**HEAT ILLNESS PREVENTION PLAN**

**SUPERVISOR SPECIFIC PROCEDURES & DETAILED GUIDANCE FOR IMPLEMENTING AN EFFECTIVE PLAN**

**INJURY & ILLNESS PREVENTION PROGRAM**

**ATTACHMENT H1**

Supervisors play a vital role in protecting their employees from the hazards of excessive heat exposure. California Code of Regulations, Title 8 (CCR T8), [section 3395](https://www.dir.ca.gov/title8/3395.html) addresses outdoor workplaces, and [section 3396](https://www.dir.ca.gov/Title8/3396.html) addresses indoor workplaces. UC ANR locations must develop written heat illness prevention plans/procedures that address one or both types of workplaces.

The guidance within this document assists supervisors/locations with adding their worksite-specific procedures to the UC ANR template Heat Illness Prevention Plan. Use of the UC ANR template does not guarantee compliance with sections 3395 or 3396 and does not shield an location from being cited for violations of those sections. Location specific information is required as well as training, effective implementation of the plan and appropriate response actions taken by supervisors and employees.

**Note**: The template procedures describe the minimum essential heat illness prevention steps applicable to most outdoor and indoor work settings. In work environments where there is a higher risk for heat illness (e.g., during a heat wave or other severe working or environmental conditions), you must exercise greater caution and employ protective measures as needed to protect workers.

To effectively establish your procedures, review the instructions provided for each of the elements of the plan template, then develop written procedures applicable to your workplace by filling in the site-specific information listed in *red italic*. The Heat Illness Prevention Plan must be written in English and the language understood by the majority of the workers and must be available at the worksite.

Effectively implement and maintain the heat illness prevention procedures you develop, including training workers (and supervisors) on your local procedures. Be sure to follow up with employees to ensure your procedures are fulfilled. Tailor procedures to your work activities by evaluating and considering the specific conditions present at your site. The sample procedures do not include every workplace scenario, so it is essential that you evaluate all conditions found in your individual workplace that are likely to cause heat illness and personalize your plan.

Review additional information and resources for locations and supervisor online at: <https://ucanr.edu/heatillness> or <https://safety.ucanr.edu/Programs/Heat_Illness_Prevention/>

**Provision of Water:**
Sufficient Access - Adequate water is required at all times, regardless of outdoor temperature and must be made available at no cost to the worker.

Water is the body's single best defense against heat other than removing heat exposure itself. In conditions of high heat and strenuous work, the human body can lose over a quart of fluid per hour just by sweating. Continuous replacement of this lost fluid is critical to allowing the body to maintain the life-preserving cooling benefits of perspiration. This is why it is so important to ensure the presence of, ready access to, and consumption of pure, fresh, and cool drinking water.

The water must be potable (i.e., fit to drink), fresh, pure, suitably cool, and provided to workers free of charge. Water must be located as close as practicable to the areas where workers are working. The purpose of these requirements is to encourage workers to drink water often and avoid making the workers interrupt their work in order to do so. To ensure that water is fresh, pure, and suitably cool, Cal/OSHA advises employers or supervisors to visually examine and smell/taste the water and pour some on their skin.

Close as Practicable - Potable drinking water must always be placed in locations readily accessible to all workers, so that workers can easily drink while working. When a worker has to interrupt work in order to drink, the chances go down that the worker will drink enough water to protect fully against heat illness.

During a Cal/OSHA inspection, the inspector may ask the supervisor to describe the factors the employer considered in deciding where to place water. For example, although the employer may state it is impossible to place water stations within rows of crops where workers are working, it may be possible to place the water stations at the end of rows. Because water containers are smaller than shade structures, they can be placed closer to workers than shade structures. Placing water only in designated shade areas or where toilet facilities or buildings are located may not be sufficient. When workers are working across large areas, water should be placed in multiple locations.

Employers may supply workers with individual water bottles/containers (preferably insulated) provided hygiene is ensured (i.e., clean bottles for each worker) and a source for water replenishment is readily available. It is not permissible for an employer to require workers to supply their own water or water containers, even if the employer reimburses the workers for the cost.

Amount and Effective Replenishment - When unlimited drinking water is not immediately available from a plumbed system or otherwise continuously supplied, the employer must provide enough water for every worker to be able to drink one quart of water, or four eight-ounce cups, per hour.

If an employer chooses not to provide the full-shift quantity of drinking water at the start of a work shift (e.g., two gallons per worker for an eight-hour shift), the standard requires effective written procedures for drinking-water replenishment allowing each worker to drink one quart per hour. In other words, a sufficient quantity of water must always be present and readily accessible, allowing every worker to consume at least one quart of water per hour until the water supply has been replenished.

A water-supply procedure that depends on replenishment during the work shift is out of compliance if it is not reliable. An employer is also out of compliance if at any time drinking water is not available to workers, or if the practice is to wait until the water vessel is empty to replenish it. It is similarly not allowed for an employer to replenish the drinking-water supply only when requested by workers.

Encouragement to Drink Water - The standard requires not only that water be provided, but that employers encourage workers to drink it frequently. The importance of this cannot be overstated. Workers may be focusing on work, and many of them may not feel how urgently their bodies need water. The tendency of workers to be unaware of and/or not respond to their body's need to hydrate is an unfortunate but preventable cause of heat illness. In their worker training sessions, employers/supervisors must emphasize the importance of drinking water frequently throughout the day, especially in high heat. In addition, the location must specify in their written heat illness prevention plan how the workers will be reminded and encouraged to drink water. For example, the supervisor can verbally remind workers or use an audible signal to remind workers to drink water. By removing any barriers that may exist to access, making the access distance as short as reasonable, and making the water station inviting by using ice (if feasible) and shade, you can actively facilitate and encourage the frequent drinking of water.

**Provision of Shade Outdoors:**
Sufficient Access - When temperatures exceed 80 F, shade structures must be erected if no other shade is readily available. Even if temperatures do not exceed 80 F, employers must still provide timely access to shade if requested by a worker. It is helpful to have the shade erected if the weather is hot enough so that the shade can help workers cool off. Supervisors/locations should monitor predicted weather temperatures in advance (on television, radio, cell phone apps, or the internet) to know when the temperature is likely to exceed 80 F. Employers are expected to know if the temperature is in fact exceeding 80 F at the worksite, for example by taking the temperature with a thermometer.

Appropriate Sources for Shade – Shade is the direct blockage of sunlight. Blockage is sufficient when objects do not cast a shadow in the shaded area. Shade may be provided by any natural or artificial means that do not expose workers to unsafe or unhealthy conditions and do not deter or discourage use.

For example, buildings, canopies, lean-tos, Ezy-ups or other partial or temporary structures that are either ventilated or open to air movement may provide shade for breaks or preventative cool-down rests for outdoor workers. Trees can also provide shade that is superior to artificially provided shade and are accepted as compliant sources of shade if the following conditions are met:

 - The canopy of the trees must be sufficiently dense to provide substantially complete blockage of direct sunlight, and

 - The branches from the trees must not be so low to the ground that workers must crouch or cannot sit up straight without contacting vegetation

Spots of sunlight are acceptable if, overall, the shade provides substantially complete blockage of sunlight. Where trees or other vegetation are used to provide shade, the thickness and shape of the canopy must, given the changing angles of the sun, result in a sufficient shadow being cast to protect workers from the sun during the entire shift.

The interior of a vehicle may not be used to provide shade *unless* the vehicle is air-conditioned and sufficiently cooled in advance. Similarly, metal storage sheds and other outbuildings do not provide protection from sunlight which meets the definition of shade unless they provide a cooling environment comparable to shade in open air (i.e., they must be mechanically ventilated or open to air movement).

Acceptable Locations - Shade must be easy for workers to reach and its location must not deter or discourage access or use. Workers should not have to encounter any obstacles or hazardous or unreasonably unpleasant conditions to reach the shade or while resting in it. The shaded area must let workers assume a comfortable posture and must not cause exposure to another health or safety hazard. Therefore, the shade requirement cannot be met by using areas underneath mobile equipment, like a tractor, or areas that require workers to crouch in order to sit fully in the shade.

The shade, whether natural or structural, must be as close as practicable to where workers are working, given the working conditions and layout of the worksite. During a Cal/OSHA inspection, the inspector may ask the supervisor to describe the factors the employer considered in deciding where to place shade structures. Because shade is more portable than bathroom facilities, it can and should be placed closer to where workers work. This may involve placing shade structures in multiple areas over large worksites and/or moving the structures as the work area changes (such as movement across fields and rows).

Unsafe or Infeasible Shade - When providing a shade structure would be unsafe or infeasible, the employer may provide alternate access to shade that provides equivalent protection.

For example, it may be unsafe to erect a shade structure near the edge of a trench or when high winds could cause a shade structure placed near workers to blow away and hit them or create a hazard to others in the area. Furthermore, establishing a shade structure on a continuous basis may be infeasible for workers who constantly move from site to site (e.g., irrigation installers). In these cases, the location must document this determination and specify what alternatives to shade will be provided to afford equivalent protection.

Encouragement to Rest in Shade - The employer is required to allow and encourage workers to take a 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. Waiting until symptoms appear before seeking shade and recovery creates a significant risk of developing heat illness. It is crucial that workers not be rushed while taking the cool-down rest, since the purpose of the cool-down rest in the shade is to reduce heat stress on the worker. Shade removes sunlight as a source of heat, and since people produce more metabolic heat while working, resting out of direct sunlight reduces heat stress while also reducing the heart rate. Rest periods of a minimum of 10 minutes every two hours are required when temperatures exceed 95 degrees (high-heat procedures).

**Cool-Down Preventative Breaks and Employee Monitoring:**

Applicable to both indoor and outdoor worksites, supervisors or their designee shall observe workers taking Preventative Cool-Down Rest and monitor for any signs or symptoms of heat illness.

An individual employee who takes a cool-down rest period **(A)** must be monitored during the cool-down rest and asked if they are experiencing any symptoms of heat illness, including simple fatigue; **(B)** shall be encouraged to remain in the shade; and **(C)** shall not be ordered back to work until any signs and symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.

**Heat Illness Incidents and Handling a Heat Sick Worker**:

Applicable to both indoor and outdoor worksites, if any signs or symptoms of heat illness are observed or reported, the supervisor/location must not order the worker back to work and must continuously observe the worker until the signs or symptoms have abated. Common early signs and symptoms of heat illness may include pale skin, heavy sweating, headache, muscle cramps, and fatigue. If no sign or symptom of heat illness is observed or reported, monitoring may be periodic, rather than continuous.

If a worker exhibits or complains of any sign or symptom of heat illness, appropriate first aid, and emergency response procedures (if necessary) should be initiated without delay. Progression to more serious illness can be rapid and can include altered coordination and speech, mental confusion, unusual behavior, nausea, vomiting, hot dry skin, unusually profuse sweating, loss of consciousness, and seizures. The affected worker may be unable to self-diagnose these problems. It is a supervisor's responsibility to be in communication and observant.

If heat illness is suspected, emergency medical personnel should be contacted immediately. No worker with signs or symptoms of heat illness should be left unattended or sent home without being offered onsite first aid or provided emergency medical services.

**Definition of Indoor Worksites:**

Indoor places of employment are spaces that are under a ceiling or overhead covering that restrict airflow and enclosed along the entire perimeter by walls, doors, windows, dividers, or other physical barriers that restrict airflow, whether open or closed. Generally, any workplace with a roof and enclosed sides is considered an indoor workplace.

Work areas that are not indoors are considered outdoors and covered by the California Code of Regulations Title 8, section 3395, *Heat Illness Prevention in Outdoor Places of Employment*. Indoor places of employment do not refer to a shaded area that is used exclusively as a source of shade and cooling for workers working in hot outdoor environments*.* Partial structures such as lean-tos/Ezy-ups and structures with one or more open sides are outdoor workplaces.

A space such as a maintenance shop with roll up or bay doors, or storage shed fully enclosed but with doors open, if reaching above 87 degrees on the heat index or 82 degrees Fahrenheit when employees are present wearing restrictive clothing or high radiant heat, would require a nearby area for Cool-Down rest for its indoor workers in the space; or if considered an outdoor space, the following of procedures for outdoor prevention.

**Temperature Assessments / Taking the Worksite Temperature:**

Temperature Assessments for Indoor Worksites – Locations shall measure the temperature and heat index, and record whichever is greater when:

1. Initial measurements shall be taken when it is reasonable to suspect that:
	1. The temperature equals or exceeds 87 degrees Fahrenheit when employees are present; or
	2. The heat index equals or exceeds 87 degrees Fahrenheit when employees are present; or
	3. Employees wear clothing that restricts heat removal, and the temperature equals or exceeds 82 degrees Fahrenheit; or
	4. Employees work in a high radiant heat area and the temperature equals or exceeds 82 degrees Fahrenheit.
2. Measurements shall be taken again when they are reasonably expected to be 10 degrees or more above the previous measurements where employees work and at times during the work shift when employee exposures are expected to be the greatest.
3. ***Records shall be taken and include*** the date, time, and specific location of all measurements.
4. ***Records shall be retained*** for 12 months or until the next measurements are taken, whichever is later. The records shall be made available upon request to employees, their designated representatives, or the State Division of Industrial Relations / Cal/OSHA.
5. Instruments used to measure the temperature or heat index shall be used and maintained according to the manufacturer's recommendations.
6. Effective procedures shall be identified to obtain active involvement of employees or their representatives in planning, conducting, and recording the measurements of temperature or heat index (whichever is greater) and in identifying and evaluating all other environmental risk factors for heat illness (this may include conversations and discussions with employees during Heat Illness Prevention training and pre-shift meetings).

Temperature Assessment for Outdoor Worksites – Locations shall measure the temperature when reasonably expected to reach 80 degrees Fahrenheit, which is the first temperature trigger for shade to be erected/available (although employees can request access to shade at any temperature). When the temperature is expected to rise throughout the shift, temperature must be monitored for reaching 95 F, the temperature trigger for High-Heat procedures. When triggered by outside temperatures, it is critical that locations/supervisors track the weather and routinely check for approaching heat waves. Heat waves are one of the main causes of heat-related illnesses and fatalities in the state. Heat waves occur when the high daily temperature is 10 degrees more than the average of the previous 5 day’s high daily temperature.

Temperature Resources - The [National Weather Service](https://www.weather.gov/) forecasts the temperature in various locations in California. In addition, the National Weather Service’s [Heat Risk map](https://www.wpc.ncep.noaa.gov/heatrisk/) provides a forecast risk of heat-related impacts for the week. Visit the Natation Weather Service (<https://www.weather.gov/>) and Weather Underground (<https://www.wunderground.com/>) for temperature resources tools. Heat index information is available from the NWS (<https://www.weather.gov/ama/heatindex>).

The supervisor should use a thermometer to keep track of the outdoor temperature at the worksite on hot days (or an onsite weather station if applicable, i.e. at select RECs). A simple thermometer available at hardware stores can be used to measure the outdoor ("dry bulb") temperature, as long as it is taken in an area where there is no shade. The temperature measurement must be taken in an area with full sunlight around, but the bulb or sensor of the thermometer itself should be shielded from direct contact with sunlight (with the hand or some other object) while taking the measurement.

**Mitigation Measures and Heat Control Mechanisms:**

Engineering Controls for Indoor Heat – Engineering controls are methods of control or devices that remove or reduce heat or create a barrier between the worker and the heat. Employers have options when implementing control measures to protect their workers against heat illness and to comply with the standard. Examples include:

* Increased natural ventilation, such as open windows and doors when the outdoor temperature or heat index is lower than the indoor temperature and heat index.
* Cooling fans or air conditioning.
* Local exhaust ventilation at points of high heat production or moisture (such as exhaust hoods).
* Reflective shields to block or reduce radiant heat.
* Insulating or isolating heat sources from workers, or isolating workers from heat sources.
* Cooled seats or benches.
* Evaporative coolers.

Supervisors/locations are required to use engineering controls when one or more of the following conditions exist in indoor work environments:

* The temperature equals or exceeds 87 degrees Fahrenheit when workers are present.
* The heat index equals or exceeds 87 degrees Fahrenheit when workers are present.
* Workers wear clothing that restricts heat removal and the temperature equals or exceeds 82 degrees Fahrenheit.
* Workers work in a high-radiant heat area and the temperature equals or exceeds 82 degrees Fahrenheit.

Supervisors/locations must start with feasible engineering controls, then add administrative controls if those are not enough to reduce the temperature and heat index to below 87 degrees Fahrenheit (or temperature to below 82 degrees Fahrenheit for workers working in clothing that restrict heat removal or high-radiant heat areas) indoors.

Feasibility - Whether engineering controls are feasible to implement is a fact-sensitive question that includes an evaluation of the size, configuration and location of the indoor workspace, the sources of radiant heat, and the nature of the work being done by workers, among other things. Engineering controls may be infeasible because of technical reasons or due to the excessively high cost of implementation. If an employer determines that implementation of engineering controls is infeasible, that would be evaluated on a case-by-case basis in the event of a compliance inspection.

Administrative Controls for Heat - refers to methods that limit exposure to heat by adjusting work procedures, practices, or schedules, i.e. decisions that are made administratively. Administrative controls should be used once all feasible engineering controls have been implemented but are not enough to:

* Reduce and maintain the temperature and heat index to below 87 degrees Fahrenheit when employees are present indoors, or
* The temperature to below 82 degrees Fahrenheit where employees wear clothing that restricts heat removal or work in high radiant heat areas indoors.

*Examples include*:

* Modify work schedules and activities to times of the day when the temperature is cooler or schedule shorter shifts, especially during heat waves. For newly hired workers and unacclimatized existing workers, gradually increase shift length over the first one to two weeks.
* Require mandatory rest breaks in a cooler environment, such as a shady location or an air-conditioned building. The duration of the rest breaks should increase as heat stress rises.
* Schedule work at cooler periods or times of day, such as early morning or late afternoon.
* Rotate job functions among workers to help minimize exertion and heat exposure.
* Reduce work intensity or speed.
* Modify work clothing.
* Mark heat sources clearly so if workers must work nearby, they are aware of the hazards.
* Require workers to work in pairs or groups during extreme heat so they can monitor each other for signs of heat illness (buddy system).

**High-Heat Procedures for Outdoor Agricultural Operations:**

High-heat procedures apply to UC ANR agricultural sites or outdoor operations. When temperatures reach or exceed 95 F, supervisors/locations must implement the high-heat preventive procedures listed in subsection (e) of [8 CCR §3395](https://www.dir.ca.gov/Title8/3395.html) and described below:

Monitoring Workers during High-Heat - During periods of high heat, it is crucial that workers be monitored for early signs and symptoms of heat illness to help ensure that sick workers receive treatment immediately and progression to serious illness is stopped. If a worker suffers syncope (fainting), disorientation, loss of consciousness, or other symptoms of heat illness while working unobserved, initial medical treatment may be delayed, resulting in a serious or fatal illness.

Because each worksite is unique, the standard gives employers options and flexibility in observing and monitoring workers. When workers work in small groups of no more than 20 workers, direct observation by a supervisor or designee may be sufficient. When there are too many workers to allow direct observation, the employer may use the buddy system and pair up workers, similarly a mandatory buddy system should be used if the supervisor is not onsite or in frequent communication.

Buddy System - With the ‘buddy’ system, the employer must train the workers to stay in contact, observe each other throughout the day, and immediately report any signs or symptoms of heat illness. For workers who are required to work alone, the supervisor may communicate with the worker by radio or cell phone, provided there is adequate coverage. The worker must be contacted regularly and as frequently as practicable throughout the day, since a worker in distress may not be able to summon help on his or her own.

Employers may use different methods to monitor for heat illness. Whatever method is used, the employer must be able to ascertain the condition of workers at regular intervals and provide emergency services when a worker reports symptoms of heat illness or is unable to respond.

All Authorized to Call for Emergency Services - All workers must be trained to recognize the signs and symptoms of heat illness and must be allowed to call for emergency medical services when necessary.

Pre-Shift Meetings – When temperatures reach 95 degrees or above, pre-shift meetings are meant to provide supervisors and workers with a brief review of high-heat procedures. The meetings are not meant to review every element previously covered in regular training or in orientation. The employer may determine whether the training is required based on the predicted temperature in the area. Topics that should be covered in pre-shift meetings include staying hydrated and taking cool-down rests, identifying the workers who should call for emergency medical services when needed, and how workers will be observed. For workers working at remote field sites without a supervisor immediately present, the employer may conduct pre-shift meetings by cell phone or radio.

High-Heat (Outdoor) Preventative Cool-Down Rest Periods - When temperatures reach or exceed 95 F, supervisors must provide one ten-minute "preventative cool-down rest period" every 2 hours. During the first 8 hours of a shift, the cool-down periods may be provided at the same time as the rest periods already required by [Industrial Welfare Commission Order No. 14 (8 CCR §11140)](https://www.dir.ca.gov/t8/11140.html). Such rest periods must be counted as hours worked.

If workers work longer than 8 hours, the supervisor must provide an additional 10-minute cool-down rest period every 2 hours. For example, if the shift extends beyond 8 hours, an additional rest period is required at the end of the eighth hour of work. If the shift extends beyond 10 hours, another is required at the end of the tenth hour.

Supervisors must ensure that workers actually take the cool-down rest periods required under this section. Merely offering the opportunity for a break is not enough.

Supervisors are required to provide additional breaks as soon as the temperature equals or exceeds 95 F. For example, even if the temperature does not reach 95 F until the last half of an eight-hour shift, the employer must ensure that workers take cool-down rest periods starting at the end of the eighth hour of work if the shift will last longer than eight hours.

Cal/OSHA does not require employers to keep records of breaks issued under this section, but doing so is the best practice and would benefit locations.

**Acclimatization (or Adapting/Acclimating) to Heat:**

Acclimatization is a process by which the body adjusts to increased heat exposure. The body needs time to adapt when working in hotter environments. Workers are more likely to develop heat illness if they are not allowed or encouraged to take it easy when a heat wave strikes or when starting a job that newly exposes them to heat. Acclimatization is fully achieved in most people within 4 to 14 days of regular work involving at least 2 hours per day in the heat.

Supervisors must be vigilant, especially with new workers who are not acclimatized and during heat waves. A supervisor or designee must closely observe workers. The commonly-understood definition of “observation” includes verbal communication as well as visually checking on a worker. Best practices include finding ways to lessen the intensity of workers' work during a heat wave and during their first two weeks work in a hot environment.

For purposes of this section, "heat wave" means any day in which the predicted high temperature for the day will be at least 80 F and at least 10 degrees Fahrenheit higher than the average high daily temperature for the preceding five days.

**Emergency Response Procedures Implementation:**

The importance of rapidly and effectively obtaining emergency medical services in the event of a serious injury or illness cannot be overstated. Particularly at non-fixed (field/remote) worksites or at sites that are difficult to locate or access. Locations should be evaluated as to whether the worksite is served by the 911 system, service/access to communication should be reliable and supervisors/employees need to be ready to contact and communicate with emergency responders.

Emergency medical services must be provided as quickly as possible if a worker suffers severe heat illness. The employer's procedures must include contacting emergency medical services when necessary, as well as taking immediate steps to keep a stricken worker cool and comfortable once emergency service responders have been called. The goal is to stop the rapid progression to more serious illness, which can include mental confusion, loss of consciousness, and seizures.

Employers must ensure that supervisors and workers are trained to recognize the signs and symptoms of heat illness, take steps immediately to prevent the progression of heat illness, provide basic first aid (such as cooling towels and shade), obtain emergency medical services, and not allow a worker with signs or symptoms of heat illness to be left alone or sent home without being offered onsite first aid or provided with emergency medical services.

Employers, however, are not required to provide medical personnel on site, and supervisors and workers are not expected to have medical expertise to diagnose heat illness. Employees should act within the scope of their training and assist others who may be experiencing symptoms of heat illness or displaying signs.

Establishing emergency response procedures is particularly important at non-fixed or remote worksites or worksites that are difficult to locate or access. If workers cannot reach emergency medical services directly (because cell phone coverage is inadequate, for example), the employer must designate a person who can immediately contact emergency services on behalf of the workers and can provide emergency services with accurate directions to the worksite. The workers must be able to reach this person quickly (such as by radio) to request that emergency medical services be summoned.

If, however, workers are able to contact emergency medical services directly, they must be allowed to do so in an emergency and must not be required to contact a supervisor first.

Locations must be prepared to transport workers safely to a place where they can be reached by an emergency medical provider where necessary. Mobile crews must be provided with a map of their location or detailed, clear, and precise directions that can be given to emergency responders.

**Training for Workers and Supervisors:**

Employers must train all workers, both supervisory and nonsupervisory, on the risk factors for heat illness, signs and symptoms of heat illness, methods to prevent heat illness, and policies and procedures established to comply with this regulation, such as providing copies of the site-specific Heat Illness Prevention Plan and training on the plan. To be effective, training must be understood by workers. Therefore, it must be given in the language and vocabulary the workers understand.

Training Records – records shall be maintainedand will include the date of the training, who performed the training, who attended the training, and the subject(s) covered. Training records will be maintained by the Supervisor or location Safety Coordinator. A Safety Meeting Training Record sheet is available online at: [https://safety.ucanr.edu/Plans,\_Forms\_and\_Templates/](https://safety.ucanr.edu/Plans%2C_Forms_and_Templates/)
Cal/OSHA recommends that employers maintain records of the training required in this subsection, as specified in [8 CCR §3203](https://www.dir.ca.gov/Title8/3203.html) (on Injury and Illness Prevention Programs).

Training Frequency – training must be provided before the beginning of work involving a risk of heat illness. For example, when employees are new to the job and annually thereafter. Training that is given close in time to the hot season is more effective than training given during colder seasons without follow-up refresher training. As a best practice, some employers use a daily "tailgate meeting" approach for the refresher training, starting out each work shift with a brief safety reminder about issues considered particularly relevant to the work to be performed that day. (Pre-shift/tailgate meetings are required prior to work when temperatures exceed 95 degrees outdoors.)

Training Effectiveness - The basic test of training is its effectiveness. Cal/OSHA evaluates compliance by examining both content and how it is presented. To be effective, training must be understood by workers and given in a language the workers understand. The test of compliance is whether training has occurred, whether the required content has been provided, and whether the training has been effective in communicating the essentials to workers; plus, actions taken during and surrounding a heat illness incident.

To evaluate compliance, Cal/OSHA personnel ask supervisory and nonsupervisory workers about required training elements. The questions are designed to determine whether workers received training through methods generally recognized as effective and whether they understood its content. Inspectors will not expect all answers to be correct but will look for indicators that the employer has made a good-faith effort to communicate all the essential information. Supervisors must ensure that their work procedures are consistent with the information provided in the training.

Online Training Available to All Employees, with Supervisor specific module/element:
Heat Illness Prevention Training is available online for all UC ANR employees, including training modules specific to employees and/or supervisors. This training is designed to provide essential guidance on recognizing and responding to heat-related risks, ensuring safe working conditions for all employees. It is approximately 45 minutes long and can be accessed online through the **UC Davis Learning Center/LMS** using the employee’s UC Davis authentication/login. The employee should select UC Davis as their institution when logging-in to UC Sum Total (UC Learning Center/LMS) in order to access the training.

How to Access the Heat Illness Prevention Online Training:

* Note: in the initial few slides of the training, you will be asked whether you are an Employee/Worker or Supervisor, click for the appropriate module
* Direct link to the Training within the LMS:

Link: [Heat Illness Prevention - UC Learning Center](https://uc.sumtotal.host/rcore/c/pillarRedirect?isDeepLink=1&relyingParty=LM&url=https%3A%2F%2Fuc.sumtotal.host%2Flearning%2Fcore%2Factivitydetails%2FViewActivityDetails%3FUserMode%3D0%26ActivityId%3D218675%26ClassUnderStruct%3DFalse%26CallerUrl%3D%2Flearning%2Flearner%2FHome%2FGoToPortal%3Fkey%3D0%26SearchCallerURL%3Dhttps%253A%252F%252Fuc.sumtotal.host%252Fcore%252FsearchRedirect%253FViewType%253DList%2526SearchText%253Dheat%25252520illness%25252520prevention%2526startRow%253D0%26SearchCallerID%3D2)

* If the direct link failed, full instructions:
* Go to the UC Davis Learning Management System (LMS) – also known as the UC Learning Center - at: <http://lms.ucdavis.edu/>
* Authenticate/login by selecting UC Davis as the institution and use your UC Davis Kerberos passphrase
* On the welcome to UC Learning Center homepage, use the Search bar at the very top of the page
* Search for Heat Illness Prevention
* Click to take the e-learning/ecourse for Heat Illness Prevention
* When beginning to take the training, click for the applicable Employee or Supervisors module when prompted for your training type

Supervisor Additional Awareness - There are additional topics that supervisors must be trained on. Such training is crucial. The additional topics for supervisors are as follows, and where covered within this guidance document (attachment H1, which supplements the template Plan):

* The procedures the supervisor must follow to implement UC ANR’s Heat Illness Prevention Plan
* The procedures to follow when a worker exhibits or reports symptoms consistent with possible heat illness, including which steps to follow to provide first aid and immediate medical treatment,
* How to monitor weather reports and how to respond to hot weather advisories.
* All workers (includes supervisors) must be trained on every detail of the employer's emergency response procedures.

**Resources:**

Additional information about heat illness prevention can be found at the following resource links, which were used in the development of this template:

University of California: <https://ucanr.edu/heatillness>

 <https://aghealth.ucdavis.edu/training/heat-illness>

 <https://aghealth.ucdavis.edu/es/training/heat-illness>

Cal/OSHA websites: <https://www.dir.ca.gov/dosh/HeatIllnessInfo.html>

 <https://www.dir.ca.gov/title8/3395.html>

 <https://www.dir.ca.gov/dosh/heatIllnessQA.html>

 <https://www.dir.ca.gov/Title8/3396.html>

 <https://www.dir.ca.gov/title8/3396a.html>

 <https://www.dir.ca.gov/dosh/heat-illness/Indoor-faq.html#define>

<https://www.osha.gov/sites/default/files/Activity_FF_EmployerHeatChecklist.pdf>

 <https://99calor.org/english.html>

 <https://99calor.org/Indoor-Heat.html>

 <https://99calor.org/Resources.html>

Spanish Resources: <http://99calor.org/espanol/>

 <https://99calor.org/espanol/Resources.html>

 <https://99calor.org/espanol/Indoor-Heat.html>

 <https://aghealth.ucdavis.edu/es/training/heat-illness>

 Weather: <https://www.weather.gov/>

 <https://www.weather.gov/forecastmaps/>

 <https://www.weather.gov/ama/heatindex>

 <https://www.wunderground.com/>

Training: <https://lms.ucdavis.edu>

 <https://health.ucdavis.edu/cppn/documents/lms/LMS-Learner-Guide.pdf>

 <https://health.ucdavis.edu/cppn/documents/lms/LMS-Manager-Guide.pdf>

 <https://aghealth.ucdavis.edu/training/heat-illness>

 <https://aghealth.ucdavis.edu/es/training/heat-illness>

 <https://99calor.org/Resources.html>