



## Written Heat Illness Prevention Plan for Indoor and Outdoor Places of Employment

California employers must protect their workers from the hazards of excessive heat exposure. California Code of Regulations, Title 8 (CCR T8), section 3395 addresses outdoor workplaces, and section 3396 addresses indoor workplaces. Depending on the circumstances, employers must develop written worker heat illness prevention procedures that address one or both types of workplaces.

These sample procedures have been created to assist employers in establishing their own heat illness prevention procedures for indoor and outdoor workplaces. They are not intended to supersede or replace the application of any other Title 8 sections, particularly section [3203](#), which requires an employer to establish, implement, and maintain an effective Injury and Illness Prevention Program (IIPP). You may:

- Integrate your heat illness prevention procedures into your IIPP.
- Develop separate indoor and outdoor workplace procedures by using this program.

Use of this program does not guarantee compliance with sections 3395 or 3396 and does not shield an employer from being cited for violations of those sections.

You must also be aware that other standards may apply to heat illness prevention, such as the construction, agriculture, and general industry requirements to provide drinking water, first aid, and emergency response.

**Note:** These 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, carefully review the requirements of sections 3395 and/or 3396, along with the instructions provided for each of the elements, then develop written procedures applicable to your workplace. 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 company procedures. Be sure to follow up to ensure your procedures are fulfilled.

To tailor these procedures to your work activities, evaluate and consider the specific conditions present at your site such as:

- 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 may increase the body's heat burden.

These 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 a heat illness.



## Heat Illness Prevention Plan for **ST. HELENA UNIFIED SCHOOL DISTRICT**

### Responsibility

**Mike Florez, Director of Facilities & Operations** 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 Program in their assigned work areas and for ensuring workers receive 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.

This plan is in English and Spanish. It is maintained at our worksite at the Maintenance & Operations Office and can be accessed electronically at [St. Helena Unified School District's website](#). It is available to workers or their representatives upon request.

### Procedures for the Provision of Water:

1. Fresh, pure, suitably cool water will be provided to workers free of charge. Water fountains, water dispensers, water bottles, and a receptacle for disposing of the used cups will be provided and will be kept clean.
2. Supervisors will ensure that the water is fresh, pure, and suitably cool. Supervisor will visually examine the water at the start of the shift and throughout the day as needed. 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 the school sites (refillable stations and drinking fountains) and inside the maintenance yard (refillable station).
4. Workers will be reminded and encouraged to frequently consume small quantities of water throughout their shift. Workers will be encouraged and reminded to drink water. The supervisor will 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/foremen will lead by example and remind workers throughout the work shift to drink water.

## **Procedures for Access to Cool-Down Areas for Indoor Places of Employment**

1. Cool-down areas(s) will be located at all sites, including the front offices and staff break rooms. The temperature in the indoor cool-down areas will be maintained at less than 82 degrees Fahrenheit by monitoring the building automation system.
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 provide ample room with necessary furniture for employees.
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.

## **Procedures for Access to Shade for Outdoor Places of Employment**

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.

**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, crews can move the shade structure. 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. Crews will be directed to work indoors.

## **Procedures for Temperature Assessment for Indoor Places of Employment**

1. A thermometer and/or weather station 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:
  - A. All school site kitchens
  - B. Intermediate distribution frame (IDF)
  - C. Custodial closets
  - D. Vehicles without air conditioning
2. The temperature or heat index will be measured and recorded by Mike Florez, Director of Facilities & Operations. Workers will be actively involved in the planning, conducting, and recording of measurements of temperature or heat index. The Director will meet annually with workers at the beginning of the school year to review the Indoor Heat Illness Prevention Plan.
3. 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 Maintenance & Operations Office to workers or designated representatives upon request. The records will include the date, time, and specific location of all measurements.
4. 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.
5. 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.
6. Workers will be actively involved in identifying and evaluating other environmental risk factors for heat illness that may exist in the workplace.

## **Procedures for Monitoring the Weather for Outdoor Places of Employment**

1. The supervisor will be trained and instructed to check the extended weather forecast in advance. Weather forecasts will be checked with the aid of [www.weather.com](http://www.weather.com), calling the National Weather Service phone numbers (see California phone numbers below), or by checking the local news and weather. 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**

Sacramento 916-979-3051

San Francisco 831-656-1725]

2. 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 at night or during the cooler hours of the day, increasing the number of water and rest breaks).
3. The supervisor will use a weather station or thermometer 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.

## **Procedures for Control Measures for Indoor Places of Employment**

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 possible level. These controls help make the work environment cooler or create a barrier between the worker and the heat:
    - 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 in laundry rooms)
    - Insulating/isolating heat sources from workers, or isolating workers from heat source
    - Evaporative coolers
    - Dehumidifiers
  3. 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:
    - 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.

- 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.
4. The following personal heat-protective equipment will 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:
- 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

## **High-Heat Procedures for Outdoor Places of Employment**

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

1. Effective communication by voice, direct observation, 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 cell phones, or text will be used for this purpose.
2. Frequent communication will be maintained with workers working by themselves or in smaller groups by cell phone, or text 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. A classified or certificated manager will be the designated alternate responsible person. If a supervisor, designated responsible person, or any worker reports 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. This will be communicated to workers in-person or through text or email.
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:**

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.

6. 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.
7. All workers will be required to take the cool-down rest periods. Merely offering the opportunity for a break is not enough.
8. 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.

**Procedures for Handling a Heat Wave for Outdoor Places of Employment**

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. Workers will stay in close contact with each other and supervisor will meet with them to communicate with them how they are feeling and ensure they are drinking enough water, taking cooling breaks, and stopping work if necessary. Both classified and certificated managers will visually observe and regularly communicate 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 at night or during cooler hours).
3. During a heat wave or heat spike and before starting work, tailgate meetings will be held to review the company 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” 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.

**Procedures for Acclimatization:**

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 perilous 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. Classified and certificated managers will visually observe and regularly communicate 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 these company procedures address it.

### **Procedures for Emergency Response:**

1. Effective means of bringing emergency services to the worker in need, or the worker in need to emergency services will be ensured by:
  - A. For outdoor places of employment, all school sites have sitemaps available denoting all buildings and classrooms on campus in relation to city streets, parks, and fields to avoid a delay of emergency medical services.
  - B. For indoor places of employment, all school sites have sitemaps available denoting all buildings and classrooms on campus in relation to city streets, parks, and fields to avoid a delay of emergency medical services.
  - C. 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.
2. Effective communication will be ensured by voice, direct observation, 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 via cell phone text may be used for this purpose.
3. Appropriately trained and equipped personnel will be made available at the site to render first aid. All administrative staff have been trained in CPR and AED use at all sites.
4. 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. Spanish speaking employees available will assist the designating English-speaking foremen, supervisors, or workers.
5. To ensure that emergency medical services can be called, all supervisors will have access to or carry communication devices, such as cell phone, text, or landline phones. These communication devices will be checked prior to each shift to ensure that they are functional.
6. 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.
7. 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.



8. Workers and supervisors will be trained in these written procedures for emergency response.

### **Procedures for Handling a Sick Worker:**

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 shaded, covered area, cool-down office or breakroom and drinking cool water will suffice or if emergency service providers will need to be called. A sick worker will not be left alone in the shaded, covered area, cool-down office or breakroom, 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 immediate supervisor, administrator, or office personnel.
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, red and hot face), does not look okay, or does not get better after drinking cool water and resting in the shade. While the ambulance is enroute, 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, because even if they start to feel better, their condition could worsen, and they may die before reaching a hospital.
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, red and hot face) emergency service providers will be called, the signs and symptoms of the victim will be communicated to them, and an ambulance will be requested.

### **Procedures for Worker and Supervisor Training:**

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 by the Human Resources Department.

1. Supervisors will be trained prior to being assigned to supervise other workers. Training will include this company's 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 St. Helena Unified School District'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 this company's written procedures, including access to sufficient water and shaded, covered area, cool-down offices or break rooms, 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 company procedures.