

# **HEAT ILLNESS PREVENTION**

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 **WATER.  
REST.  
SHADE.** *The work can't get done  
without them.*



# Some Number (2020)

## ❖ 5 Fatalities.

- ❖ Illicit drug use was indicated in several of the fatalities.

## ❖ 43 cases of heat illness investigated.

- ❖ Lack of establishment and implementation of emergency response procedures.

# Text Colors

- **Blue – Older 3395 requirements.**
- **Red – May 2015 updates.**
- **Purple – COVID-19 Considerations.**
  - **NOTE: 3205 – 3205.4 updates were withdrawn from the May 20<sup>th</sup> Standards Board meeting. New draft language is expected this Friday for consideration at the June 3<sup>rd</sup> emergency Board meeting.**

# Heat Illness Prevention (3395)

## Elements Include:

- ❖ Access to Water\*.
- ❖ Access to Shade.\*
- ❖ Weather Monitoring.
- ❖ Acclimatization.\*
- ❖ High Heat Procedures.
- ❖ Employee and Supervisory Training.\*
- ❖ Written Procedures Including Emergency Response.\*

\*Areas to consider COVID-19 issues.

# Access to Water

- ❖ Potable drinking water must be made available at no cost to the employee.
- ❖ Maintain, at all times, sufficient quantities of pure and cool potable drinking water (i.e. enough to provide at least one quart per employee per hour for the entire shift).
- ❖ Sanitization of frequently surfaces.



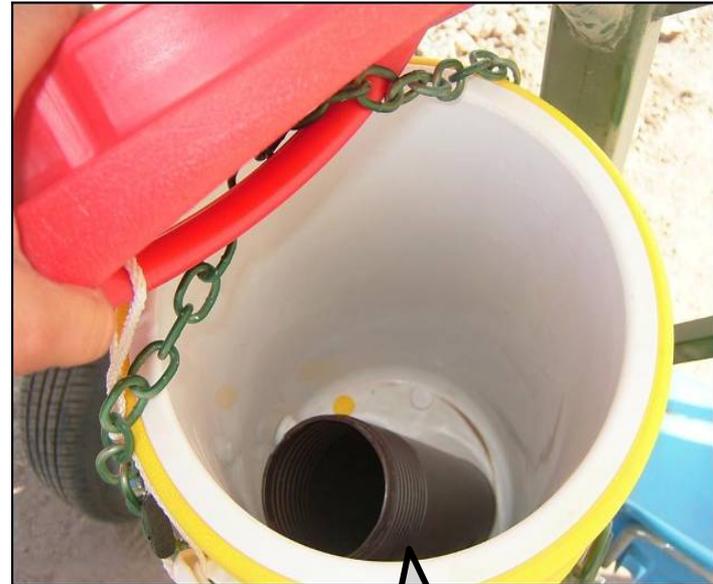
# Access to Water



- ❖ Water must be fit to drink.
- ❖ Water containers **CAN NOT** be refilled from non-potable water sources (e.g. irrigation wells, sprinkler or firefighting systems).
- ❖ Care must be taken to prevent contamination of the drinking water supplied to the workers.

# Access to Water

- ❖ Implement and maintain effective replenishment procedures when beginning the shift with smaller quantities.



**Unacceptable**

# Access to Water

- ❖ Locate the water containers as close as practicable given the working conditions and layout of the worksite.
- ❖ Keep it readily accessible, move it with the workers!
- ❖ Encourage the frequent drinking of water.

**Remind workers not to wait until they are thirsty!**



# Shade Up:

**When the temperature exceeds 80° F**

- ❖ Have and maintain one or more areas of shade at all times, when employees are present.
- ❖ Locate the shade as close as practical to the area where employees are working.
- ❖ Natural vs Manmade shade.
- ❖ Physical Distancing issues.



# Shade Up:

## When the temperature exceeds 80° F

- ❖ Provide enough shade to accommodate the number of employees on recovery or rest periods while maintaining physical distancing.
- ❖ Provide enough shade to accommodate the number of employees on meal period who remain on site while maintaining physical distancing.
- ❖ Access to shade must be permitted at all times.



# Access to Shade, cont.



- ❖ Encourage employees to take a **preventative** cool-down rest in the shade.
- ❖ **Monitor employees on cool down rests.**
- ❖ **Ask them if they're experiencing symptoms of heat illness.**
- ❖ **Don't order back to work until symptoms abated, allow at least a 5 minute rest.**
- ❖ **Take appropriate first aid steps or emergency response as necessary.**



# Access to Shade, cont.



❖ Shaded area must not cause exposure to another health or safety hazard and that does not deter or discourage access or use.

❖ Areas underneath mobile equipment (e.g. tractor), or areas that require crouching in order to sit fully in the shade are not acceptable.





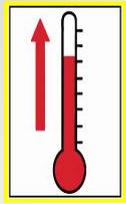




# If Temperature is Below 80°F



- ❖ When the temperature does not exceed 80°F, provide timely access to shade upon request.



# Monitor the Weather

[www.nws.noaa.gov](http://www.nws.noaa.gov)

- ❖ Instruct supervisors to track the weather of the job site [by monitoring predicted temperature highs and periodically using a thermometer].
- ❖ Determine, and instruct supervisors, on how weather information will be used to modify work schedule, increase number of water and rest breaks or cease work early if necessary.

National Oceanic and Atmospheric Administration's  
**National Weather Service**

Site Map News Organization

Home > Products > State Listing

California State Information

Satellite Radar Weather Offices

Click on the above map for current site specific weather observations

Back to Main Lvl

Local forecast by "City, St"  
City, St Go

XML RSS Feeds

Warnings

Current

By State/County...

UV Alerts

Observations

Radar

Satellite

Snow Cover

Surface Weather...

Observed Precip

Forecasts

Local

Graphical

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Hurricanes

Severe Weather

Fire Weather

Text Messages

By State

By Message Type

Hourly Report

Public Information

State Forecast

Climatic Data

Zone Forecast

Hydro Products

Short Term Forecast

Aviation Products

Forecast Discussion

Watches

Weather Summary

Special Weather

Warnings and Advisories

# National Weather Service

## Heat Index (HI)

Temperature (°F)

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

**Heat Index** or the "Apparent Temperature" is a measurement of how hot it really feels when the Relative Humidity (%) is taken into account with the air temperature.

**Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity**

■ Caution   
 ■ Extreme Caution   
 ■ Danger   
 ■ Extreme Danger

# High Heat Procedures

## Industries covered by this subsection:

- ❖ Agriculture.
- ❖ Construction.
- ❖ Landscaping.
- ❖ Oil and Gas Extraction.
- ❖ Transportation or delivery of agricultural, construction materials or other heavy materials.

# When the Temperature Equals or Exceeds 95°F

1. You must implement additional preventive measures:

- ❖ Ensure effective communication (by voice, observation or electronic means).



# When the Temperature Equals or Exceeds 95°F

You must implement additional preventive measures:

## 2. Observe employees for alertness and signs and symptoms of heat illness.

- ❖ Supervisory or designee observation of 20 or fewer employees
- ❖ Mandatory buddy system
- ❖ Regular communication
- ❖ Other effective means



# When the Temperature Equals or Exceeds 95°F



3. Designate one or more employees to call for emergency services and allow other employees to call for emergency services when no designated employee is available.

4. Give more frequent reminders to drink plenty of water.

# When the Temperature Equals or Exceeds 95°F



## 5. Hold pre-shift meetings on prevention.

- ❖ Review the high heat procedures,
- ❖ Encourage employees to drink plenty of water, and
- ❖ Remind employees of their right to take a cool-down rest when necessary.

# When the Temperature Equals or Exceeds 95°F



## 6. For agricultural employers:

- ❖ Temps 95°F or above, ensure employees take a minimum ten minute net preventative cool-down rest every two hours.
- ❖ Additional ten minute cool-down rest at end of 8<sup>th</sup> and 10<sup>th</sup> hour of work.

# Emergency Response Procedures

- ❖ (In past, was only an element of training)
- ❖ Ensure effective communication.
- ❖ Respond to signs and symptoms of possible heat illness.
  - Supervisor to take immediate, appropriate action
  - If indicators of serious heat illness, implement emergency response procedures
  - Employees exhibiting or reporting signs or symptoms of heat illness shall be monitored and not left alone. Onsite first aid or appropriate emergency medical services shall be offered.
  - Contact emergency medical services and ensure that clear and precise directions to the site can be provided

# **Address Lack of Acclimatization**

- ❖ (In past, was only an element of training)
- ❖ As an employer, you are responsible for the working conditions of your employees, so you must act effectively when conditions result in sudden exposure to heat that your workers are not used to.
- ❖ All employees shall be closely observed by a supervisor or designee during heat waves.
- ❖ Employees newly assigned to high heat areas shall be closely observed by a supervisor or designee for the first 14 days of employment.

[www.osha.gov/sites/default/files/covid-19-cloth-coverings-outdoor-heat.pdf](https://www.osha.gov/sites/default/files/covid-19-cloth-coverings-outdoor-heat.pdf)



## COVID-19 Guidance on the Use of Cloth Face Coverings while Working Outdoors in Hot and Humid Conditions

Given the evolving nature of the pandemic, OSHA is in the process of reviewing and updating this document. These materials may no longer represent current OSHA recommendations and guidance. For the most up-to-date information, consult Protecting Workers Guidance.

During the COVID-19 pandemic, OSHA generally recommends that employers encourage workers to wear cloth face coverings at work to help reduce the spread of COVID-19. However, workers who wear cloth face coverings in hot and humid environments or while performing strenuous activities outdoors, such as those in agriculture, landscaping, construction, delivery services, and oil and gas operations, can find cloth face coverings to be uncomfortable.

Employers should follow the below practices to protect against the spread of COVID-19 and the risk of heat-related illness:

- **Acclimatize** new and returning workers to environmental and work conditions while wearing cloth face coverings.
- Prioritize the **use of cloth face coverings** when workers are in close contact with others (less than 6 feet), such as during group travel or shift meetings.
- Allow workers to remove cloth face coverings when they can safely maintain at least 6 feet of physical distance from others.
- Evaluate the feasibility of wearing cloth face coverings for each worker and consider alternatives (e.g., face shields) **when appropriate**.



Photo: USDA

- Increase the frequency of **hydration and rest breaks** in shaded, non-enclosed, or air conditioned areas.
- Incorporate at least 6 feet of physical distancing into break areas by staggering breaks, spacing workers, and limiting the number of workers on break at a time, where feasible.

- Allow workers to wear **personal passive cooling items** (e.g., icepack vests, cooling bandanas) and loose-fitting and breathable clothes, as long as these items do not present a safety hazard.

- Encourage workers to use cloth face coverings that optimize fit and comfort, are made out of breathable, moisture-wicking materials, and use light colors when working in direct sunlight.

- Increase the frequency of communication to workers and encourage workers to monitor themselves and others for **signs of heat illness**.

- Avoid scheduling strenuous tasks during the hottest parts of the day and alter work shifts to cooler parts of the day, when possible.

- Encourage workers to change cloth face coverings when wet, as wet face coverings make it more difficult to breathe and are not as effective. Provide clean replacement cloth face coverings or disposable face masks, as needed, for workers to change into throughout the work shift.

[www.cdc.gov/coronavirus/2019-](https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/heat-stress-employers.html)

[ncov/community/organizations/heat-stress-employers.html](https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/heat-stress-employers.html)

## When are employees at additional risk for heat-related illness during the COVID-19 Pandemic?

Implementing the COVID-19 safety and health recommendations, such as those identified in the [Interim Guidance for Businesses and Employers](#), may alter an employee's working environment. These alterations can affect the risk level for heat-related illness due to:

- Loss of the body's natural adaptation to heat ([acclimatization](#)). This can occur if your workplace has closed temporarily or employees have been off work for more than one week.
- Lack of a re-acclimatization component of work re-entry plan. This is important to have in place if employees have been out of the work environment for a week or more.
- Increased heat burden associated with personal protective equipment (PPE) (for healthcare personnel) or cloth face coverings or [masks](#). These can:
  - Reduce the body's normal ways of getting rid of heat by sweating and other means.
  - Increase effort required to breathe (through face covering or mask, or respirator (for healthcare personnel)).
  - Elevate perception of anxiety brought on during wear.
- Increased physical activity if employees have to do more than their usual job tasks due to [social distancing](#) requirements.

# **Address Lack of Acclimatization**

## ❖ Heat wave

- ❖ For purposes of this section only, “heat wave” means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

# **Address Lack of Acclimatization**

- ❖ **Thus, determine how your company will:**
  - **Lessen the intensity and/or shift length of the newly-hired employees' work during a two or more week break-in period;**
  - **Modify the work schedule or reschedule non-essential duties, during the hot summer months;**
  - **Be extra-vigilant with your employees to recognize immediately symptoms of possible heat illness.**

# Employee & Supervisor Training

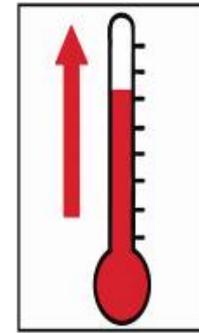
Ensure all employees and supervisors:

- ❖ Are trained before beginning work that should reasonably be anticipated to result in a heat illness **while maintaining physical distancing.**



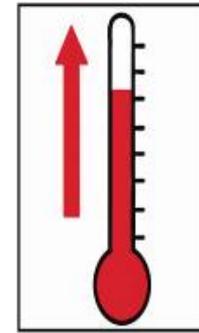
# Employee Training

- ❖ The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body.



# Employee Training

- ❖ Your company's heat illness prevention procedures
  - Including, but not limited to, the employer's responsibility to provide water, shade, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.



# **Environmental Risk Factors for Heat Illness**

- **Means working conditions that create the possibility that heat illness could occur, including:**
  - Air temperature
  - Relative humidity
  - Radiant heat from the sun and other sources
  - Conductive heat sources such as the ground
  - Air movement
  - Workload severity and duration
  - Protective clothing and **personal protective equipment** worn by employees

# Personal Risk Factors

- Means factors such as:
  - Individual's age
  - Degree of acclimatization
  - Health
  - Water consumption
  - Alcohol consumption
  - Caffeine consumption
  - Illicit drugs
  - Use of prescription medications that affect the body's water retention or other physiological responses to heat



# Early Warning Signs and Symptoms...

- Cramps
- Lack of stamina
- Headache
- General discomfort
- Dehydration

## NOTE:

- Progression to more serious illness can be rapid
- May occur after work hours



# More Serious Symptoms...

- Dizziness
- Loss of coordination
- High body heat
- Confusion
- Irrational actions
- Irritability
- Muscle pain
- Rash
- Poor concentration
- No sweating
- Rapid breathing
- Nausea
- Blurry vision
- Fainting
- Exhaustion
- Stroke
- Unconsciousness

# Employee Training, cont.

- ❖ Importance of frequent consumption of small quantities of water.
- ❖ Different types of heat illness, common signs and symptoms; and appropriate first aid or emergency response.
- ❖ Knowledge that heat illness may progress rapidly.

 **Stay safe and healthy!**  
WATER. REST. SHADE. *The work can't get done without them.*

**Drink water even if you aren't thirsty – every 15 minutes.**  
 

**Rest in the shade.**  
 

**Watch out for each other.**  


**Wear hats and light-colored clothing.**  
 

**2** "Easy does it" on your first days of work in the heat. You need to get used to it. Rest in the shade – at least 5 minutes as needed to cool down.

 **Health effects of heat**  
Two types of heat illness:

**Heat Exhaustion**  


**Heat Stroke**  




**1** Watch out for early symptoms. You may need medical help. People react differently – you may have just a few of these symptoms, or most of them.

# Are You Hydrated?

## Hydrated

## Dehydrated

OPTIMAL



WELL HYDRATED

DEHYDRATED:

You need to drink more water



SEEK MEDICAL AID:

May indicate blood in urine or kidney disease

Watch urine stream not toilet water, as water in toilet will dilute your urine color. Also some vitamins & supplements may cause a darkening of your urine unrelated to dehydration.

# Employee Training, cont.

- ❖ The concept, importance, and methods of acclimatization.

Training must include the importance of acclimatization, how it is developed, and how your procedures address it.

- ❖ Importance of immediately reporting signs or symptoms of heat illness to a supervisor.
- ❖ Procedures for responding to possible heat illness.



# Employee Training, cont.

- ❖ The employer's responsibility to provide water, shade, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.



# Employee Training, cont.

- ❖ Procedures to follow when contacting emergency medical services, **providing first aid**, and if necessary transporting employees.
- ❖ Procedures that ensure clear and precise directions to the work site, including designating a person to be available to ensure that emergency procedures are invoked when appropriate.



# Supervisor Training

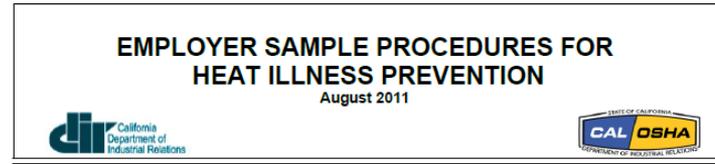
Supervisors must be trained on the following:

- ❖ The heat standard requirements.
- ❖ The procedures they must follow to implement the requirements.
- ❖ Procedures to follow when a worker exhibits or reports symptoms consistent with possible heat illness, including emergency response procedures and first aid.
- ❖ How to monitor weather reports and how to respond to hot weather advisories.

# Written Procedures

❖ Heat Illness Prevention Plan may be included as part of the employer's Illness and Injury Prevention Program required by section 3203.

❖ Establish, implement, and maintain... effective... in writing.



California employers with any outdoor places of employment must comply with the Heat Illness Prevention Standard T8 CCR 3395. These procedures have been created to assist employers in crafting their own heat illness prevention procedures, and to reduce the risk of work related heat illnesses among their employees.

These procedures are not intended to supersede or replace the application of any other Title 8 regulation, particularly T8 3203 Injury and Illness Prevention Program (IIPP). Title 8 CCR 3203 requires an employer to establish, implement, and maintain an effective IIPP. The measures listed here may be integrated into the Employer's Injury and Illness Prevention Program. The employer must also be aware that other standards apply to Heat Illness Prevention such as the requirement to provide for drinking water, first aid and emergency response.

**Please note:** These procedures provide the minimal steps applicable to most outdoor work settings and are essential to reducing the incidence of heat related illnesses. In working environments with a higher risk for heat illness (e.g., during a heat wave, or other severe working or environmental conditions), it is the employer's duty to exercise greater caution and additional protective measures beyond what is listed in this document, as needed to protect their employees.

To effectively establish your company procedures, carefully review the key elements listed on this document, as well as the examples provided, then select and fill out the procedures applicable to your workplace. Please use additional paper when necessary. Implement and train employees and supervisors on your company procedures and follow-up to ensure your procedures are fulfilled.

Furthermore, to successfully tailor these procedures to your work activities, evaluate and consider the individual conditions present at your site (such as, but not limited to):

- (1) Size of the crew
- (2) The length of the work-shift
- (3) The ambient temperature (which can be taken either with the aid of a simple thermometer or by monitoring the weather)
- (4) The presence of personal protective equipment or additional sources of heat

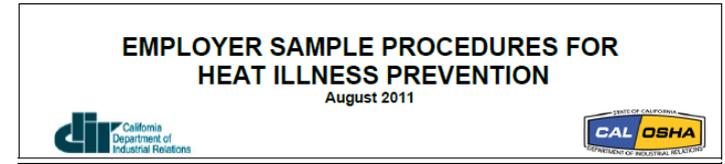
Again, these sample procedures do not include every workplace scenario, so it is crucial that your company evaluate and take into account conditions found in your individual workplace that are likely to cause a heat illness.

**Your written procedures should also:**

1. Identify the designated person(s) that has been assigned the applicable task(s) (e.g. supervisor, foreman, safety coordinator, crew leader).
2. Provide specific details required to carry out the task and ensure that the task is accomplished successfully (e.g. how many water containers/shade structures, of what size,

# Written Procedures

- ❖ Maintain the procedures at the worksite, so that it can be made available to employees and representatives of Cal/OSHA upon request.
- ❖ Plan... both English and the language understood by the majority of the employees.



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# Written Procedures

## Detail how your company will:

- ❖ Provide access to water & shade.
- ❖ Monitor the weather.
- ❖ Institute high heat procedures.
- ❖ Address acclimatization methods and procedures.
- ❖ Train all employees and supervisors.
- ❖ Respond to heat illnesses without delay, provide first aid and emergency services.
- ❖ Provide clear and precise directions to the worksite.

# Serious Hazard

You risk a serious citation if the outdoor temperature in the work area exceeds 80° F and any of these required elements is not present at the site:

- ❖ Drinking water
- ❖ Shade
- ❖ Trained employees or supervisor
- ❖ Emergency response procedures

# Imminent Hazard Don't Risk an OPU!

You may also risk an Order Prohibiting Use (OPU) and a Serious Citation if the heat and lack of facilities create an imminent hazard.

An OPU may be issued if:

- ❖ The temperature is  $\geq 95^{\circ}$  and water, shade, training or emergency procedures are not in place;
- ❖ The temperature is  $\geq 80^{\circ}$ , and there is a heat wave, heavy workload or other critical factor putting employees in danger.

An OPU:

- ❖ Will shut down the operation, and;
- ❖ Work will not be allowed to resume until the employer demonstrates that the imminent hazard has been corrected.

# Indoor Heat

- Initially indoor heat was not addressed
- Then started to be addresses at workplaces that have a significant source of heat being generated inside the building
  - Did not include places like warehouses
- Now includes all workplaces



# Indoor Heat

- Same requirements as 3395 (using other regulations), except shade, since work is indoors
- Address your indoor program in writing as part of your IIPP, as part of your outdoor plan, or as a stand-alone plan
- **PREPARE: Legislation required Cal/OSHA to submit to the Standards Board an Indoor Heat Standard by January 1, 2019**
  - Date missed, but being submitted soon(?)



# For Additional Information

Visit the Cal/OSHA Heat Illness Webpage:

[www.dir.ca.gov/DOSH/HeatIllnessInfo.html](http://www.dir.ca.gov/DOSH/HeatIllnessInfo.html)



The screenshot shows the Cal/OSHA Heat Illness Prevention webpage. The header includes the State of California Department of Industrial Relations logo and navigation links. The main content area features a large graphic with a farmer and the text "STOPPING FOR WATER KEEPS YOU GOING." Below the graphic, there are four numbered steps for prevention: 1. Training, 2. Water, 3. Shade, and 4. Planning. A notice at the bottom discusses recent regulatory updates. The right sidebar contains quick links, branches, and units.

State of California  
Department of Industrial Relations

CA.GOV

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Cal/OSHA

## Heat Illness Prevention

California employers are required to take these four steps to prevent heat illness

- 1. Training**  
Train all employees and supervisors about heat illness prevention.
- 2. Water**  
Provide enough fresh water so that each employee can drink at least 1 quart per hour, or four 8 ounce glasses, of water per hour, and encourage them to do so.
- 3. Shade**  
Provide access to shade and encourage employees to take a cool-down rest in the shade for at least 5 minutes. They should not wait until they feel sick to cool down.
- 4. Planning**  
Develop and implement written procedures for complying with the Cal/OSHA Heat Illness Prevention Standard.

**Notice on Heat Illness Regulations and Rulemaking**

The Office of Administrative Law approved the Occupational Safety & Health Standards Board's proposed amendments to the current heat illness regulation. The amended regulations will go into effect on May 1, 2015, in time for this year's growing season and warmer weather.

Please refer to the Cal/OSHA guidance on the new requirements, as well as a Heat Illness Prevention Enforcement Q&A, updated on April 6, 2015.

**Quick Links**

- File a workplace safety complaint
- Learn about worker rights
- Obtain a free consultation

**Cal/OSHA Branches & Units**

**Branches**

- Enforcement
- Consultation

**Units**

- Amusement Ride and Tramway
- Asbestos and Carcinogen
- Crane
- Elevator
- Heat and Agriculture Program
- High Hazard
- Labor Enforcement Task Force
- Mining and Tunneling
- Pressure Vessel
- Process Safety Management
- Research and Standards

**Educational Materials**

- Cal/OSHA publications
- Consultation eTools

**About Cal/OSHA**

Contact us by email:

[heat@dir.ca.gov](mailto:heat@dir.ca.gov)

# For Additional Information

## Guidance for Employers and Employees on the New Requirements:

[www.dir.ca.gov/dosh/documents/Heat-Illness-Prevention-Regulation-Amendments.pdf](http://www.dir.ca.gov/dosh/documents/Heat-Illness-Prevention-Regulation-Amendments.pdf)



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Contact us by email:

[heat@dir.ca.gov](mailto:heat@dir.ca.gov)

# For Additional Information

## Q&A:

[www.dir.ca.gov/dosh/heatIllnessQA.html](http://www.dir.ca.gov/dosh/heatIllnessQA.html)



The screenshot shows the website for the California Department of Industrial Relations (DIR). The header includes the state logo, navigation links for Home, Labor Law, Cal/OSHA - Safety & Health, Workers' Comp, Self Insurance, Apprenticeship, Director's Office, and Boards. The main content area is titled "Heat Illness Prevention Enforcement Q&A" and is dated "Updated: April 6, 2015". It contains two numbered questions and their corresponding answers. The first question asks "Where and when does this standard apply?" and lists five categories: Agriculture, Construction, Landscaping, Oil and gas extraction, and Transportation and delivery of agricultural products and of construction or other heavy materials. The second question asks "What is meant by 'outdoor places of employment'?" and explains that an outdoor place is one that is not an indoor workplace. A sidebar on the right contains "Quick Links", "Cal/OSHA Branches & Units" (with sub-sections for Branches and Units), "Educational Materials", and "About Cal/OSHA".

State of California  
Department of Industrial Relations

Cal/OSHA

### Heat Illness Prevention Enforcement Q&A

Updated: April 6, 2015

1. **Where and when does this standard apply?**

This standard applies to all outdoor places of employment. In addition, the following industries are subject to additional requirements in high heat (over 95°F or above) (see Q&A No. 8a and 8b):

1. Agriculture,
2. Construction,
3. Landscaping,
4. Oil and gas extraction, and
5. Transportation and delivery of agricultural products and of construction or other heavy materials (e.g. furniture, lumber, freight, cargo, cabinets, industrial or commercial materials).

Cal/OSHA interprets the standard's provisions to apply at all times when employees work outdoors. Some provisions are triggered at specific times, for instance, the shade requirement described in Q&A No. 7 and the High-Heat Procedures addressed by Q&A No. 8a.

2. **What is meant by "outdoor places of employment"?**

An outdoor place of employment is best thought of as one that is not an indoor workplace. A workplace with a roof and enclosed sides is generally considered an indoor workplace.

For the purposes of this standard, the distinguishing quality of indoor workplaces is that they reduce the risk factors that commonly lead to heat illness. (For information about environmental risk factors for heat illness, see Q&A Nos. 4 and 5.)

For example, a building that provides sufficient ventilation and cooling, either by natural or mechanical means, and blocks exposure to direct sunlight will be considered an indoor workplace. Sheds, packing sheds, and partial or temporary structures such as tents, lean-tos, and structures

Ca/OSHA

- Quick Links
  - File a workplace safety complaint
  - Learn about worker rights
  - Obtain a free consultation
- Cal/OSHA Branches & Units
  - Branches
    - Enforcement
    - Consultation
  - Units
    - Amusement Ride and Tramway
    - Asbestos and Carcinogen
    - Crane
    - Elevator
    - Heat and Agriculture Program
    - High Hazard
    - Labor Enforcement Task Force
    - Mining and Tunneling
    - Pressure Vessel
    - Process Safety Management
    - Research and Standards
- Educational Materials
  - Cal/OSHA publications
  - Consultation eTools
- About Cal/OSHA

Contact us by email:

[heat@dir.ca.gov](mailto:heat@dir.ca.gov)

# Other Resources

- **Federal OSHA**

[www.osha.gov/heat/index.html](http://www.osha.gov/heat/index.html)

- Much of the information is the same as Cal/OSHA's, but there is some additional information on the federal site

- **NIOSH**

[www.cdc.gov/niosh/topics/heatstress](http://www.cdc.gov/niosh/topics/heatstress)

# Heat Illness Materials

Multilingual educational materials can be downloaded free from the [www.99calor.org](http://www.99calor.org) website



The image shows a screenshot of the 99 Calor website. At the top, there is a red banner with a sun icon and the text "WATER. REST. SHADE. The work can't get done without them." Below this is a navigation bar with buttons for "Educational Resources", "For Employers", "Campaign", "FAQ's", "Contact", and "877-99-CALOR". The "Educational Resources" button is circled in blue. Below the navigation bar is a large photograph of a woman in a purple shirt and blue cap sitting under a white tent in a field. The text "YOU'LL LAST LONGER AFTER A LITTLE REST." is overlaid on the photo. To the right of the photo is a red sidebar with the heading "HEAT SAFETY TIPS:" and a list of tips: "Drink water often", "Rest in the shade", "Report heat symptoms early", "Know what to do in an emergency", and "Employers must train workers about heat safety and provide water, rest, shade." Below the photo is a red banner with the text "Welcome to the California campaign to protect outdoor workers from HEAT ILLNESS."

**WATER. REST. SHADE.**  
*The work can't get done without them.*

[Educational Resources](#) [For Employers](#) [Campaign](#) [FAQ's](#) [Contact](#) **877-99-CALOR**

**YOU'LL LAST LONGER AFTER A LITTLE REST.**

**HEAT SAFETY TIPS:**

- Drink water often
- Rest in the shade
- Report heat symptoms early
- Know what to do in an emergency
- Employers must train workers about heat safety and provide water, rest, shade.

*Welcome to the California campaign to protect outdoor workers from HEAT ILLNESS.*

# 99calor.org videos are available on YouTube

- [www.youtube.com/watch?v=cR6FA5w8A1o&feature=relmfu](http://www.youtube.com/watch?v=cR6FA5w8A1o&feature=relmfu) (streaming only; no download)
- English, Spanish, Mixteco, Punjabi, & Hmong



The screenshot shows a YouTube video player interface. At the top, there is a search bar with the text "Search" and a magnifying glass icon. Below the search bar is the YouTube logo. The video content is a red and white advertisement for a heat safety DVD. The text in the advertisement reads: "WATER. REST. SHADE." in large, bold, white letters. Below this, in smaller white text, it says "The work can't get done without them." At the bottom of the advertisement, it displays the phone number "877-99-CALOR" and the text "A Heat Safety DVD". The video player controls at the bottom show a play button, a progress bar, and a timestamp of "0:26 / 8:00".

Heat Illness Prevention

CaliforniaDIR

# Worksafe BC - videos

[www.worksafebc.com](http://www.worksafebc.com)

- FREE videos (Streaming or downloaded)
- Hover on “Health & Safety”, then A-Z index by topic (will include topic publications & other resources)



# State Compensation Insurance Fund (SCIF)

[www.statefundca.com](http://www.statefundca.com)

- Key in “Safety Meeting Topics”

The screenshot shows the SCIF website's navigation bar with links for About, Obtain a Policy, Claims Services, Safety & Seminars, Forms, and Careers. A search icon and a LOG IN button are also present. The main content area is titled "Safety Meeting Topics (Bilingual)" and includes a description of the topics, their intended use, and a list of topics with language options (English/Spanish). A sidebar on the left lists various safety resources and services.

**STATE COMPENSATION INSURANCE FUND**

About Obtain a Policy Claims Services Safety & Seminars Forms Careers

LOG IN

### Safety Resource Center

- » **Safety Meeting Topics**
- » Young Workers Safety Information
- » Ergonomic Resources
- » Safety Newsletters
- » Cal/OSHA Injury Summary
- » Hazard Checklists
- » Globally Harmonized System (GHS)

Safety Professional Services

Seminars and Employer Education Series

### Safety Meeting Topics (Bilingual)

State Fund has produced an extensive selection of Safety Meeting Topics. The topics are intended for use of on-the-job safety training and meetings to educate employees of potential hazards and work-related injuries and illnesses. A record of all safety meetings should be kept on file for the duration of each attendee's employment and should include: date, topic, attendees, recommendations, and additional comments.

The Safety Meeting Topics are intended for use by our insured policyholders and may be disseminated to their employees for loss prevention purposes. The use of these materials by any party for profit of any kind is strictly prohibited.

In California all employers must have an Injury and Illness Prevention Program (IIPP) that includes employee training in safe work practices. NOTE: For the construction and tunneling industries there are specific requirements for "tailgate" safety meetings.

The use of this information by any party for profit of any kind is strictly prohibited. See [Terms of Use & California Privacy Policy](#).

A B C D E F G H I J K L M N O P R S T U V W X Y

- Accident Investigation [\[English\]](#) [\[Spanish\]](#)
- Active Shooter Preparedness [\[English\]](#) [\[Spanish\]](#)
- Aerial Platform Safety [\[English\]](#) [\[Spanish\]](#)
- Africanized Honey Bees [\[English\]](#) [\[Spanish\]](#)
- Aggressive Driving [\[English\]](#) [\[Spanish\]](#)
- Agricultural Pesticide Use Regulations [\[English\]](#) [\[Spanish\]](#)
- Agricultural Worker Transport [\[English\]](#) [\[Spanish\]](#)
- Air Bag Safety [\[English\]](#) [\[Spanish\]](#)
- Aircraft Maintenance Safety [\[English\]](#) [\[Spanish\]](#)
- Ammonia Safety [\[English\]](#) [\[Spanish\]](#)
- Amusement Park Hazards [\[English\]](#) [\[Spanish\]](#)
- Animal Handling Safety [\[English\]](#) [\[Spanish\]](#)
- Animal Processing Safety [\[English\]](#) [\[Spanish\]](#)
- Arc Welding Safety [\[English\]](#) [\[Spanish\]](#)
- Architectural Landscaping [\[English\]](#) [\[Spanish\]](#)
- Are You Prepared For An Emergency? [\[English\]](#) [\[Spanish\]](#)
- Asbestos in Construction [\[English\]](#) [\[Spanish\]](#)

# OSHA

## Cal/OSHA

[www.dir.ca.gov/dosh](http://www.dir.ca.gov/dosh)

- Publications
- Title 8 regulations
- Policy and Procedure

## Fed/OSHA

[www.osha.gov](http://www.osha.gov)

- Educational materials
- Title 29 of the Code of Federal Regulations

# Consultation Services

- Must be invited to the facility
- Consultants work proactively with employers
- No citations or penalties
- Free
- Information is not shared with Enforcement
- Develop publications
- Answer questions by telephone

# The Catch

- Serious and Imminent hazards identified during a consultation are expected to be corrected in a timely manner:
  - Serious - 30 days,
  - Imminent – immediately
- Employee involvement
- Posting of identified serious hazards

# Cal/OSHA Consultation Service

## Toll-Free Number 1-800-963-9424

- San Fernando Valley  
6150 Van Nuys Boulevard, Suite 307  
Van Nuys, CA 91401  
(818) 901-5754
- Northern California  
2424 Arden Way, Suite 410  
Sacramento, CA 95825  
(916) 263-0704
- LA/Orange  
1 Centerpointe Drive, Suite 150  
La Palma, CA 90623  
(714) 562-5525
- San Francisco Bay Area  
1515 Clay Street, Suite 1103  
Oakland, CA 94612  
(510) 622-2891
- San Bernardino  
464 W. 4th Street, Suite 339  
San Bernardino, CA 92401  
(909) 383-4567
- Central Valley  
2550 Mariposa Mall, Room 2005  
Fresno, CA 93721  
(559) 445-6800
- San Diego  
7575 Metropolitan Drive, Suite 204  
San Diego, CA 92108  
(619) 767-2060

**Any Questions?**