

OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

2520 Venture Oaks, Suite 350
Sacramento, CA 95833
(916) 274-5721
FAX (916) 274-5743
www.dir.ca.gov/oshsb



NOTICE OF PROPOSED MODIFICATIONS TO

TITLE 8, California Code of Regulations, Section 3395 Of the General Industry Safety Orders

Heat Illness Prevention

Pursuant to Government Code Section 11346.8(c), the Occupational Safety and Health Standards Board (Standards Board) gives notice of the opportunity to submit written comments on the above-named standard in which modifications are being considered as a result of public comments and/or Board staff consideration.

On September 25, 2014, the Standards Board held a Public Hearing to consider revisions of Title 8, Section 3395. The Standards Board received written and oral comments on the proposed revisions. The proposal has been modified as a result of these comments and Board consideration.

Subsection (b)

To add greater clarity to the text, the proposed additional phrase is being modified to read “and does not *deter or discourage access or use.*” This more completely expresses the concept of workers being unable or unwilling to use the available shade because of where that shade is located.

Subsection (c)

Language regarding quality of water is drawn from other existing safety orders, therefore, it is not being changed, but it is being moved so that the first sentence of the subsection will now read, “Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable, *including but not limited to the requirements that it be fresh, pure, suitably cool, and provided to employees free of charge.*”

Additionally, language regarding availability of water/distance is being pared down into a performance standard as follows. “The water shall be located as close as practicable to the areas where employees are working.”

Subsection (d)(1)

The language is revised as follows. “The shade shall be located as close as practicable to the areas where employees are working.”

Subsections (d)(3) and (4)

In response to comments, the wording of these paragraphs has been revised to add clarity. The word “preventative” has been added so that an individual shade break under subsection (d)(3) is called a “preventative cool-down rest.” The word “individual” has been added to distinguish this employee-directed situation from the group breaks required by subsection (e)(6) for agricultural

employees working continuously in high heat. The “monitoring” requirement has been moved from (d)(4) to (d)(3), and a specific cross-reference to the employer’s emergency response procedures has been added to (d)(4).

Subsection (e)

The trigger temperature for high-heat procedures will be retained at 95 degrees Fahrenheit instead of the proposed 85 degrees Fahrenheit.

Subsection (e)(3)

This subsection has been redrafted to read as follows:

“Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.”

Subsection (e)(6)

The sentence specifying when the recovery period must be taken was deleted. Additionally, the word “recovery” has been replaced with “preventative cool-down rest.” Language has also been added to advise that “preventative cool-down rest period” has the same meaning as “recovery period.”

Subsection (f) [new]

The Emergency Response Procedures have been moved from subsection (g)(4) to new subsection (f). What was previously set forth in the final untitled subsection on observation and response was also incorporated into new subsection (f). The language is the same as before with the exception of the addition of the words “or emergency medical services” after the word “supervisor” and new language stating, “If an electronic device will not furnish reliable communication in the work area, the employer will ensure a means of summoning emergency medical services” in paragraph (1) [formerly (g)(4)(A)] and the deletion of an unnecessary sentence at the end of paragraph (4) [formerly (g)(4)(D)].

Subsection (g) [new]

The requirements for Acclimatization have been placed into new subsection (g). Paragraph (1) covers supervision of all employees during a “heat wave” and defines that term as a day when the predicted temperature will reach or exceed 80 degrees Fahrenheit *and* be at least 10 degrees higher than the daily average high in the preceding five days.

Paragraph (2) covers supervision of an employee who is newly assigned to a high heat area.

Subsection (h)

Due to the addition of the previous two subsections, subsection (f) on Training has been renamed subsection (h).

Subsection (i)

The title of this subsection was changed to “Heat Illness Prevention Plan,” and language was added to specify that it may be included as part of the employer’s Illness and Injury Prevention Program under section 3203.

Subsection (i)(3) [formerly proposed (g)(4)]

The substantive requirements were separated out into a new subsection (f) as noted above. Paragraph (3) of this subsection (i) now provides only that the Heat Illness Prevention Plan must include “Emergency Response Procedures in accordance with subsection (f).”

Subsection (i)(4) [formerly proposed (g)(3)]

The substantive requirements were separated out into a new subsection (g) as noted above. Paragraph (4) of subsection (i) now provides only that the Heat Illness Prevention Plan must include “Acclimatization Procedures in accordance with subsection (g).”

A copy of the full text of the standard, with these modifications clearly indicated, is attached for your information. In addition, a summary of written comments regarding the original proposal and staff responses is included.

Pursuant to Government Code Section 113456.8(d), notice is also given of the opportunity to submit comments concerning the addition to the rulemaking file of the following document relied upon:

Centers for Disease Control and Prevention Morbidity and Mortality Weekly Report “Heat Illness and Death Among Workers — United States, 2012–2013” August 8, 2014/63(31); 661-665

A copy of that document is available for review during normal business hours at the Standards Board Office located at the address listed below.

Any written comments on these modifications must be received by 5:00 p.m. on December 8, 2014, at the Occupational Safety and Health Standards Board, 2520 Venture Oaks Way, Suite 350, Sacramento, California 95833 or submitted by fax to (916) 274-5743 or e-mailed to oshsb@dir.ca.gov. This proposal will be scheduled for adoption at a future business meeting of the Standards Board.

The Standards Board’s rulemaking files on the proposed action are open to public inspection Monday through Friday, from 8:00 a.m. to 4:30 p.m., at the Standards Board’s office.

The Standards Board will have rulemaking documents available for inspection throughout the rulemaking process on its web site. Copies of the text of the regulations in an underline/strikeout format and the Notice of Proposed Modifications can be accessed through the Standards Board’s website at <http://www.dir.ca.gov/oshsb>.

Inquiries concerning the proposed changes may be directed to the Executive Officer, Marley Hart, at (916) 274-5721.

OCCUPATIONAL SAFETY AND HEALTH
STANDARDS BOARD
Original signed by

Date: November 19, 2014

Marley Hart, Executive Officer

ATTACHMENT 1

PROPOSED MODIFICATIONS TO REGULATORY TEXT

(Modifications from initial proposal are indicated in double underline wording for new language and double strikeout for deleted language.)

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Subchapter 7. General Industry Safety Orders
Article 10. Personal Safety Devices and Safeguards

Amend Section 3395 to read:

Section 3395. Heat Illness Prevention in Outdoor Places of Employment.

(a) Scope and Application.

(1) This standard applies to all outdoor places of employment.

EXCEPTION: If an industry is not listed in subsection (a)(2), employers in that industry are not required to comply with subsection (e), High-heat procedures.

(2) List of industries subject to all provisions of this standard, including subsection (e):

(A) Agriculture

(B) Construction

(C) Landscaping

(D) Oil and gas extraction

(E) Transportation or delivery of agricultural products, construction materials or other heavy materials (e.g. furniture, lumber, freight, cargo, cabinets, industrial or commercial materials), except for employment that consists of operating an air-conditioned vehicle and does not include loading or unloading.

(3) This section applies to the control of risk of occurrence of heat illness. This is not intended to exclude the application of other sections of Title 8, including, but not necessarily limited to, sections 1512, 1524, 3203, 3363, 3400, 3439, 3457, 6251, 6512, 6969, 6975, 8420 and 8602(e).

NOTE NO. 1: The measures required here may be integrated into the employer's written Injury and Illness Program required by section 3203, or maintained in a separate document.

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Attachment No. 1
Revised text - Page 2 of 10

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

NOTE NO. 2: This standard is enforceable by the Division of Occupational Safety and Health pursuant to Labor Code sections 6308 and 6317 and any other statutes conferring enforcement powers upon the Division. It is a violation of Labor Code sections 6310, 6311, and 6312 to discharge or discriminate in any other manner against employees for exercising their rights under this or any other provision offering occupational safety and health protection to employees.

(b) Definitions.

“Acclimatization” means temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.

“Heat Illness” means a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

“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.

“Landscaping” means providing landscape care and maintenance services and/or installing trees, shrubs, plants, lawns, or gardens, or providing these services in conjunction with the design of landscape plans and/or the construction (i.e., installation) of walkways, retaining walls, decks, fences, ponds, and similar structures, except for employment by an employer who operates a fixed establishment where the work is to be performed and where drinking water is plumbed.

“Oil and gas extraction” means operating and/or developing oil and gas field properties, exploring for crude petroleum or natural gas, mining or extracting of oil or gas or recovering liquid hydrocarbons from oil or gas field gases.

“Personal risk factors for heat illness” means factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

“Shade” means blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use.

“Temperature” means the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor temperature in an area where there is no shade. While the temperature measurement must be taken in an area with full sunlight, the bulb or sensor of the thermometer should be shielded while taking the measurement, e.g., with the hand or some other object, from direct contact by sunlight.

- (c) Provision of water. Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable, including but not limited to the requirements that it be fresh, pure, suitably cool, and provided to employees free of charge. The water shall be located as close as practicable to the areas where employees are working. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. ~~The water provided shall be fresh, pure and suitably cool, and shall be provided to employees free of charge.~~ The frequent drinking of water, as described in subsection ~~(f)~~(h)(1)(C), shall be encouraged.

~~The water shall be located as close as practicable to the areas where employees are working and shall not in any event be farther than 400 foot walking distance from any employee at any time other than when the employee is using a restroom or travelling between the restroom and an area where employees are working unless the employer can demonstrate that conditions prohibit locating the drinking water within the prescribed distance.~~

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

(d) Access to shade.

- (1) Shade required to be present when the temperature exceeds ~~85~~80 degrees Fahrenheit. When the outdoor temperature in the work area exceeds ~~85~~80 degrees Fahrenheit, the employer shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate ~~25%~~ of the number of employees on the shift at any time meal, recovery or rest periods, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. ~~The shaded area shade shall be located as close as practicable to the areas where employees are working but no farther than 700 feet walking distance from the area where any employee is working unless the employer can demonstrate that terrain or other conditions prohibit locating the shaded area within the prescribed distance.~~
- (2) Shade required to be available when the temperature does not exceed ~~85~~80 degrees Fahrenheit. When the outdoor temperature in the work area does not exceed ~~85~~80 degrees Fahrenheit employers shall either provide shade as per subsection (d)(1) or provide timely access to shade upon an employee's request.
- (3) Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade for a period of no less than five minutes at a time when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times. An individual employee who takes a preventative cool-down rest (A) shall be monitored and asked if he or she is experiencing symptoms of heat illness; (B) shall be encouraged to remain in the shade; and (C) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.
- (4) If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the employer shall monitor the employee during the cool-down rest or recovery period to determine if signs or symptoms are abating or worsening. If signs or symptoms worsen or do not resolve, the employer shall provide appropriate first aid and/or emergency medical services response according to subsection (f) of this section.

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Exceptions to subsections (d)(1) and (d)(2):

- (1) Where the employer can demonstrate that it is infeasible or unsafe to have a shade structure, or otherwise to have shade present on a continuous basis, the employer may utilize alternative procedures for providing access to shade if the alternative procedures provide equivalent protection.
 - (2) Except for employers in the agricultural industry, cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if the employer can demonstrate that these measures are at least as effective as shade in allowing employees to cool.
- (e) High-heat procedures. The employer shall implement high-heat procedures when the temperature equals or exceeds ~~95~~85-95 degrees Fahrenheit. These procedures shall include the following to the extent practicable:
- (1) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.
 - (2) Observing employees for alertness and signs or symptoms of heat illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following:
 - (A) Supervisor or designee observation of 20 or fewer employees, or
 - (B) Mandatory buddy system, or
 - (C) Regular communication with sole employee such as by radio or cellular phone, or
 - (D) Other effective means of observation.
 - (3) Designating ~~an~~ one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
 - (4) Reminding employees throughout the work shift to drink plenty of water.

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

~~(4) Close supervision of a new employee by a supervisor or designee for the first 14 days of the employee's employment by the employer, unless the employee indicates at the time of hire that he or she has been doing similar outdoor work for at least 10 of the past 30 days for 4 or more hours per day.~~

(5) Pre-shift meetings before the commencement of work to 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.

(6) For employees employed in agriculture, the following shall also apply:

~~For every two hours an employee works continuously outdoors during~~ When temperatures of reach 95 degrees or above, the employer shall ensure that the employee takes a minimum ten minute net recovery preventative cool-down rest period every two hours. The recovery preventative cool-down rest period required by this paragraph shall be taken, insofar as practicable, near the end of each second hour of work in which temperatures are 95 degrees or greater. This recovery period may be provided concurrently with any other meal or rest period required by Industrial Welfare Commission Order No. 14 if the timing of the recovery preventative cool-down rest period coincides with a required meal or rest period. For purposes of this section, preventative cool-down rest period has the same meaning as "recovery period" is defined in Labor Code Section 226.7(a).

(f) Emergency Response Procedures. The Employer shall implement effective emergency response procedures including:

(1) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable. If an electronic device will not furnish reliable communication in the work area, the employer will ensure a means of summoning emergency medical services.

(2) Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Attachment No. 1
Revised text - Page 7 of 10

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

- (A) If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness.
- (B) If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), the employer must implement emergency response procedures.
- (C) An employee exhibiting signs or symptoms of heat illness shall not be sent home without being offered onsite first aid and/or being provided with emergency medical services in accordance with the employer's procedures.
- (3) Contacting emergency medical services and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider.
- (4) Ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.
- (g) Acclimatization.
- (1) All employees shall be closely observed by a supervisor or designee during a 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.
- (2) An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.
- ~~(f)~~(h) Training.
- (1) Employee training. Effective training in the following topics shall 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:

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

- (A) The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
- (B) The employer's procedures for complying with the requirements of this standard, 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.
- (C) The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.
- (D) The concept, importance, methods of acclimatization, and the employer's procedures under subsection ~~(e)(3)~~(i)(4).
- (E) The different types of heat illness, ~~and~~ the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness, and in addition, that heat illness may progress quickly from mild symptoms and signs to serious and life threatening illness.
- (F) The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.
- (G) The employer's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.
- (H) The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.
- (I) The employer's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures shall

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

(2) Supervisor training. Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness effective training on the following topics shall be provided to the supervisor:

(A) The information required to be provided by section ~~(f)~~(h)(1) above.

(B) The procedures the supervisor is to follow to implement the applicable provisions in this section.

(C) The procedures the supervisor is to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures.

(D) How to monitor weather reports and how to respond to hot weather advisories.

~~(g)(i)(3) Written procedures~~Heat Illness Prevention Plan. The employer's shall establish, implement, and maintain, an effective procedures for complying with each requirement of this standard required by subsections (f)(1)(B), (G), (H), and (I) heat illness prevention plan. The plan shall be in writing in both English and the language understood by the majority of the employees and shall be made available at the worksite to employees and to representatives of the Division upon request. The ~~Heat Illness Prevention Plan~~ may be included as part of the employer's Illness and Injury Prevention Program required by section 3203, and shall, at a minimum, contain:

(1) Procedures for the provision of water and access to shade.

(2) The high heat procedures referred to in subsection (e).

~~(3) Procedures for the close supervision of all employees during periods when it is predicted that the high temperature for the day will be 80 degrees Fahrenheit or more and ten degrees Fahrenheit or more above the average high daily temperature in the preceding five days, and for an employee newly assigned to high heat areas by a supervisor or designee, for the first 14 days of the employee's employment by the employer.~~

STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

Attachment No. 1
Revised text - Page 10 of 10

PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

~~(4)(3) Emergency Response Procedures~~; in accordance with subsection (f).

~~(A) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.~~

~~(B) Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.~~

~~(C) Contacting emergency medical services and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider.~~

~~(D) Ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.~~

~~(4) Acclimatization procedures in accordance with subsection (g).~~

~~(h) If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness. If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), the employer must implement emergency response procedures. An employee exhibiting signs or symptoms of heat illness shall not be sent home without being offered onsite first aid and/or being provided with emergency medical services in accordance with the employer's procedures.~~

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

SUMMARY AND RESPONSE TO COMMENTS

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
General Uncategorized	<p>Several commenters argued that there was no data or Cal-OSHA experience justifying any regulatory changes; and some criticized the proposals as too prescriptive and the process used to develop the proposals as not sufficiently collaborative. (There were related requests to make the language more understandable and to make the supporting studies and data available. There were also claims that the economic impacts would be higher than estimated because of reasons such as needing to hire more supervisors to comply and projected higher costs for breaks or for amending heat illness prevention plans.)</p> <p>Several other commenters argued that stricter standards are wholly supported by research and studies (some cited) and that these proposals may be a step in the right direction but don't go far enough.</p> <p>Suggestions were made to change the scope or approach of these proposals by –</p> <ul style="list-style-type: none">• Adopting industry-specific orders for agriculture or construction• Expanding coverage to all work or to quasi-indoor work (such as in open warehouses) posing the same heat illness risks <p>Some expressed the need to distinguish between transitory and fixed work sites in setting distance limits.</p> <p>Many suggested that Cal-OSHA focus more attention on enforcement, either in lieu of or in addition to revising the regulation.</p>	<p>No change in scope of proposals. These proposals were developed over a period of years devoted to examining the issues, holding public advisory meeting, and consulting with interested parties on all sides. Any change in scope would add significant delay and preclude having improved standards in place for the late spring and summer of 2015. (Note: Studies relied upon were listed in the Initial Statement of Reasons and are a part of the rulemaking record available from the Standards Board.)</p> <p>The distance limits for water and shade availability have been removed in the proposed revisions in favor of the performance standard of “as close as practicable to the areas where employees are working.”</p>

(b) Definitions.

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
Definition of “Shade”	<p>Several commenters strongly support the proposed additional phrase (“and does not discourage access”) and suggest incorporating examples in Statement of Reasons into the text. Others suggested prohibiting shade from being located next to or across a road and prohibiting use of crop plants as shades.</p> <p>Several commenters questioned whether the additional phrase added clarity or improved the existing language, with one posing the question “discourage access by whom?” and others expressing concern that it may be subjectively enforced.</p>	<p>To add greater clarity to the text, the proposed additional phrase is being modified to read “and does not <i>deter or</i> discourage access <i>or use.</i>” This more completely expresses the concept of workers of being unable or unwilling to use the available shade because of where that shade is located. It does not seem necessary or prudent to incorporate examples directly into the text, as this can lead to questions over whether the list of items is complete or exclusive.</p>
Definitions for other items	<p>Some commenters suggested adding regulatory definitions for “fresh, pure, and suitably cool” water, for “preventative cool down rest” periods, and for “heat waves” (in relation to acclimatization).</p>	<p>Only “heat wave” needed to be defined in order to clarify an acclimatization requirement, and this definition was placed within the new subsection (g) that sets forth this requirement.</p>
(c) Provision of Water.		
Quality of Water	<p>Several commenters suggested that all or parts of the added phrase “fresh, pure, and suitably cool” were ambiguous and susceptible to subjective enforcement. Some commented on practical problems in providing sufficient amounts of water meeting this quality standard, and some wanted the standard to remain just “potable.”</p> <p>Some commenters recognized that the added phrase already appears in existing General Industrial Safety Order 3457. Some commented on examples of employers that did not provide water that was fresh and clean or that offered warm unpalatable water for free while offering to sell cool bottled water.</p>	<p>Because the added language is drawn from other existing safety orders, it is not being changed, but it is being moved so that the first sentence of the subsection will now read, “Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable, <i>including but not limited to the requirements that it be fresh, pure, suitably cool, and provided to employees free of charge.</i>”</p>

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
<p>Availability of Water / Distance</p>	<p>Numerous commenters opposed the combined performance and prescriptive standards of “as close as practicable to the areas where employees are working and . . . [no] farther than 400 feet . . . unless the employer can demonstrate that conditions prohibit locating the drinking water within the prescribed distance.” Many complained that the distance limit was impractical for their industry in terms of physical layout and that the combined standards invited subjective enforcement. Others believed 400 feet is too great to provide ready access or encourage frequent drinking of water, but that placing a specified limit in the regulation would create a “default” compliance standard.</p> <p>Some commenters suggested that a standardized distance limit be set for water, shade, and field sanitation.</p>	<p>The language is being pared down into a performance standard as follows. “The water shall be located as close as practicable to the areas where employees are working.” Although this standard could lead to more case-by-case determinations and disputes over what is close enough to satisfy this requirement, it appears to be the standard that is most preferred by worker and industry representatives alike.</p> <p>Regarding standardizing all distances, water in particular can and should be closer at hand and more readily available than shade or portable sanitation. It should not only be made available in a rest area where these other facilities are provided.</p>
<p>(d) Access to shade.</p>		
<p>(d)(1) – Trigger temperature for availability</p>	<p>Several commenters argued that there was no scientific basis for lowering the trigger temperature for shade availability from 85° to 80°. Several others argued that the trigger should be lowered further to 75° based on the National Weather Service’s Heat Index that uses 80° as a threshold for “Caution – risk of severe heat illness in sensitive individuals.” Commenters on all sides noted that humidity and average temperatures in a given region are also significant considerations.</p>	<p>No change. While some argued for variable standards based on locale and other factors such as humidity, variable standards would be far more difficult for employers to understand and apply and for regulators to enforce.</p>
<p>(d)(1) – Amount/extent of coverage</p>	<p>Several commenters argued that increasing availability of shade from sufficient to accommodate 25% of workforce to sufficient to accommodate all employees on prescribed breaks was impracticable and that employers could not always stagger shifts.</p>	<p>No change. The requirement is for coverage of 100% of the outdoor workforce only if the employer maintains a rigid schedule with all employees on break at the same time. No information was provided regarding why this would be necessary or why it would be appropriate to leave a majority of the employees without access to shade when</p>

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
(d)(1) -- Distance	<p>Numerous commenters opposed the combined performance and prescriptive standards of “as close as practicable to the areas where employees are working but no farther than 700 feet walking distance from the area when any employee is working unless the employer can demonstrate that terrain or other conditions prohibit locating the drinking water within the prescribed distance.” Many complained that the distance limit was impractical for their industry in terms of physical layout and that the combined standards invited subjective enforcement. Others believed that 700 feet is too great to ensure quick and easy access to shade, but that placing such a specified limit in the regulation would make it the “default” compliance standard.</p>	<p>taking a break on a very hot day.</p>
(d)(3) and (4) -- Cool down rest and employee exhibiting signs or reporting symptoms of heat illness	<p>Some commenters suggested that a standardized distance limit be set for water, shade, and field sanitation.</p> <p>Some commented that a cool down rest taken by an employee as a preventative measure was being treated the same as a period of recovery from heat illness that might trigger the need for emergency medical response.</p> <p>Several commenters believe the language, including use of the word “monitor,” creates an expectation that supervisors will have medical training and expertise.</p> <p>Several others strongly supported these provisions and suggested that the monitoring element be linked to the employer’s emergency procedures as specified in its Heat Illness Prevention Plan.</p>	<p>The language is being pared down into a performance standard as follows. “The shade shall be located as close as practicable to the areas where employees are working.” Although this standard could lead to more case-by-case determinations and disputes over what is close enough to satisfy this requirement, it appears to be the standard that is most preferred by worker and industry representatives alike.</p> <p>In response to these comments, the wording of these paragraphs has been revised to add clarity. The word “preventative” has been added so that an individual shade break under subsection (d)(3) is called a “preventative cool-down rest”. The word “individual” has been added to distinguish this employee-directed situation from the group breaks required by subsection (e)(6) for agricultural employees working continuously in high heat. The “monitoring” requirement has been moved from (d)(4) to (d)(3), and a specific cross-reference to the employer’s emergency response procedures has been added to (d)(4). Regarding the employer’s ability or capacity to make medical decisions, heat illness is like any other job illness or injury, where the employer must be ready to supply whatever medical attention is required and ultimately will be liable in workers’ compensation for that illness and injury.</p>

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
(e) High-heat procedures.		
General Applicability / Trigger Temperature	<p>Several commenters strongly supported lowering the trigger temperature and suggested that the high heat procedures be extended to all outdoor workers, with specific recommendation to do this by deleting subsection (a)(2).</p> <p>Several commented that multiple trigger temperatures with overlapping requirements create confusion.</p> <p>Several noted that the lower temperature would make many more days of the year subject to high heat procedures. Currently some employers stop work at 95° without being required to implement high heat procedures, but this option won't be feasible at 85°.</p> <p>Some suggested lowering the trigger temperature to 80° in the event of high humidity and prohibiting work between noon and sunset during an extended heat wave.</p> <p>Some also suggested having a system to account for workers leaving the jobsite.</p>	<p>Because important changes are being made in other subsections on provision of water, access to shade, emergency response procedures, and acclimatization that apply across the board, there appears to be no compelling need to lower this particular trigger temperature, which applies to a limited set of procedures for a limited number of industries. Leaving it at 95°, which is also the trigger temperature for the break rule in (e)(6), should limit confusion over overlapping requirements and concerns about having too many daily procedural protocols in regions where 85°+ days are commonplace.</p> <p>Regarding a system to account for workers leaving the jobsite, employers should already be tracking the presence or absence of employees for purposes of meeting pay obligations (which includes the obligation to pay employees for non-productive time under the control of the employer) as well as high heat monitoring requirements in these proposals.</p>
(e)(2) – Observing employees	<p>This section drew only a handful of comments, including that buddy system or “other effective means of observation” options should not be seen as means to shift all responsibility to rank and file workers; that the terms “regular communication” and “effective” should be further defined or quantified (with one suggesting that “regularly understandable communication” be incorporated from General Industrial Safety Order 3203(a)(3)); and that term “monitoring” should be removed to avoid implication that medical expertise is required.</p>	<p>No change. The proposed language appears to be understandable to most commenters without additional elaboration.</p>
(e)(3) – Designating	<p>One commenter believed this is duplicative of current regulations on</p>	<p>This subsection has been redrafted to read as follows:</p>

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
employee(s) to call for emergency services	emergency procedures, and one interpreted the provision as requiring designation of someone in addition to a trained supervisor. Another recommended designating “one or more” employees on a worksite.	“Designating <i>one or more</i> employees on each worksite <i>as</i> authorized to call for emergency medical services, <i>and allowing other employees to call for emergency services when no designated employee is available.</i> ”
(e)(5) – Pre-shift meetings	<p>Several commented that it is not legal to require employees to attend meetings before their paid workday begins and suggested deleting terms “pre-shift” and “before the commencement of work”.</p> <p>Another commenter noted that the compensation is lower for non-productive work time.</p> <p>Others questioned the meaning, utility, or required frequency of pre-shift meetings, with one suggesting that safety meetings be held at least every 10 working days.</p>	<p>No change. It should be noted that a pre-shift discussion of high heat precautions can be part of a pre-shift meeting held for other purposes. It should also be noted that this has been proposed as a safety measure, and that the designations “pre-shift” and “before the commencement of work” refer to the timing of the meeting and do not override laws requiring employees to be paid for time under the employer’s control.</p>
(e)(6) – Mandated rest breaks in agriculture	<p>Several commenters argued that this provision improperly mingles wage and hour requirements with health and safety requirements; that it imposes new recordkeeping requirements; that it improperly singles out agriculture; and that the timing requirements are confusing and unduly rigid and potentially require more or different breaks than those required by Wage Order 14.</p> <p>Several others argued that the proposal is not sufficiently protective, and that in line with other industries and studies, longer breaks should be required hourly and at lower temperatures.</p>	<p>In response to the concerns over the required timing of these breaks, the sentence specifying when the break must be taken was deleted. The resulting language remains consistent with the original intent to enable employers to align these breaks with other breaks required by Wage Order No. 14 and to allow meal breaks to be unpaid if an employee is not exhibiting signs or reporting symptoms of heat illness and is free of responsibility or control at that time.</p> <p>The pay structure in agriculture (in which longer straight-time hours, shorter working seasons, and piece-rate compensation, all operate as disincentives to halting production work) still justifies the differential treatment of this industry.</p>
(f) Emergency Response Procedures [new]		
General	Several commenters said that these provisions should be separated	The first two recommendations were accepted, and the Emergency

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
	<p>out and identified as substantive requirements rather than being identified only as required elements of the employer’s written heat illness prevention plan.</p> <p>Several recommended that consistency be maintained between emergency response requirements and the new observation and response requirements in the final subsection.</p> <p>One said that the new emergency response procedures are unnecessary and adequately covered in the existing standard and other general standards governing emergency medical services and first aid.</p> <p>Two suggested adopting the Federal OSHA web page on Heat Illness Emergency Response as an Appendix, and others suggested adding references to other materials that provide guidance on appropriate response for different types of work-related heat illness.</p>	<p>Response Procedures have been moved from paragraph (4) of the subsection on Written Procedures to their own new subsection (f). What was previously set forth in the final untitled subsection on observation and response was also incorporated into the new subsection (f). The language is the same as before with the exception of the addition of the words “or emergency medical services” after the word “supervisor” in paragraph (1) [formerly (g)(4)(A)] and the deletion of an unnecessary sentence at the end of paragraph (4) [formerly (g)(4)(D)].</p>
(f)(1) [formerly (g)(4)(A)] – Effective Communication	<p>One suggested that the words “effective communication” be changed to “readily understandable communication.”</p>	<p>No change excepts as noted above under “General”.</p>
(f)(2) [formerly (h)] – Immediate action	<p>Some expressed concern that the words “commensurate with the severity of the illness” imply that supervisors must have and exercise medical judgment beyond their expertise, and they suggested alternative of providing “appropriate first aid and/or emergency medical services in accordance with the employer’s procedures.”</p>	<p>No change. The alternative would not really resolve the stated concern. There is no requirement here to have or exercise expert medical judgment, but there is an overriding expectation that needed treatment will be provided rather than delayed or withheld because no one recognizes the problem or knows what to do about it.</p>
(g) Acclimatization [new]	<p>As with Emergency Response, some commenters said that these provisions should be separated out and identified as substantive requirements rather than being identified only as required elements of</p>	<p>The recommendation to place these requirements in a separate subsection was accepted. In addition, the confusion caused by the wording of the preexisting provision (former subsection (g)(3)) was addressed by splitting into two paragraphs. Paragraph (1) now covers</p>

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
	<p>the employer’s written heat illness prevention plan.</p> <p>Several commented that the temperature triggers in this subsection are different from the others and will lead to confusion. Two suggested deleting the component of 10° above previous daily average and just having the 80° trigger. Another commented that this trigger would require close supervision every day of the year in some places. (A couple believed that the 10° above previous daily average trigger could apply at temperatures of 60 or 70 degrees.)</p> <p>Some also commented that the term “high heat areas” is not defined and confusing.</p> <p>Two commented that close supervision is an undue burden but also noted the importance of acclimatization.</p>	<p>supervision of all employees during a “heat wave” and defines that term as a day when the predicted temperature will reach or exceed 80° <i>and</i> be at least 10° higher than the daily average high in the preceding five days. The term heat wave may help employers and workers better understand that the need for acclimatization is triggered by the presence of both factors and not just one or the other.</p> <p>Paragraph (2) now covers supervision of an employee who is newly assigned to a high heat area. There are no specific temperature triggers in this paragraph, but it is relational in the same way the other standard is: An employee moving from one outdoor job location to another in the Central Valley in July may not need to acclimatize; but another employee moving from a cool coastal location to a warm inland location (or changing from an indoor job to an outdoor one) would need to acclimatize, even if outdoor temperatures were moderate by the inland area’s standards.</p>
<p>(h) Training [formerly (f)]</p>		
<p>General</p>	<p>Some recommended adding a requirement that an employee trained in first aid for heat illness be present at all outdoor worksites whenever the temperature is expected to reach or exceed 75°.</p> <p>Some recommended adding the following: “Training material appropriate in content and vocabulary to the educational level, literacy and language of employees shall be used.”</p> <p>Others commented that the enumeration of specific items within this section was unnecessary and duplicative of other language or legal requirements (especially with regard to retaliation).</p> <p>One questioned the use of the phrase “including, but not limited to” in</p>	<p>No substantive change. The proposal to require an employee with first aid training in heat illness at every worksite where the temperature reaches 75° is overly broad and prescriptive and not tied to an identified need. The other suggested addition is presumed in the existing requirement that training be “effective.” While this regulation is designed to be self-contained and instructive on the particular topic of heat illness, one of the dangers in adding too many general prescriptions is in creating the assumption that those prescriptions will not apply if not expressly stated.</p> <p>Use of the phrase “including, but not limited to” is appropriate in this instance because the preceding introductory phrase defines the overall scope of the topic while the following enumerated items are not an</p>

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
	paragraph (1)(B)	exhaustive list.
(h)(1)(D) [formerly (f)(1)(D)] – Acclimatization	Some commenters expressed uncertainty over the meaning and duties imposed by this paragraph and the corresponding provision on acclimatization in the subsection on written procedures.	The paragraph on acclimatization procedures has been redrafted, as indicated above, and what is expected of employers will also be addressed through guidelines.
(i) Heat Illness Prevention Plan [formerly (g) - Written Procedures]		
General	<p>Several commented that this section included employer obligations not found elsewhere in the regulation.</p> <p>Several commenters suggested that the emergency procedures in the heat illness prevention plan incorporate the employer observation and response requirements in [former] subsection (h).</p> <p>Some also recommended that this Plan include the name and contact information for a person designated to provide first aid and contact emergency services on every work shift.</p> <p>Several generally supported the various elements added to this subsection.</p>	<p>The emergency response procedures were separated out into a new subsection (f) that incorporates the language previously proposed as new subsections (g)(4) and (h). The acclimatization requirements were separated out into a new subsection (g) that incorporates and revises the language previously proposed as new subsection (g)(3).</p> <p>The suggestion to identify emergency responders for every work site in the Plan was not accepted, as it would be extremely difficult and cumbersome to comply with for employers without static worksites and shifts; and there are other ways to keep workers informed about who these responders are, without having to repeatedly update a written Plan.</p>
First paragraph	<p>Two commenters noted that the revised language appears to require a free-standing written heat illness prevention plan, though the current standard allows the plan to be incorporated into the employer’s Illness and Injury Prevention Program.</p> <p>Another commenter noted that the word “effective” is not defined and should be deleted because it lacks clarity.</p> <p>Some commenters raised concerns about the requirement to have the plan available “at the worksite,” with some recommending an</p>	<p>The title of the subsection was changed to “Heat Illness Prevention Plan,” and language was added to specify that it may be included as part of the employer’s Illness and Injury Prevention Program under section 3203.</p> <p>The word “effective” was retained. Though it may seem quite general, the term is well understood in the world of occupational safety and health regulation as providing a critical measuring stick for determining whether a procedure, plan, or measure serves its intended purpose to</p>

Heat Illness Regulation (8 CCR 3395) – Summary of Comments and Responses for 15 day Notice

Subsection / Subject	Summary of Comments	Response / Rationale
	enumeration of acceptable alternatives.	promote or protect worker health and safety. <i>See</i> Labor Code § 142.3(a)(2) [The Standards Board “shall adopt standards at least as <i>effective</i> as the federal standards . . .”] The proposed worksite language provides necessary and sufficient context for the term “available” so that workers can have ready access to the plan and not have to hunt it down.
(i)(2) [formerly (g)(2)] – High Heat Procedures	Two commenters expressed concerned that employers not subject to subsection (e) would still be required to address high heat procedures in their plans.	No change. The specific reference to subsection (e) means that those procedures need only be addressed if that subsection applies, although other employers are welcome to adopt and incorporate high heat procedures in their plans.
(i)(3) [formerly (g)(4)] – Emergency Response Procedures	<i>See comments above under subsection (f) Emergency Response Procedures.</i>	The substantive requirements were separated out into a new subsection (f) as noted above. Paragraph (3) of this subsection (i) now provides only that the Heat Illness Prevention Plan must include “Emergency Response Procedures in accordance with subsection (f).”
(i)(4) [formerly (g)(3)] – Acclimatization	<i>See comments above under subsection (g) Acclimatization</i>	The substantive requirements were separated out into a new subsection (g) as noted above. Paragraph (4) of this subsection (i) now provides only that the Heat Illness Prevention Plan must include “Acclimatization Procedures in accordance with subsection (g).”