**HEAT ILLNESS PREVENTION PLAN
INDOOR & OUTDOOR WORKSITES**

**UNIVERSITY OF CALIFORNIA**

**AGRICULTURE AND NATURAL RESOURCES**

**INJURY AND ILLNESS PREVENTION PROGRAM**

This is a fillable template that must be tailored by each University of California, Agriculture and Natural Resources (UC ANR) worksite.
Instructions in red font, in italic, enclosed in brackets indicate where you must enter your worksite-specific information.

UC ANR is committed to protecting workers from the hazards of excessive heat exposure and controlling the risk of occurrence of heat illness. This template/Plan is intended to comply with California Code of Regulations, Title 8 (CCR T8), section 3395 Heat Illness Prevention in Outdoor Places of Employment and section 3396, Heat Illness Prevention in Indoor Places of Employment. All UC ANR locations must develop written worker heat illness prevention procedures.

This template Plan has been created to assist UC ANR locations in establishing their site-specific heat illness prevention procedures for indoor and outdoor workplaces. The Plan shall be integrated into the location’s Injury and Illness Prevention Program (IIPP), required of all work locations, as Attachment H to the IIPP (CCR T8, 3203).

The Heat Illness Prevention Plan must be written in English and the language understood by the majority of the workers it is applicable to and must be available at the worksite.

Employees are free to exercise their rights under the standard without fear of reprisal or retaliation.

**Applicability**

Outdoor Worksites:
The procedures specified in this Plan related to outdoor work activities apply to all UC ANR worksites whenever environmental risk factors for heat illness are present. Key temperature triggers for outdoor heat illness prevention is 80 degrees Fahrenheit (shade provisions) and 95 degrees (High-Heat provisions) as well as during Heat Waves (10 degrees warmer than the average prior 5 days).
Indoor Worksites:
The procedures specified in this Plan related to indoor worksites apply to all UC ANR indoor work areas where the temperature equals or exceeds 87 degree on the Heat Index chart or 82 degrees Fahrenheit when employees are present and may be wearing clothing that may restrict the removal of heat or in high radiant heat areas.
All Sites:
*Environmental risk factors* for heat illness are defined as working conditions that create the possibility that heat illness could occur, including air temperature, air movement, relative humidity, radiant heat from the sun and other sources like machinery and equipment, conductive heat sources such as the ground or a floor, workload severity and duration, protective clothing and personal protective equipment (PPE) worn by employees.
*Personal risk factors* for heat illness include factors such as an individual’s age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications (or other substances) that affect the body's water retention or other physiological responses to heat.
Exceptions to the Plan:

- Places of employment where employees are teleworking from a location of the employee’s choice, which is not under the control of the employer, such as working remotely from home.
- Emergency operations that are directly involved in the protection of life or property.
- For indoor sites, incidental heat exposures where a worker is exposed to temperatures at or above 82 degrees Fahrenheit and below 95 degrees Fahrenheit for less than 15 minutes in any 60-minute period. However, this particular exception does not apply to vehicles without effective and functioning air conditioning or shipping /intermodal containers during loading, unloading, or related work.

**ALL WORKSITES:**

To tailor procedures to your location’s work activities, evaluate and consider the specific conditions present at your site such as: *[evaluate and consider]*

* whether workers work indoors, outdoors, or both
* the number of workers
* the length of the work-shift
* the ambient temperatures, heat index, and additional sources of heat workers are exposed to
* the fact that personal protective equipment, and personal risk factors, may increase the body’s heat burden

In the course of their work duties, employees in the classifications listed below may be exposed to environmental risk factors for heat illness. *[Particular to your worksites, list job categories/titles, work areas or buildings, and/or classifications/groups that may be exposed]*

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**Responsibility***[Enter name and job title of the person(s) e.g. name of location Director]*has overall authority and responsibility for implementing the provisions of this program in our workplace. In addition, all managers and supervisors are responsible for implementing and maintaining the Heat Illness Prevention Plan/Program in their assigned work areas and for ensuring workers receive training and answers to questions about the procedures in a language they understand.

All workers are responsible for using safe work practices; following all directives, policies, and procedures; and assisting in maintaining a safe work environment.

**Written Plan(s) and Procedures**This plan is in English and *[Enter language understood by most of your workers if not English].* It is maintained at our worksite at *[Enter location, shall include main-office location as well as off-site work areas, e.g. including a written/printed hardcopy in the vehicle at a field site]* and can be accessed electronically at *[Enter website if available online, delete if not applicable].* It is available to workers or their representatives upon request.

**The written plan(s) shall include:**
All Worksites: procedures for

1. Applicability
2. Responsibility
3. Written Plan(s) and Procedures
4. The Provision of Water
5. Acclimatization
6. Heat Illness Incidents (handling a heat sick worker)
7. Emergency Response
8. Worker and Supervisor Training

Outdoor Worksites: additional procedures for

1. Monitoring the Weather for Outdoor Worksites
2. Access to Shade for Outdoor Worksites
3. High-Heat Procedures for Outdoor Worksites
4. Handling a Heat Wave for Outdoor Worksites

Indoor Worksites: additional procedures for

1. Temperature Assessment for Indoor Worksites
2. Access to Cool-Down Areas for Indoor Worksites
3. Control Measures for Indoor Worksites

**Supervisor Specific Procedures and Detailed Guidance for Implementing an Effective Plan is attached as IIPP *Attachment H1*.** *Supervisors, please also refer to attachment H1.*

All UC ANR locations shall establish, implement, and maintain an effective heat illness prevention plan. The plan shall be available at each outdoor and indoor worksite where heat illness prevention procedures may be required, shall be in writing/printed in both English and the language understood by the majority of the employees, and shall be made available at the worksite to employees, their representatives, or representatives of the State Division of Industrial Relations/Cal/OSHA. The written plan and procedures shall be reviewed with employees in training and, when applicable to outdoor high-heat procedures or heat waves, during pre-shift meetings.

**The Provision of Water Procedures**

*[Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

1. Fresh, pure, suitably cool water will be provided to workers free of charge. *[Add site-specific information on how this will be provided, e.g., water fountains, water dispensers, water bottles, single-use or disposable cups and a receptacle for disposing of the used cups will be provided and will be kept clean. Water provided by Igloo or other container is not required to be maintained at a specific temperature, but cool enough to be pleasant and not so cool as to cause discomfort. If water is not plumbed or otherwise continuously supplied, you must describe your procedures for how you provide at least one quart per worker per hour for drinking for the entire shift. If you do not provide enough water at the start of the shift to last the entire shift, you must describe your procedures to replenish the drinking water throughout the shift.]*
2. Supervisors will ensure that the water is fresh, pure, and suitably cool. *[Describe how this will be done. For example, Supervisor or their designee will visually examine the water at the start of the shift and throughout the day as needed and smell/taste the water and pour some on their skin to ensure that the water is suitably cool.]* During hot weather or high indoor-heat work conditions, the water will be cooler than the ambient temperature, but not so cool as to cause discomfort.
3. The water will be located at *[State all the location(s) where the water will be available. The location(s) must be in the cool-down areas and as close as possible to the areas where workers are working outdoors.]*
4. Workers will be reminded and encouraged to frequently consume small quantities of water throughout their shift. *[Describe how the workers will be encouraged and reminded to drink water. For example: The supervisor or audible devices, such as whistles or air/vehicle horns, radios, etc. will be used to remind workers to drink water.]*
5. All water containers will be kept in a sanitary condition. Water from non-approved or non-tested water sources (e.g., untested wells) is not acceptable. If hoses or connections are used, they must be approved for potable drinking water systems, as shown on the manufacturer’s label.
6. For outdoor work locations, when the temperature equals or exceeds 95 degrees Fahrenheit, or during a heat wave, pre-shift meetings will be conducted before the commencement of work to both encourage workers to drink plenty of water and to remind workers of their right to take a cool-down rest when necessary. Additionally, the number of water breaks will be increased. Supervisors will lead by example and remind workers throughout the work shift to drink water.
7. *Other: [Describe any other method of ensuring provision of water throughout the shift].*

**Acclimatization Procedures**

*[Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

Acclimatization is the temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. The body needs time to adapt when temperatures rise suddenly, and a worker risks heat illness by not taking it easy when a heat wave or heat spike strikes, or when starting a new job that exposes the worker to heat to which the worker’s body hasn’t yet adjusted. Inadequate acclimatization can be significantly more dangerous in conditions of high heat and physical stress. The following are additional protective procedures that will be implemented when conditions result in sudden exposure to heat that workers are not accustomed to.

1. The weather will be monitored daily. The supervisor will be on the lookout for heat waves, heat spikes, or temperatures to which workers haven’t been exposed for several weeks or longer.
2. New workers and those who have been newly assigned to a high-heat area will be closely observed by the supervisor or designee for the first 14 days. *[Describe procedures, including job titles of designees, if applicable, for close visual observation and regular communication with workers about how they are feeling and any symptoms they may be experiencing.*
3. The intensity of the work will be lessened during a two-week break-in period by using procedures such as scheduling slower paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day (early morning or evening). Steps taken to lessen the intensity of the workload for new workers will be documented.
4. For indoor work areas, this 14-day observation period applies when the temperature or heat index equals or exceeds 87 degrees Fahrenheit, or when the temperature or heat index equals or exceeds 82 degrees Fahrenheit when a worker wears clothing that restricts heat removal or when a worker works in a high radiant heat area.
5. Workers and supervisors will be trained in the importance of acclimatization, how it is developed, and how location-specific procedures address it.
6. *Other: [Describe any other method of acclimatization].*

**Heat Illness Incidents (Handling a Heat Sick Worker) Procedures**

*[Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

1. When a worker displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will evaluate the sick worker and determine whether resting in the *[Specify shade or cool-down area(s)]* and drinking cool water will suffice or if emergency service providers will need to be called or the employee transport to medical care. A sick worker will not be left alone in the *[Specify shade or cool-down area(s)],* as their condition could take a turn for the worse.
2. When a worker displays possible signs or symptoms of heat illness and no trained first aid worker or supervisor is available at the site, emergency service providers will be immediately called by *[Enter name or job title of who will call]*
3. Emergency service providers will be called immediately if a worker displays signs or symptoms of severe heat illness (e.g., decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions), does not look okay, or does not get better after drinking cool water and resting in the shade or cool-down area. While the ambulance is en route, first aid will be initiated (e.g., cool the worker by placing the worker in the shade, removing excess layers of clothing, placing ice packs in the armpits and groin area, and fan the victim). We will not let a sick worker go home without care.
4. If a worker displays signs or symptoms of severe heat illness (e.g., decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions) emergency service providers will be called, the signs and symptoms of the victim will be communicated to them, and an ambulance will be requested.
5. *Other: [Describe any other method of handling a sick worker].*

**Emergency Response Procedures**

*[Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

1. Effective means of bringing emergency services to the worker in need, or the worker in need to emergency services will be ensured by: *[Describe how emergency services will be provided]*
2. *[Example: For outdoor places of employment, when a crew is assigned to a particular worksite, the workers and the supervisor will be provided a map of the site that will allow them to give clear and precise directions to the worksite (e.g., street or road names, distinguishing features, and distances to major roads) to avoid a delay of emergency medical services.] [Delete this section if workplace is indoors]*
3. *[Example: For indoor places of employment, workers and the supervisor will be provided a map of the worksite that will allow them to give clear and precise directions to the worksite (e.g., street or road names, distinguishing features, and distances to major roads) to avoid a delay of emergency medical service.] [Delete this section if workplace is outdoors.]*
4. *[Example: The supervisor will designate a worker or workers to physically go to the nearest road or highway where emergency responders can see them. If daylight is diminished, the designated worker(s) shall be given reflective vests or flashlights to direct emergency personnel to the sick worker’s location, which may not be visible from the road or highway.]*
5. Effective communication will be ensured by *[Enter the communication method. For example, voice, direct observation, mandatory buddy system, or electronic means, such as cell phone, text, or two-way radio.]* and will be maintained so that workers can contact a supervisor when necessary. If the supervisor is unable to be near the workers (to observe them or communicate with them), then *[Enter the communication method used. For example, via cell phone, text, or two-way radio]* may be used for this purpose or a supervisor designee assigned.
6. Appropriately trained and equipped personnel will be made available at the site to render first aid. *[Describe how supervisors will ensure this, for example, maintaining a listing of employees trained in First Aid/CPR and having a first aid kit onsite or accessible nearby.]*
7. Determinations will be made if there is a language barrier present in the workplace that might inhibit the calling of emergency services. The following will be the measures taken to ensure emergency services can be promptly called *[Describe what will be done, such as designating bilingual-speaking individuals, supervisors, or workers. Also consider situations where temporary service or seasonal workers may introduce language barriers not normally present in your workplace.]*
8. To ensure that emergency medical services can be called, all supervisors will have access to or carry communication devices, such as *[Enter the communication method. For example, cell phone, text, landline phone, or two-way radio in communication with main-office]*. These communication devices will be checked prior to each shift to ensure that they are functional.
9. When a worker shows signs or symptoms of *severe* heat illness, emergency medical services will be called, and steps will immediately be taken to keep the stricken worker cool and comfortable to prevent the progression to more serious illness. Under no circumstances will the affected worker be left unattended. They must be consistently monitored.
10. During a heat wave, heat spike, or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any signs or symptoms they are experiencing. Co-workers and buddies will look out for each other and empowered to take appropriate action.
11. Workers and supervisors will be trained in these written procedures for emergency response.
12. *Other: [Describe any other emergency response procedure]*

 **Worker and Supervisor Training Procedures***[Customize this section to your workplace and include the site-specific procedures for workers. Delete parts that do not apply to your worksite.]*
To be effective, training must be understood by workers. Therefore, it must be given in a language and vocabulary the workers understand. Training records will be maintained and 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 *[Enter the location or method of keeping the training records, for example Supervisor or location Safety Coordinator.]*

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 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
1. Supervisors will be trained prior to being assigned to supervise other workers. Training will include UC written procedures and the steps supervisors will follow when workers exhibit symptoms consistent with heat illness.
2. Supervisors and workers will be trained as it is *[Enter name of UC ANR Location]* ’s responsibility to provide water, access to cool-down areas or shade, preventative cool-down rests, and first aid, as well as the workers’ right to exercise their rights under this standard without retaliation.
3. Supervisors and workers will be trained in appropriate first aid and/or emergency response to different types of heat illness and made aware that heat illness may progress quickly from mild signs and symptoms to a serious, life-threatening illness.
4. Supervisors will be trained on how to track the weather at the job site (by monitoring predicted temperature or heat index highs and periodically using a thermometer). Supervisors will be instructed on how weather information will be used to modify work schedules, increase the number of water and rest breaks, or cease work early if necessary.
5. All workers and supervisors will be trained prior to working. Training will include all aspects of implementing UC ANR’s written procedures, including access to sufficient water and *[Specify shade or cool-down area(s)],* cool down rests, high-heat procedures, emergency response procedures, control measures, importance of frequent consumption of water, different types of heat illness, common signs and symptoms of heat illness, and acclimatization procedures. Workers and supervisors will also be trained on the environmental and personal risk factors of heat illness, as well as the burden of heat load on the body caused by exertion, clothing, and personal protective equipment. The importance of immediately reporting signs and symptoms of heat illness will be especially emphasized.
6. In addition to initial training, workers will be retrained annually.
7. Workers will be trained on the steps for contacting emergency medical services, including how they are to proceed when there are non-English speaking workers, how clear and precise directions to the site will be provided, how to transport ill workers to a point where they can be reached by an emergency responder, and the importance of making visual contact with emergency responders at the nearest road or landmark to direct them to their worksite, if necessary.
8. New workers will be assigned a “buddy,” or experienced co-worker, to ensure that they understand the training and follow appropriate procedures.
9. *Other: [Describe any other method of ensuring compliance].*

 **OUTDOOR WORKSITES:**

**Monitoring the Weather for Outdoor Worksites Procedures**

*[****Delete this section if employees do not work outdoors.*** *Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

This section of the standard is triggered by outside temperatures. It is, therefore, 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.

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.

The supervisor should use a thermometer to keep track of the temperature at the worksite on hot days. 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 and the bulb or sensor of the thermometer should be shielded from direct contact with sunlight (with the hand or some other object) while taking the measurement.

1. The supervisor will be trained and instructed to check the extended weather forecast in advance. *[Describe how weather forecasts will be checked. For example, weather forecasts will be checked with the aid of the internet* [*(h*](http://www.nws.noaa.gov/%29)*t*[*tp://www.nws.noaa.gov/),*](http://www.nws.noaa.gov/%29) *calling the National Weather Service phone numbers (see California phone numbers below), or by checking the Weather Channel TV Network. The work schedule will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected. This type of advance planning should take place whenever the temperature is expected to reach 70 degrees Fahrenheit or higher.*

***CALIFORNIA Dial-A-Forecast***

*Eureka 707-443-7062*

*Hanford 559-584-8047*

*Los Angeles 805-988-6610*

*Sacramento 916-979-3051*

*San Diego 619-297-2107*

*San Francisco 831-656-1725]*

1. Prior to each workday, the supervisor will monitor the weather at the worksite by the method described above. This critical weather information will be taken into consideration to evaluate the risk level for heat illness and when it will be necessary to make modifications to the work schedule (e.g., stopping work early, rescheduling the job, working during the cooler hours of the day, increasing the number of water and rest breaks).
2. The supervisor will use a *[State the method for measuring temperature. For example, a thermometer, Kestrel, weather station, wet-bulb globe thermometer, etc.]* throughout the job site and throughout the work shift to monitor for an increase in outdoor temperature and to ensure that once the temperature exceeds 80 degrees Fahrenheit, shade structures will be opened and made available to the workers. In addition, when the temperature equals or exceeds 95 degrees Fahrenheit, additional preventive measures, such as high-heat procedures, will be implemented. See the high-heat procedures section for additional information.
3. *Other: [Describe any other procedures used to monitor forecasts and the weather].*

**Access to Shade for Outdoor Worksites Procedures**

*[****Delete this section if employees do not work outdoors.*** *Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

1. Shade will be as close as practicable to the workers when the outdoor temperature equals or exceeds 80 degrees Fahrenheit. When the temperature is below 80 degrees Fahrenheit, access to shade will be provided promptly, when requested by a worker. *[Describe the natural and/or artificial shade sources that will be used at the worksite.]*

**Note**: The interior of a vehicle will not be used to provide shade unless the vehicle has a working air conditioner and is cooled down ahead of time.

1. Enough shade will be available at the site to accommodate all of the workers who are on a break at any point in time. During meal periods, there will be enough shade for all workers who choose to remain in the general area of work or in areas designated for recovery and rest periods. To ensure that the provided shade will be enough, we will rotate workers in and out of breaks, including meal periods, and recovery and rest periods, if the number of workers in the crew is higher than the number that can fit comfortably under the shade.
2. Workers will be informed of the location of the shade and will be encouraged to take a five-minute cool-down rest in the shade. Such access will be permitted at all times. A worker who takes a preventative cool-down rest break will be monitored, encouraged to remain in the shade, and asked if they are experiencing symptoms of heat illness. In no case will the worker be ordered back to work until signs and symptoms of heat illness have abated, and in no event less than 5 minutes in addition to the time needed to access the shade. See the section on Emergency Response for additional information.
3. As crews move, shade structures will be relocated to be placed as close as practicable to the workers so that access to shade is provided at all times. To ensure this is done, *[State who is responsible for moving the shade structures in each location or crew].* All workers on a recovery, rest break, or a meal period will have full access to shade so they can sit in a normal posture without having to be in physical contact with each other.
4. Before trees or other vegetation are used to provide shade (such as in orchards), the thickness and shape of the shaded area will be evaluated to ensure that sufficient shadow is cast to protect workers throughout the workday, as the shade moves.
5. In situations where it is not safe or feasible to provide access to shade (e.g., during high winds), the unsafe or unfeasible conditions will be documented, and alternative procedures will be used to provide access to shade that provides equivalent protection. *[Describe the alternative procedure for access to shade]*
6. Nearby buildings, break rooms and offices may be used as areas of refuge from heat to help provide shade, a cool-down rest area, or preventative rest area, when reasonably close to the outdoor worksite. See section on Access to Cool-Down Areas for Indoor Worksites Procedures for more information on cool-down areas and preventative rest. *[Identify and list Cool-Down areas for breaks and preventative rest.]*
7. *Other: [Describe any other method of ensuring access to shade].*

**High-Heat Procedures for Outdoor Worksites**

*[****Delete this section if employees do not work outdoors.*** *Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

High-Heat Procedures are additional preventive measures that this UC ANR location will use when the temperature equals or exceeds 95 degrees Fahrenheit in outdoor places of employment.

1. Effective communication by *[Enter the communication method. For example, voice, direct observation (applicable for work crews of 20 or fewer), mandatory buddy system, or other methods]* will be maintained so that workers at the worksite can contact a supervisor when necessary. If the supervisor is unable to be near the workers (to observe them or communicate with them), then *[Enter communication method. For example, cell phones, text, or two-way radio]* will be used for this purpose.
2. Frequent communication will be maintained with workers working by themselves or in smaller groups by *[Enter communication method. For example, cell phone, text, or two-way radio]* to be on the lookout for possible symptoms of heat illness. The worker(s) will be contacted regularly and as frequently as possible throughout the day since a worker in distress may not be able to summon help on their own.
3. Effective communication and direct observation for alertness and signs and symptoms of heat illness will be conducted frequently. When the supervisor is not available, an alternate responsible person will be designated by the supervisor ahead of time and the responsible person must be assigned to observe and look for signs and symptoms of heat illness. *[Enter name and job title of alternate responsible person]* will be the designated alternate responsible person. If a supervisor, designated responsible person, or any worker reports/observes any signs or symptoms of heat illness in any worker, the supervisor or designated person will take immediate action commensurate with the severity of the illness (see Emergency Response Procedures).
4. Workers will be reminded throughout the work shift to drink plenty of water and take preventative cool-down rest breaks when needed. *[State how the workers will be encouraged to and reminded to drink water. For example: The supervisor or audible devices, such as whistles or air horns, will be used to remind workers to drink water.]*
5. Pre-shift meetings will be held before the commencement of work to review the high-heat procedures, encourage workers to drink plenty of water, and remind workers of their right to take a cool-down rest when necessary.

**We operate an agricultural worksite. In addition to the High Heat Procedures listed above, we also use the following High Heat Procedures:** *[Delete this sentence and section if it does not apply to your worksite.]*

1. When the temperature equals or exceeds 95 degrees Fahrenheit, workers will be provided one 10-minute “preventative cool-down rest period” every two hours. During the first eight hours of a shift, the cool-down periods may be provided at the same time as the scheduled rest periods already required by Industrial Welfare Commission Order No. 14.
2. Workers working longer than eight hours will be provided with an additional 10-minute cool-down rest period every two hours. For example, if the shift extends beyond eight hours, an additional rest period will be taken at the end of the eighth hour of work. If the shift extends beyond 10 hours, another rest period will be taken at the end of the 10th hour, and so on.
3. All workers will be required to take the cool-down rest periods. Merely offering the opportunity for a break is not enough.
4. Once the temperature equals or exceeds 95 degrees Fahrenheit, records will be kept documenting the fact that mandatory cool-down rest periods were provided and taken.
5. *Other: [Describe any other high-heat procedure].*

**Handling a Heat Wave for Outdoor Worksites Procedures**

*[****Delete this section if employees do not work outdoors.*** *Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete the parts that do not apply to your worksite.]*

Heat wave means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

1. During a heat wave, all workers will be closely observed by a supervisor or designee. *[Describe procedures, including job titles of designees, if applicable, for close visual observation and regular communication with workers about how they are feeling and any symptoms they may be experiencing.]*
2. During a heat wave or heat spike, the workday will be cut short or rescheduled (e.g., conducted during cooler hours).
3. During a heat wave or heat spike and before starting work, tailgate (pre-shift) meetings will be held to review Heat Illness Prevention Procedures, the weather forecast, and emergency response procedures. Additionally, if schedule modifications are not possible, workers will be provided with an increased number of water and rest breaks and observed closely for signs and symptoms of heat illness.
4. Each worker will be assigned a “buddy” (mandatory buddy system) to be on the lookout for signs and symptoms of heat illness and to ensure that emergency procedures are initiated when someone displays possible signs or symptoms of heat illness.
5. *Other: [Describe any other method used to handle heat waves].*

**INDOOR WORKSITES:**

**Temperature Assessment for Indoor Worksites Procedures**

*[****Delete this section if employees do not work indoors.*** *Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

Indoor places of employment are spaces that are under a ceiling or overhead covering that restricts 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 California Code of Regulations Title 8, section 3395, Heat Illness Prevention in Outdoor Places of Employment.

Indoor place of employment does 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 and structures with one or more open sides are outdoor workplaces.

Temperature can be measured with a thermometer that is freely exposed to the air but shielded from radiant heat sources, such as the sun, hot objects, hot surfaces, hot liquids, and fire. This air temperature must be measured in the immediate area where workers are located and recorded in degrees Fahrenheit.

The heat index is what the temperature feels like to the human body when the effect of relative humidity is combined with that of the air temperature (a calculation of dry bulb temperature and the relative humidity %).

There are two ways to determine the heat index:

Use a heat index monitor that measures both temperature and relative humidity and utilizes National Weather Service (NWS) heat index equations to determine the heat index; or, calculate the heat index by measuring the indoor temperature with a dry bulb thermometer and relative humidity with a hygrometer, then use the chart found in Appendix A of Title 8, section 3396: <https://www.dir.ca.gov/title8/3396a.html>

1. A *[State the method for measuring temperature or heat index. For example, a thermometer, Kestrel, weather station,* *hygrometer for measuring humidity, etc.]* will be used throughout the workplace to monitor temperature or heat index. Monitoring instruments will be maintained according to manufacturer's recommendations and the instruments used to measure the heat index shall be based on the heat index chart in Appendix A of Section 3396. The locations for the temperature measurements will be: *[Enter the locations where temperature measurements will be made that will be representative of worker exposure. Add or delete rows, as needed]*

*A.*

*B.*

*C.*

*D.*

*E*

1. The temperature or heat index will be measured and recorded by *[Enter name or job title of the person who will be tasked with measuring the temperature]*. Workers *[and/or their union representatives]* will be actively involved in the planning, conducting, and recording of measurements of temperature or heat index. *[Enter site-specific procedures for ensuring the participation of workers and/or union representatives in the planning, conducting, and recording of the temperature or heat index measurements].*
2. Records of the temperature or heat index measurements, whichever value is greater, will be retained for 1 year or until the next measurements are taken, whichever is later, and made available at the *[State a specific location at the worksite, for example Supervisor or Safety Coordinator records]* to workers or designated representatives upon request. The records will include the date, time, and specific location of all measurements.
3. Initial temperature or heat index measurements shall be taken where workers work and at times during the work shift when worker exposures are expected to be the greatest and when it is suspected to equal or exceed 82 degrees Fahrenheit.
4. Measurements will be taken again when they are reasonably expected to be 10 degrees Fahrenheit or more above the previous measurements where workers work and at times during the work shift when worker exposures are expected to be the greatest.
5. *Other:* *[Describe any other method of ensuring that the temperature or heat index are measured and recorded].*
6. Workers *[and/or their union representatives]* will be actively involved in identifying and evaluating other environmental risk factors for heat illness that may exist in the workplace. *[Describe procedures for identifying and evaluating any other environmental risk factors for heat illness. For example, workers wear clothing that restricts heat removal or work in a high radiant heat area. Delete if not applicable.]*

**Access to Cool-Down Areas for Indoor Worksites Procedures**

*[****Delete this section if employees do not work indoors.*** *Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete parts that do not apply to your worksite.]*

Cool-down area means an indoor or outdoor area that is blocked from direct sunlight and shielded from other high-radiant heat sources and is either open to the air or provided with ventilation or cooling. Blockage is sufficient when objects do not cast a shadow in the area of blocked sunlight.

The temperature in indoor cool-down areas must be maintained at less than 82 degrees Fahrenheit unless the employer demonstrates it is infeasible. The work location should provide and maintain one or more cool-down areas at all times while workers are present.

1. Cool-down areas(s) will be located at *[State all the location(s) of the cooling area(s). The location must be as close as practicable to the work areas].* The temperature in the indoor cool-down areas will be maintained at less than 82 degrees Fahrenheit by *[Describe the methods you will use to ensure that cool-down area(s) will be less than 82 degrees F].*
2. The cool-down area(s) will be available at the site to accommodate all of the workers who are on a break at any point in time and will be large enough so that all workers on break can sit in a normal posture fully in the cool-down area(s) without having to be in physical contact with each other. To ensure this, we *[Describe how you will determine the number of seats to provide in the cool-down area(s)].*
3. Workers will be informed of the location of the cool-down area(s) and will be encouraged and allowed to take cool-down breaks in the cool-down area(s) whenever they feel they need a break. A worker who takes a preventative cool-down rest break will be monitored and asked if they are experiencing symptoms of heat illness. In no case will the worker be ordered back to work until signs or symptoms of heat illness have abated (see the section on Emergency Response for additional information). If a worker exhibits signs or symptoms of heat illness while on a preventative cool-down rest, then appropriate first aid or emergency response will be provided. Preventative cool-down rest periods will be at least 5 minutes, in addition to the time needed to access the cool-down area.
4. *Other: [Describe any other method of ensuring access to cooling areas for cool-down breaks].*

**Control Measures for Indoor Worksites Procedures**

*[****Delete this section if employees do not work indoors.*** *Customize this section to your workplace and include the site-specific procedures to be implemented for workers. Delete the parts that do not apply to your worksite.]*

Control measures will be implemented when either of the following occurs:

* Indoor temperature or heat index is 87 degrees Fahrenheit or higher.
* Indoor temperature is 82 degrees Fahrenheit or higher and workers are either:
	+ Wearing clothing that restricts heat removal or
	+ Working in an area with high radiant heat.
1. Feasible engineering controls will be implemented first to reduce the temperature and heat index to below 87°F (or temperature to below 82°F for workers working in clothing that restricts heat removal or working in high radiant heat areas). Administrative controls will be added if feasible engineering controls are not enough to comply with the standard. If both feasible engineering and administrative controls are not enough to decrease the temperature and minimize the risk of heat illness, then personal heat-protective equipment will be provided.
2. The following engineering controls will be implemented to lower the indoor temperature, heat index, or both to the lowest reasonable level. These controls help make the work environment cooler 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. The following are examples. Customize this section to your workplace and include the site-specific procedures that you will implement for workers. Delete parts that do not apply to your worksite.*
* *Cooling fans or air conditioning*
* *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*
* *Local exhaust ventilation at points of high heat production or moisture (such as exhaust hoods)*
* *Reflective shields to block radiant heat*
* *Insulating/isolating heat sources from workers, or isolating workers from heat source*
* *Cooled seats or benches*
* *Evaporative coolers*
* *Dehumidifiers*
* *Other: [Describe any other method of lowering the temperature or heat index].]*
1. The following administrative controls will be implemented once all feasible engineering controls have been implemented. These controls are modified work practices that can reduce heat exposure by adjusting work procedures, practices, or schedules: *[Employers have options when implementing control measures to protect their workers against heat illness and to comply with the standard. The following are examples. Customize this section to your workplace and include the site-specific procedures you will implement for workers. Delete parts that do not apply to your worksite.*
* *Modify work schedules and activities to times of the day when the temperature is cooler or schedule shorter shifts, especially during heat waves. Heat wave means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days. 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. If workers must be in proximity to heat sources, mark them clearly, so 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).*
* *Other: [Describe any other method of administrative control].]*
1. The following personal heat-protective equipmentwill be provided if feasible engineering controls do not decrease the temperature enough and administrative controls do not minimize the risk of heat illness. This personal heat-protective equipment consists of special cooling devices that the worker wears on their body that can protect them in hot environments: *[Employers have options when implementing control measures to protect their workers against heat illness and to comply with the standard. The following are examples. Customize this section to your workplace and include the site-specific procedures you will implement for workers. Delete parts that do not apply to your worksite.*
* *Water and/or air-cooled garments, cooling vests, jackets, and neck wraps. The cooling source can be reusable ice packs or cooled air connected to an external source.*
* *Supplied air personal cooling systems*
* *Insulated suits*
* *Heat-reflective clothing*
* *Infrared reflecting face shields*
* *Other: [Describe any other type of heat-protective equipment you will use].]*

**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>

**ALL WORKSITES:**

**Recognizing Heat Illness Risk Factors**

Environmental risk factors for heat illness include air temperature, relative humidity, radiant heat from the sun, machinery, and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing, and PPE worn by employees.

Personal risk factors for heat illness include age, degree of acclimatization, general health, water consumption, and use of medications, caffeine, or alcohol which can affect the body’s water retention or other physical response to heat.

Supervisors must evaluate work conditions before sending employees to perform outdoor and/or indoor work in hot conditions. Typically, temperatures above 80 oF, especially with heavy physical work activities, would represent conditions where there is a risk of heat illness. Other factors, such as high humidity or work activities that restrict the body’s ability to cool itself, such as protective clothing, could result in a risk of heat illness at lower temperatures.

The National Weather Service Heat Index guideline (attached) may be used to assess the environmental risk of heat illness, based on temperature and relative humidity. The Heat Index table categorizes the risk or degree of heat illness with increasing heat index values. Provision of water and shade as described above should be implemented whenever the Heat Index exceeds 80oF.

**Identifying Heat Illness**

Heat illness is a group of serious and escalating medical conditions that can result from the body's inability to cope with a particular heat load, and includes heat fatigue, heat cramps, heat exhaustion, and heat stroke.

The National Institute of Occupational Safety and Health (NIOSH) publication *Working in Hot Environments* describes the symptoms and response measures for several types of heat illness, as follows:

**Transient Heat Fatigue –**

Transient heat fatigue refers to the temporary state of discomfort and mental or psychological strain arising from prolonged heat exposure. Workers unaccustomed to the heat are particularly susceptible and can suffer, to varying degrees, a decline in task performance, coordination, alertness, and vigilance. The severity of transient heat fatigue will be lessened by a period of gradual adjustment to the hot environment (heat acclimatization).

**Heat Rash –**

Heat rash, also known as prickly heat, is likely to occur in hot, humid environments where sweat is not easily removed from the surface of the skin by evaporation and the skin remains wet most of the time. The sweat ducts become plugged, and a skin rash soon appears. When the rash is extensive or when it is complicated by infection, prickly heat can be very uncomfortable and may reduce a worker's performance. The worker can prevent this condition by resting in a cool place part of each day and by regularly bathing and drying the skin.

**Fainting –**

A worker who is not accustomed to hot environments and who stands erect and immobile in the heat may faint. With enlarged blood vessels in the skin and in the lower part of the body due to the body's attempts to control internal temperature, blood may pool there rather than return to the heart to be pumped to the brain. Upon lying down, the worker should soon recover. By moving around, and thereby preventing blood from pooling, the patient can prevent further fainting.

**Heat Cramps –**

Heat cramps are painful spasms of the muscles that occur among those who sweat profusely in heat, drink large quantities of water, but do not adequately replace the body's salt loss. The drinking of large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Shortly thereafter, the low salt level in the muscles causes painful cramps. The affected muscles may be part of the arms, legs, or abdomen, but tired muscles (those used in performing the work) are usually the ones most susceptible to cramps. Cramps may occur during or after work hours and may be relived by taking salted liquids by mouth.

***CAUTION Persons with heart problems or those on a low sodium diet who work in hot environments should consult a physician about what to do under these conditions.***

**Heat Exhaustion–**

Heat exhaustion includes several clinical disorders having symptoms which may resemble the early symptoms of heat stroke. Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated.

In most cases, treatment involves having the victim rest in a cool place and drink plenty of liquids. Victims with mild cases of heat exhaustion usually recover spontaneously with this treatment. Those with severe cases may require extended care for several days. There are no known permanent effects.
***CAUTION Persons with heart problems or those on a low sodium diet who work in hot environments should consult a physician about what to do under these conditions.***

**Heat Stroke –**

Heat stroke is the most serious of health problems associated with working in hot environments. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. The body's only effective means of removing excess heat is compromised with little warning to the victim that a crisis stage has been reached.

A heat stroke victim's skin is hot, usually dry, red, or spotted. Body temperature is usually 105oF or higher, and the victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur.

Any person with signs or symptoms of heat stroke requires immediate hospitalization. However, first aid should be immediately administered. This includes removing the victim to a cool area, thoroughly soaking the clothing with water, and vigorously fanning the body to increase cooling. Further treatment at a medical facility should be directed to the continuation of the cooling process and the monitoring of complications which often accompany heat stroke. Early recognition and treatment of heat stroke are the only means of preventing permanent brain damage or death.

For more information, see the following documents on the ANR EH&S website: [*Protecting Workers from Heat Stress*](http://www.dir.ca.gov/dosh/dosh_publications/FLC_Eng_Agr_Posting_Req.pdf) and [*Safety Note #20, Heat Illness Awareness*](http://safety.ucanr.org/files/1411.pdf).

Any employee who recognizes symptoms or signs of heat illness in themselves or co-workers should immediately report this condition to their supervisor.

**Heat Index**

From 1992 to 2022, a total of 986 workers across all industry sectors in the United States died from exposure to heat\*. Our bodies dissipate heat by varying the rate and depth of blood circulation, by losing water through the skin and sweat glands, and as a last resort, by panting, when blood is heated above 98.6°F. Sweating cools the body through evaporation. However, high relative humidity retards evaporation, robbing the body of its ability to cool itself. When heat gain exceeds the level the body can remove, body temperature begins to rise, and heat-related illnesses and disorders may develop.

The **Heat Index** (HI) is the temperature the body feels when heat and humidity are combined. The chart below shows the HI that corresponds to the actual air temperature and relative humidity. (This chart is based upon shady, light wind conditions.
**Exposure to direct sunlight can increase the HI by up to 15°F.)**

(Due to the nature of the heat index calculation, the values in the tables below have an error +/- 1.3F.)

|  |  |
| --- | --- |
| **HI** | **Possible Heat Disorder** |
| 80°F – 90°F | Fatigue possible with prolonged exposure and physical activity |
| 90°F – 105°F | Sunstroke, heat cramps and heat exhaustion possible |
| 105°F – 130°F | Sunstroke, heat cramps, and heat exhaustion likel, and heat stroke possible |
| 130°F or greater | Heat stroke highly likely with continued exposure, death possible |
|  |
| **Temperature (°F) versus Relative Humidity (%)** |
| **°F** | **90%** | **80%** | **70%** | **60%** | **50%** | **40%** |
| **80** | **86** | **84** | **83** | **82** | **81** | **80** |
| **85** | **101** | **97** | **93** | **90** | **86** | **84** |
| **90** | **122** | **113** | **106** | **100** | **95** | **91** |
| **95** |  | **133** | **123** | **113** | **105** | **99** |
| **100** |  |  | **142** | **129** | **118** | **109** |
| **105** |  |  |  | **148** | **134** | **122** |
| **110** |  |  |  |  |  | **136** |

|  |
| --- |
| **Temperature (°F) versus Dewpoint** |
| **°F** | **55** | **60** | **65** | **70** | **75** | **80** | **85** |
| **80** | **80** | **80** | **81** | **83** | **84** | **87** |  |
| **85** |  | **84** | **86** | **89** | **93** | **99** | **107** |
| **90** |  |  | **91** | **95** | **100** | **107** | **117** |
| **95** |  |  |  | **101** | **106** | **114** | **125** |
| **100** |  |  |  |  | **113** | **121** | **131** |
| **105** |  |  |  |  |  | **127** | **138** |
| **110** |  |  |  |  |  | **134** | **145** |

   \* 10-year average of heat related fatalities from 1992-2022. U.S. Environmental Protection Agency source: National Weather https://www.weather.gov/ffc/hichart

**First Aid and Emergency Response**

Employees who report signs and symptoms of heat illness must be provided with first-aid or emergency response as needed.

If signs of heat illness occur in an employee:

* Move the person to a shaded or cooling area for a recovery period of at least five minutes.
* Monitor their health by asking them how they feel or observing symptoms.
* Provide first-aid as needed (cool-down methods, removal from heat, small sips of water).
* If the condition appears to be severe or the employee does not recover, then emergency medical care is needed.
* Do not leave the employee unmonitored or send them home without medical care.
* Emergency medical care shall be provided by the following method:
* Call 911.
* Be ready to provide emergency response personnel with clear and precise directions to work locations (street names and addresses).
* Notify your supervisor that emergency services have been called for an employee illness and provide any other incident information.

The following people are authorized to call for emergency services when needed:

|  |
| --- |
| *[designate an individual who is always present at worksites or authorize each employee]* |

Directions to worksite(s):

|  |
| --- |
| *[must include map-based street names and addresses for each worksite]* |

Transport of employees from remote worksites:

|  |
| --- |
| *[describe means of moving employees from remote field locations to locations accessible by ambulance or emergency responders]* |

Location of the nearest hospital or urgent care center (for each worksite):

|  |
| --- |
| *[must include address and phone number of the facility near each worksite]* |

**How to Respond to Heat-related Emergencies**

If workers report or supervisors observe signs or symptoms of heat-related illness, stop activity immediately. Take action while waiting for help. HEAT STROKE IS A MEDICAL EMERGENCY. CALL 911 immediately if a worker shows any signs of heat stroke.

|  |  |  |
| --- | --- | --- |
| **Illness** | **Symptoms** | **First Aid\*** |
| **Heat stroke** | * Confusion
* Fainting
* Seizures
* Excessive sweating or red, hot, dry skin
* Very high body temperature
 | * Call 911

While waiting for help: * Place worker in shady, cool area
* Loosen clothing, remove outer clothing
* Fan air on worker; cold packs in armpits
* Wet worker with cool water; apply ice packs, cool compresses, or ice if available
* Provide fluids (preferably water) as soon as possible
* Stay with worker until help arrives
 |
| **Heat exhaustion** | * Cool, moist skin
* Heavy sweating
* Headache
* Nausea or vomiting
* Dizziness
* Light headedness
* Weakness
* Thirst
* Irritability
* Fast heart beat
 | * Have worker sit or lie down in a cool, shady area
* Give worker plenty of water or other cool beverages to drink
* Cool worker with cold compresses/ice packs
* Take to clinic or emergency room for medical evaluation or treatment if signs or symptoms worsen or do not improve within 60 minutes.
* Do not return to work that day
 |
| **Heat cramps** | * Muscle spasms
* Pain
* Usually in abdomen, arms, or legs
 | * Have worker rest in shady, cool area
* Worker should drink water or other cool beverages
* Wait a few hours before allowing worker to return to strenuous work
* Have worker seek medical attention if cramps don’t go away
 |
| **Heat rash** | * Clusters of red bumps on skin
* Often appears on neck, upper chest, folds of skin
 | * Try to work in a cooler, less humid environment when possible
* Keep the affected area dry
 |
| \* Remember, if you are not a medical professional or trained in First Aid, use this information as a guide only to help workers in need. |