

# HEAT-ILLNESS PREVENTION FOR OUTDOOR EMPLOYEES

## Summary of Current Standard

- Either
  - Have on hand 1 quart of drinking water per hour per employee at a shift's start or
  - Have effective procedures to replenish the water supply so each employee can drink that much water
- Encourage the frequent drinking of water
- Provide employees suffering from heat illness or who believe they need time to recover from heat exposure to prevent the onset of heat illness with access to cooling shade for at least 5 minutes (i.e., a "preventative recovery period")
  - Exception: Non-ag employers may use cooling measures other than shade
- Train employees and their supervisors on how to avoid heat illness and steps to take if it nonetheless occurs
- Have written compliance and emergency procedures

## DOSH's Questions & Answers document (rev. March 17, 2009)

### **Shade**

- Must always be able to provide shade promptly upon an employee's request
- Shade throughout shift when prior day's 5 p.m. NWS forecast calls for high temp of > 85 °F
- Even if forecasted high is  $\leq$  85 °F, shade must be present if temperature > 90 °F
- Alternative: Hourly temperature monitoring; shade must be present if temperature > 85 °F
- Shade for at least 25% of crew's employees so they can sit comfortably without touching each other
- Written procedure required in case > 25% want shade (e.g., set up more shade structures; rotate employees in and out of shade at 5-minute intervals; stagger rest & meal periods)
- Soil barrier (e.g., 5-g. bucket, tarp) for areas shaded by artificial means (e.g., pop-up canopy)
- No soil barrier needed for areas shaded by natural means (e.g., tree, vines)
- No soil barrier for a lawn, no matter how it's shaded
- Shade must be as close as practicable; usually within a 2½-minute walk, but always within shorter of ¼-mile walk or 5 minutes of employees

### **Water**

- Enough water must always be present to allow every employee to consume at least 1 quart per hour until such time that the water supply is replenished
- Placed in readily accessible locations
- Employer may give each employee a small beverage container to be carried and used by employee while working; employee must be encouraged to refill the container from employer's drinking-water supply and clean and maintain it as needed.
- Temperature > 90 °F: Ice should be on hand to cool the water

## Amendments Proposed at Cal/OSHA Standards Board Meeting, October 15, 2009

### **Shade**

- Temperature > 85 °F: Shade must be present for at least 25% of crew's employees so they can sit fully in shade in a normal posture without touching each other
- Temperature  $\leq$  85 °F: Timely access to shade must be provided upon employee's request

- Shaded area must be as close as practicable to work areas
- Allow and encourage employees to rest in shade for no less than 5 minutes to cool down when they feel a need to do so to protect themselves from overheating
  - “Preventative recovery period” deleted

#### **Water**

- Must be fresh, pure, suitably cool and provided at no cost

#### **High-Heat Procedures**

- Temperature  $\geq 95$  °F: Employer must implement high-heat procedures, including to the extent practicable:
  - Ensuring effective communication so employees can contact supervisor when necessary
  - Observing employees for alertness and signs or symptoms of heat illness
  - Reminding employees throughout the work shift to drink plenty of water
  - Closely supervising a new employee for the first 14 days of employment
    - Exception: Not required if the employee when hired indicates he had been doing similar outdoor work for at least 10 of the past 30 days for 4 or more hours per day

#### **Training**

- Employees and supervisors must receive training before starting outdoor work to which the standard applies
- Added burden of heat load on the body caused by exertion, clothing, and personal protective equipment must be covered under heat-illness risk factors
- Emergency procedures must include designation of a person to be available to ensure those procedures are invoked when appropriate
- Supervisors must be trained in how to monitor weather reports and how to respond to hot-weather advisories

### **Revisions to Proposed Amendments Expected to be Proposed at July 15 meeting**

#### **Shade**

- Where employer can show it is infeasible or unsafe to have shade continuously present, employer may use alternative procedures for providing access to shade that provide equivalent protection

#### **Water**

- Deletes statement that water must be fresh, pure, suitably cool and provided at no cost

#### **High-Heat Procedures**

- Limits coverage to these industries: Agriculture; Construction; Landscaping; Oil and gas extraction; Transportation of ag products, construction materials or other heavy materials

#### **Training**

- Effective training in required topics must be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness
- Effective training in required topics must be provided to a supervisor before supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness