital.
If I feel heat stress how long can I stay in the shade to recover?

- A) until the end of my shift
- B) at least 5 minutes
- C) until lunch
If I feel heat stress how long can I stay in the shade to recover?
- A) until the end of my shift
- B) at least 5 minutes
- C) until lunch

If you are suffering from heat illness or need a recovery period... shade shall be provided for no less than 5 minutes.
Call your EHS Office at 3-3531.

or,

Or ask your Supervisor or Leadperson.

STAY SAFE AND BE PROACTIVE