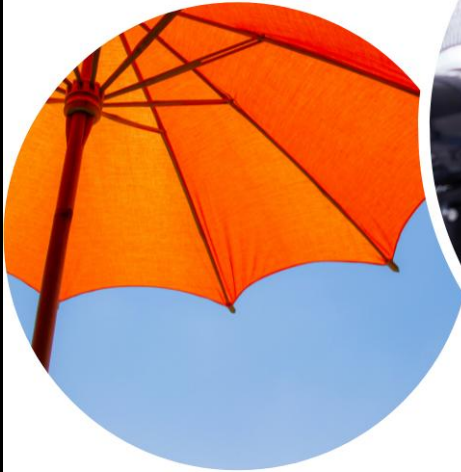













HEAT ILLNESS PREVENTION PLAN (HIPP)



**WORKFORCE
DEVELOPMENT
DEPARTMENT
REV 06/2025**

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1. About the Heat Illness Prevention Plan (HIPP)

The Policy

This plan establishes the San Bernardino County operating procedures for preventing employee illnesses associated with exposure to indoor and outdoor heat. It provides information and guidance on:

- Preventive measures and employee training requirements pertaining to the prevention of heat illness and,
- Response procedures that should be followed in the event an employee exhibits signs or symptoms of possible heat illness. It is intended to meet the requirements of [California Code of Regulations, Title 8 Section 3395, Heat Illness Prevention](#), and [Section 3396, Heat Illness Prevention in Indoor Places of Employment](#).

Compliance

1. Outdoor:

All employees who work outdoors are covered under this plan. This plan is meant to keep employees who work outdoors safe from heat illness. Outdoor work areas, activities and operations, such as outdoor inspections and field incident response, and outdoor events are considered outdoor places of employment, and those workers fall under the scope of this plan.

Employees who fall under this plan include but are not limited to:

- Workforce Development Specialist
- Business Service Representative
- Business Service Specialist

Examples of outdoor duties include but are not limited to:

- Outdoor activities
- Setup of Job Fair Booth
- Outdoor Job Fairs

2. Indoor:

This plan applies to all indoor work areas where the temperature equals or exceeds 82 degrees Fahrenheit when employees are present.

This plan does not apply to:

- Employees while teleworking
- Employees working in county jails, detention facilities, or juvenile facilities.
- Employees performing emergency operations that are directly involved in the protection of life or property.
- Employees that are only exposed to incidental heat exposure. (i.e. temperatures at or above 82 degrees Fahrenheit and below 95 degrees Fahrenheit for less than 15 minutes in any 60-minute period.)

Employees who fall under this plan include but are not limited to:

- Employees that work in offices and buildings and indoor temperatures or heat index equal or exceed 82 degrees Fahrenheit.
- Employees that work in warehouses, maintenance shops, or fleet shops without air conditioning or climate controls, and indoor temperatures or heat index equal or exceed 82 degrees Fahrenheit.

3. Employee Access to the HIPP

This plan is maintained at our worksites in the Safety Coordinator binder and can be accessed electronically at <https://workforce.sbcounty.gov/workforce-development-staff/handbooks-manuals-guides/> The HIPP is also available to workers or their representatives upon request.



2. Definitions

The following definitions are applicable to this Heat Illness Prevention Plan:

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

Administrative control means a method to limit exposure to a hazard by adjustment of work procedures, practices, or schedules. Examples of administrative controls that may be effective at minimizing the risk of heat illness in a particular work area include, but are not limited to acclimatizing employees, rotating employees, scheduling work earlier or later in the day, using work/rest schedules, reducing work intensity or speed, reducing work hours, changing required work clothing, and using relief workers.

Clothing that restricts heat removal means full-body clothing covering the arms, legs, and torso that is any of the following:

- Waterproof; or
- Designed to protect the wearer from a chemical, biological, physical, radiological, or fire hazard; or
- Designed to protect the wearer or the work process from contamination.

EXCEPTION: **Clothing that restricts heat removal** does not include clothing demonstrated to be all of the following:

- Constructed only of knit or woven fibers, or otherwise an air and water vapor permeable material; and
- Worn in lieu of the employee's street clothing; and
- Worn without a full-body thermal, vapor, or moisture barrier.

Cool-down area means an indoor or outdoor area that is blocked from direct sunlight and shielded from other high radiant heat sources to the extent feasible and is either open to the air or provided with ventilation or cooling. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. A cool-down area does not include a location where:

- Environmental risk factors defeat the purpose of allowing the body to cool; or
- Employees are exposed to unsafe or unhealthy conditions; or
- Employees are deterred or discouraged from accessing or using the cool-down area.

Engineering control means a method of control or a device that removes or reduces hazardous conditions or creates a barrier between the employee and the hazard. Examples of engineering controls that may be effective at minimizing the risk of heat illness in a particular work area include, but are not limited to: isolation of hot processes, isolation of employees from sources of heat, air conditioning, cooling fans, cooling mist fans, evaporative coolers (also called swamp coolers), natural ventilation where the outdoor temperature or heat index is lower than the indoor temperature or heat index, local exhaust ventilation, shielding from a radiant heat source, and insulation of hot surfaces.

Environmental risk factors for heat illness means 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; conductive heat sources such as the ground, workload severity and duration, protective clothing, and personal protective equipment worn by employees.

Globe temperature means the temperature measured by a globe thermometer, which consists of a thermometer sensor in the center of a six-inch diameter hollow copper sphere painted on the outside with a matte black finish, or equivalent. The globe thermometer may not be shielded from direct exposure to radiant heat while the globe temperature is being measured.

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

Heat index means a measure of heat stress developed by the National Weather Service (NWS) for outdoor and indoor environments that takes into account the dry bulb temperature and the relative humidity.

Heat wave means any day in which the predicted high outdoor temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit greater than the average high daily outdoor temperature for the preceding five days, for the purpose of this section only.

High radiant heat area means a work area where the globe temperature is at least five degrees Fahrenheit greater than the temperature.

High radiant heat source means any object, surface, or other source of radiant heat that, if not shielded, would raise the globe temperature of the cool-down area five degrees Fahrenheit or greater than the dry bulb temperature of the cool-down area.

Indoor refers to a space that is under a ceiling or overhead covering that restricts airflow and is enclosed along its entire perimeter by walls, doors, windows, dividers, or other physical barriers that restrict airflow, whether open or closed. All work areas that are not indoor are considered outdoor and covered by section 3395.

EXCEPTION: 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.

Personal heat-protective equipment means equipment worn to protect the user against heat illness. Examples of personal heat-protective equipment that may be effective at minimizing the risk of heat illness in a particular work area include, but are not limited to water-cooled garments, air-cooled garments, cooling vests, wetted over-garments, heat-reflective clothing, and supplied-air personal cooling systems.

Personal risk factors for heat illness means factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of medications that affect the body's water retention or other physiological responses to heat.

Preventative cool-down rest means a rest taken in a cool-down area to prevent overheating.

Radiant heat means heat transmitted by electromagnetic waves and not transmitted by conduction or convection. Sources of radiant heat include the sun, hot objects, hot liquids, hot surfaces, and fire.

Relative humidity means the amount of moisture in the air relative to the amount that would be present if the air were saturated.

Shade means the blockage of direct sunlight. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthful conditions. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car exposed to the sun does not provide acceptable shade to a person inside of it, unless the car is running with the air-conditioning turned on.

Shielding means a physical barrier between radiant heat sources and employees that reduces the transmission of radiant heat.

Temperature means the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer freely exposed to the air without considering humidity or radiant heat, to measure the temperature in the immediate area where employees are located.

Union representative means a recognized or certified collective bargaining agent representing the employees.



3. Responsibilities

County Administration and Leadership

County Administration and Leadership is responsible for exemplifying their commitment to keeping the County a safe and healthful workplace by providing the support and guidance needed to keep prevention of heat-related illnesses a priority.

Department Heads

Department Heads have the primary responsibility for ensuring the Heat Illness Prevention Plan (HIPP) is in place to serve its purpose of keeping the Department's employees safe. To accomplish this, Department Heads will:

- Ensure individuals under their supervision obtain the training required to prevent Heat-Related Illnesses.
- Ensure the department's written HIPP is updated as needed.
- Ensure the department provides clear responsibilities for all personnel to coordinate effectively with emergency responders.

Supervisors and Leads

To maintain and fulfill the elements of the Heat Illness Prevention Plan, Supervisors and Leads will:

- Implement this plan;
- Monitor employees under their supervision and contact applicable emergency personnel if needed;
- Advise employees to initiate cool down measures as stipulated in this plan;
- Provide a means for water source/ hydration to employees;
- Remind employees to follow heat illness prevention protocols by staying hydrated and seeking sufficient shade for cool down measures.
- Record temperature and heat index readings in the indoor temperature log. *Please note this is only applicable for indoor worksites when temperatures reach 87 degrees Fahrenheit.*
- Ensure employees are properly acclimated to the heat.

Employees

Employees include regular and recurrent/extra-help employees, temp agency employees, (e.g. and contract employees. Employees are responsible for knowing the safety and health regulations for their duties and being an active participant in safe practices. Employees will:

- Follow this plan;
- Report heat illness symptoms to their supervisor;
- Observe co-workers for heat illness symptoms and/ or contact applicable emergency personnel if needed;
- Maintain personal protective equipment per manufacture recommendations;
- Follow other safe practices listed within this document and taught during training.
- Abstain from drinking liquids such as sports or energy drinks, coffee, alcohol (within 48 hours of work), or other sugary drinks in lieu of water.

Department of Risk Management

DRM is your partner in developing your Department's HIPP and monitoring compliance with regulatory requirements. To accomplish this, DRM will:

- Maintain/update the county's HIPP template as necessary;
- Provide guidance and technical assistance in customizing and updating your HIPP;
- Develop training and outreach materials;
- Participate in emergency response as required.



4. Hazard Recognition

Supervisors and employees shall maintain an awareness of hazardous conditions or risk factors that can influence when heat illness is likely to occur. Employees may be affected by multiple risk factors at the same time.

Risk Factors influencing heat-related illness include:

- Elevated air temperature,
- Relative humidity,
- Radiant heat from the sun, hot objects, hot liquids, hot surfaces, and fire,
- Conductive heat sources (e.g., the ground),
- Hot air movement,
- Strenuous physical activity,
- Personal risk factors including but not limited to:
 - Age
 - Weight
 - Diet/nutrition
 - Use of certain medications
 - Hydration levels
 - Prior heat illness injuries
- The use of Personal Protective Equipment (PPE) including but not limited to:
 - Surgical gowns & caps
 - Tyvek jumpsuits
 - Waterproof aprons
 - Respirators
 - Face shields
 - Boots
 - Gloves

Appendix A

HEAT STRESS Risk Factors
Workers should be aware of the many factors that can impact the risk of heat illness.

Environment

- High temperatures, especially with high humidity, which makes sweating less effective
- Direct sun exposure
- Lack of wind or breeze to cool the body; however, when ambient conditions are higher than body temperature, warm airflow can actually increase heat gain
- Proximity to engines or other hot equipment

Activities

- High exertion
- Not enough rest breaks
- Repeated strenuous days in the heat
- High motivation to push through discomfort from heat strain

No Acclimatization

- New employees
- Experienced employees returning from time away from the heat
- Acclimatized workers who experience a sudden change in worksite temperature, such as heat waves or moving in a new area

Dehydration

- One of the most important risk factors

Prior Heat Illness

- Increases the risk of heat illness in the future

Other Factors

- Age
- Height
- Prior heat illness
- Allergies

Medications

Heat tolerance can be affected by medications taken for:

- cold, allergies, and congestion
- muscle spasms
- blood pressure
- urine production (diuretics)
- high blood pressure
- diarrhea
- dizziness/vertigo
- psychosis
- depression

Health Conditions

- Short-term illnesses, such as diarrhea, vomiting

CLICK HERE

A worker may be affected by many risk factors at the same time. Talk to a healthcare provider about your personal risk factors.

PPE is often necessary and required but also increases the physical effort to perform duties while carrying the extra weight of the PPE and can lead to employee's getting hotter faster. PPE can also reduce the body's normal way of eliminating heat by sweating and other means, and holds excess heat and moisture inside, making the employee's body even hotter.



5. Response Procedures

Outdoor Response Procedures

The following will apply whenever the temperature is expected to be 80 degrees Fahrenheit or higher and/ or whenever the supervisor feels an employee will be at risk for heat illness (i.e. heat waves or temps above 95 degrees Fahrenheit).

Climate Monitoring

As necessary, the supervisor or designee will check the weather from a recognized source (National Weather Service) and remind employees to stay hydrated and utilize shade (e.g., air-conditioned vehicle).

The following resources will be used to monitor the outdoor temperature:

- **National Weather Service Phone Numbers CALIFORNIA Dial-A-Forecast**
 - Los Angeles 805-988-6610(#1)
 - San Diego 858-297-2107(#1)
- **Internet websites such as:**
 - National Oceanic and Atmospheric Administration at <http://www.noaa.gov/>
 - Nation Weather Service at www.weather.gov
 - The Weather Channel at www.weather.com
 - Weather Underground at www.wunderground.com

Observation

Employees will watch for heat illness symptoms among co-workers, as a person suffering from heat illness may not recognize the symptoms they are experiencing. Employees will also utilize breaks and recovery periods (minimum of five minutes) for cooling off measures. Employees will look for physical changes or behavior changes in their co-workers during the rest periods (e.g., when employees are in an air-conditioned car, drinking water and/ or during shaded breaks). Should their co-worker begin to show signs or symptoms indicative of heat illness, then they will report the information to a supervisor, and begin cool down measures (see Section 6, General Response to Heat Illnesses).

Employees on medications that make them sensitive to heat illness should discuss the side effects/ corrective actions with their doctor and follow up with their supervisor prior to working in the heat.

Communication via a cell phone, text message, radio, and/ or in person will be utilized to check on employees by supervisors and employees or Leads can relay any possible heat illness issues via any of these communication methods.

Limiting Heat Exposure to Employees

Employees should try to mitigate exposure by covering exposed parts of their body, keeping hydrated and taking cooling breaks/ rest breaks. Employees may take a minimum of a five-minute cooling rest break every hour if working in the outdoor heat (above 80°F). This can be accomplished by finding suitable shade (e.g., shade tree, structure, or other shelter (Canopy/ Tent/ Patio Cover) and/ or in an air-conditioned vehicle during outdoor activities/ inspections.

Employees are encouraged to work in teams of two when possible and not alone when in a hot environment and/ or performing strenuous outdoor activities. Employees may work alone when there is minimal physical labor and/or driving in air conditioning vehicles to outdoor events, outdoor activities, or outdoor inspections.

Based on climate monitoring and when applicable to the activity, outdoor work may be rescheduled for another day, rotated in-between activities, scheduled for the morning or later in the day and/ or stopped for a brief period.

Acclimatization

All employees need to be acclimatized before/ during work in the heat. Acclimatization means the temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within 4-14 days of regularly working in the heat for at least two hours per day. As such, supervisors will assist employees in acclimatizing to the weather and monitor temperatures 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.

New employees or any employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's assignment.

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 employees will be documented.

Drinking Water

Supervisors will ensure employees are taking enough water (1 quart per employee per 1 hour of outdoor work is required) or have access to an appropriate water source when in the field.

Water is be provided in two ways;

1. Employees may fill up their water bottles or jugs from their house or utilize the filtered water from breakrooms.
2. Utilize the bottled water source located in each office, station, or facility if in the field.

Employees will take water bottles in quantities or size to meet the requirement utilizing the bottled water available in all areas and office/ station locations prior to working outdoors.

During hot weather, the water must be cooler than the ambient temperature, but not so cool as to cause discomfort. Water will be kept cool either by a portable ice chest with ice packs, or by ice provided by the

department. OSHA recommends adding ice to the water when temperatures are over 95 degrees Fahrenheit because cool water adds the benefit of directly cooling the body upon consumption.

Employees are encouraged to drink water every 15-20 minutes and to take their 5-minute cooling breaks as needed.

Supervisors will encourage employees to abstain from drinking other liquids such as coffee, alcohol (within 48 hours of work), sports drinks, or other sugary drinks in lieu of water.

Should the water run out during the shift, employees have the option to return to the office or training site to replenish their water source.

Shaded cool-down areas

Shaded cool-down areas will be as close as practicable to employees 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 an employee.

Employees will be informed of locations of shaded cool-down areas and encouraged to take a five-minute cool-down rest in the shade. Such access will be permitted at all times. An employee 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 employee 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.

Methods used to shade employees

1. **Trees and Vegetation** in the open air and/ or with cross winds is the preferred method of cooling an employee. The trees/ vegetation must be sufficient enough to provide shade-flecks of sunlight are acceptable as long as the overall shade provides substantial blockage of the sunlight.
2. **Vehicles** with air conditioning may be used for heat illness prevention. Vehicles may be idled with the air conditioning running for a period of time to prevent heat illness.
3. **“Pop-ups”, “Shade ups”, canopies or umbrellas** (“Shading Device”) may be used only for stationary activities (i.e. physical work locations, emergency incidents, or outdoor training events) where access to trees/vegetation or usage of a vehicle is limited or non-existent.

Personal Protective Equipment

When working outdoors in the heat, clothing worn by employees should be lightweight, preferably light colored. If light colored clothing is not possible, breathable fabric that allows airflow and air movement is recommended. Long sleeves shirts can be worn to cover the body and protect against sunburn, but they also slightly affect the body’s ability to cool itself.

Employees wearing personal protective equipment such as respirators, gloves, or hats, should be aware of the added heat load while worn in high heat conditions. Access to shade and hydration, as well as cooling breaks, may need to be taken more often than the minimum five-minute recovery break per hour.

Outdoor Procedures for Heatwaves and High Heat

The following response procedures will be implemented during **heat waves** and during **high heat** when the temperature equals or exceeds **95 degrees** Fahrenheit.

Pre-shift or tailgate meetings will be held before the commencement of work to remind employees to drink plenty of water and take a cool-down rest when necessary. Heat Illness Prevention Procedures, the weather forecast, and emergency response will also be reviewed.

During a heat wave, and when applicable to the activity, outdoor work may be rescheduled for another day, rotated in-between activities, scheduled for the morning or later in the day and/ or stopped for a brief period. If work schedule modifications are not possible, employees will be provided with an increased number of water and rest breaks and observed closely for signs and symptoms of heat illness.

Each employee 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.

If a supervisor, designated "buddy", or any employee reports any signs or symptoms of heat illness in any employee, the supervisor will take immediate action appropriate with the severity of the illness (see Section 6, General Response to Heat Illnesses).

Indoor Response Procedures

The following response procedures will be implemented when the indoor temperature is **82 degrees** Fahrenheit or higher when employees are present:

- Provisions of drinking water
- Access to cool down areas and breaks
- Temperature monitoring

Drinking Water

Fresh, pure water will be provided to employees free of charge. Supervisors will ensure that water will be suitably cool meaning it is cooler than the ambient temperature, but not so cool as to cause discomfort. Water will be kept cool either by a water cooler, refrigerator, ice cooler, or by ice provided by the department. Supervisors will ensure the work site will have enough water for each employee (e.g., 1 quart per employee per 1 hour is required).

Water is provided in following ways:

- Employees can utilize the filtered water cooler in the kitchen or breakroom areas.
- Employees can utilize the sink faucets located in the kitchen or breakroom area.

Access to Cool-Down Areas



In buildings where the HVAC system has malfunctioned or not operating, employees can take cooling breaks in the indoor cool-down areas that will be maintained at less than 82 degrees Fahrenheit by

- Closing all curtains or blinds to eliminate as much sun heat as possible.
- Providing cooling fans or portable air conditioning units as appropriate and needed.
- Increasing natural ventilation when feasible (e.g., open windows and doors) and the outdoor temperature or heat index is lower than the indoor temperature and heat index.

Employees 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. Employees who take a preventative cool-down rest break will be monitored and asked by their supervisor or a designee if they are experiencing symptoms of heat illness.

In no case will the employee be ordered back to work until signs or symptoms of heat illness have abated. If an employee 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.

Indoor Temperature Monitoring and Recording

Temperature monitoring will begin when indoor temperatures are suspected to equal or exceed **82 degrees Fahrenheit** when employees are present.

Temperature Log and Heat Index

Initial temperature or heat index measurements will be recorded in the [Temperature Log](#) when:

- Indoor temperature or the heat index is **87 degrees Fahrenheit** or higher, or
- Indoor temperature is **82 degrees Fahrenheit** or higher and employees are either:
 - Wearing clothing that restricts heat removal, or
 - Working in an area with high radiant heat.

The screenshot shows an 'INDOOR TEMPERATURE LOG' form. It includes instructions at the top and a table with columns for 'INITIAL READINGS' and 'FOLLOW-UP READINGS'. The table has rows for 'DATE/TIME', 'TEMPERATURE (°F)', 'HUMIDITY (%)', 'HEAT INDEX (°F)', and 'STATUS'. A 'CAUTION' alert is visible in the middle of the table, indicating that the heat index is 87°F or higher. The form also has sections for 'NOTES' and 'EXTREME CAUTION'.

Additional measurements will be recorded each hour while employees continue to work at the worksite.

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. 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 heat index equations to determine the heat index

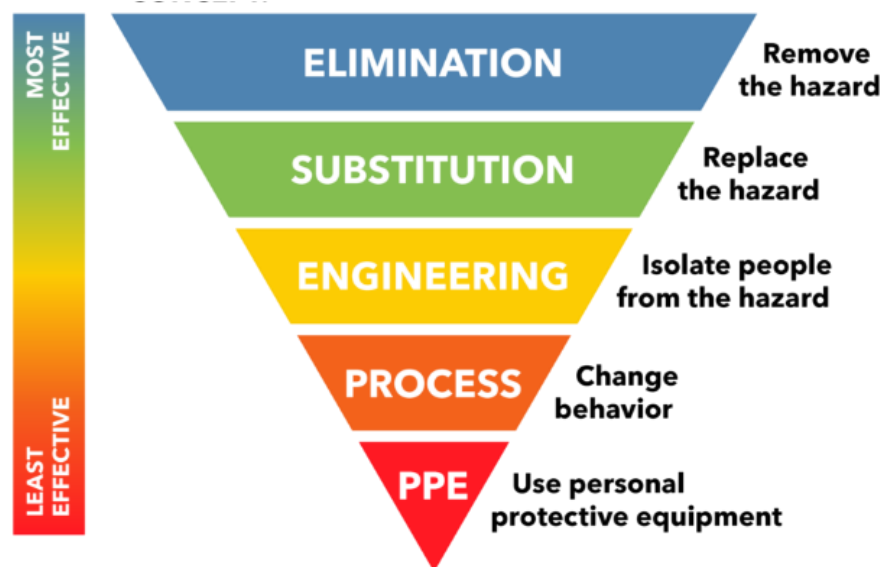
Digital thermometers or dataloggers will be used to measure indoor temperatures and humidity levels. Monitoring instruments will be maintained according to manufacturer's recommendations, and the readings will be used to determine the indoor heat index either by heat index reference chart from Appendix A of Section 3396, or by using the heat index calculator, linked, [here](#) . Temperature and humidity will be measured and recorded by Staff Analyst II.

Additional Response Procedures

The following additional procedures will be implemented when the indoor temperature or heat index is **87 degrees** Fahrenheit or higher, **or** the indoor temperature is **82 degrees** Fahrenheit or higher **and** employees are either:

- Wearing clothing that restricts heat removal, or
- Working in an area with high radiant heat.

HIERARCHY OF CONTROLS



Control Measures

The hierarchy of controls will be utilized to implement indoor heat control measures and reduce temperatures.

Depending on the situation, a combination of control measures may be necessary to reduce indoor temperatures. Feasible 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. 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. If both feasible engineering and administrative controls are not enough to decrease the temperature and minimize the risk of heat illness, personal heat-protective equipment will be provided. Personal heat-protective equipment consists of special cooling devices that the worker wears on their body that can protect them in hot environments.

Our department will utilize the following **Engineering Controls**:

- 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
- Reflective shields to block radiant heat
- Elimination of steam leaks
- Cooled seats or benches
- Evaporative coolers

Our department will utilize the following **Administrative Controls**:

- Allow employees to telework or relocate them to other buildings.
- Modify work schedules and activities to times of the day when the temperature is cooler
- Require mandatory rest breaks in a cool-down area, such as an air-conditioned breakroom. The duration of the rest breaks will increase as heat stress rises.
- Outdoor work for Job Fairs will be scheduled during cooler periods or times of day, such as early morning or late afternoon.
- Front Desk Staff will be rotated among employees to help minimize exertion and heat exposure. If employees must be in proximity to heat sources, mark them clearly, so they are aware of the hazards.
- Employees will work in pairs or groups “buddy system” during extreme heat so they can monitor each other for signs of heat illness

Our department will utilize the following **Personal heat-protective equipment**:

- Water and shade.

Acclimatization and Observation

Where no effective engineering controls are in use to control the effect of outdoor heat on indoor temperature, all employees will be closely observed by a supervisor or designee during a heat wave.

Furthermore, new employees will be closely observed by a supervisor or designee for the first 14 days of employment.



6. General Response to Heat Illness

Response to symptoms

Employees who are showing signs of heat illness should stop and contact their supervisor or lead immediately. Employees should contact medical emergency services immediately if necessary.

When an employee 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 shade or cool-down area(s) and drinking cool water will suffice or if emergency service providers will need to be called.

A sick employee will not be left alone at any time as their condition could take a turn for the worse. Sick employees will also not be sent home, because even if they start to feel better, their condition could worsen, and they may die before reaching a hospital.

The following will provide some guidance information on responding to the various heat illnesses and injuries:

Transient Heat Fatigue temporary state of discomfort and mental strain arising from prolonged heat exposure.

- a. **Symptoms:** general feeling of tiredness or fatigue and usually results in a decline in task performance, coordination, alertness, and vigilance.
- b. **Response:** replace fluids, rest, and gradual acclimatization.

Heat rash occurs when the sweat glands become plugged on areas of the skin that are kept wet, such as the armpits and the groin area. It is usually a minor injury unless the area becomes infected.

- a. **Symptoms:** itchy red bumpy rash.
- b. **Response:** rest in the shade and dry off affected skin.

Heat Cramps occur as a result of salt and potassium (electrolyte) depletion. Usually, a minor illness which leaves no long-term effects if treated properly.

- a. **Symptoms:** muscle pain, cramps, or spasms.
- b. **Response:** rest in the shade, replenish with fluids and apply a moist cloth to cramped muscles (do not rub or massage).

Heat-related fainting, otherwise known as syncope, occurs as a result of insufficient blood to the brain, caused by blood vessels on the skin drawing blood away from the brain and heart.

- a. **Symptoms:** dizziness, lightheadedness and/or fainting.
- b. **Response:** move to a shaded area and lie down with legs elevated until symptoms subside, remove any excess clothing or personal protective equipment, and replenish fluids gradually (slowly sip water or other non-caffeinated liquid).

Heat exhaustion occurs when the body becomes overheated from the loss of fluids and salts. Heat exhaustion is the most common type of heat illness and is not life threatening if adequately recognized and responded to.

- a. **Symptoms:** headache, dizziness, weakness/fatigue, nausea or vomiting, pale appearance, reduced sweating, weak rapid pulse, dry mouth, thirst, possible chest pain, and moderately raised body temperature (101-104 degrees Fahrenheit).
- b. **Response:** move to a shaded area to cool and rest, remove any excess clothing or personal protective equipment replenish fluids gradually (slowly sip water or other non-caffeinated liquid) and place ice behind the head to facilitate cooling.

Heatstroke occurs when symptoms of heat exhaustion are not treated, and the body continues to become overheated until the body's cooling system shuts down. Heat Stroke is the most serious heat illness and should not be taken lightly. It can be fatal if not properly treated.

- a. **Symptoms:** dry, hot, reddish skin (no sweating), swollen tongue, strong rapid pulse, abnormal blood pressure, unsteadiness, dizziness/fainting, vomiting, headache, chills, seizures, irritability/confusion, loss of consciousness, shock, rapid and shallow breathing, and/ or excessively high temperature.
- b. **Response: immediately call 911** and give emergency personnel pertinent information and the location, move the victim to the shade, remove any excess clothing and personal protective equipment, lightly spray the person with cool water and/or fan the victim with direct air, elevate their feet six to eight inches remove any nearby objects that could cause injury if the victim is suffering from seizures and do not have the victim drink water (they may aspirate).



7. Emergency Medical Services

Heat Illness Emergencies

When an employee 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 any employee at the worksite. A telephone, work cellular telephone, or a private cellular telephone will be used to call for emergency services. To ensure effective communication, all supervisors have access to or carry cell phones. Cell phones are to remain charged and will be checked prior to each shift to ensure that they are functional

Contact 9-1-1 immediately if an employee

- Displays signs or symptoms of severe heat illness such as:
 - 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.



All 9-1-1 calls for emergency service (including most cellular telephone calls) are received by Dispatch. Advise Dispatch of the signs and symptoms that an employee is suffering from. **Do not hang up;** Dispatch will require further information from the calling party such as:

1. **Your Contact Info** (your name and call back number)
2. **Location** (building name and room number)
3. **Nearest Cross street**

While the ambulance is en route, first aid will be initiated (e.g., cool the worker by placing the worker in the shaded cool-down area, removing excess layers of clothing, placing ice packs in the armpits and groin area, and fan the victim).

If an emergency occurs outdoors, and the affected employee is able to walk, get them out of the sun, begin active cooling/ first aid measures for heat illness, and advise Dispatch of the employee's location. Be as precise as possible. If the dispatcher requests that the employee be moved to a location that is easier for emergency services (Police and Fire/EMS responders) to access, advise the dispatcher if you think that can be done without further injury.

If the employee cannot be re-located, provide Dispatch with the precise location. If other employees are available, direct them to the nearest cross streets or areas to assist in directing emergency services to the patient.

Serious Injury or Illness Reporting

For any injury or illness that occurs at the workplace and requires emergency response, follow the procedures on the Serious Injury Reporting flyer

Supervisors or Human Resource Business Partners (HRBP) must immediately report these to DRM so we may notify Cal/OSHA no longer than eight (8) hours after you learned about the death or serious injury or illness.

IMPORTANT

Departments who fail to report serious occupational injury or illness within 8-hours are subject to a **\$5,000** Cal/OSHA penalty.

SAN BERNARDINO COUNTY

Serious Injury Reporting Instructions

Serious Injury
A serious injury is where employees suffer a workplace illness or injury requiring transportation to an emergency room, hospitalization, or surgery. Follow the steps below to report serious injuries to help ensure that the injured employee(s) receive the immediate emergency care they need and that there is a smooth transition to any follow-up appointments and/or treatment needed.



Steps to Report a Serious Injury

1. Call the **Risk Management main line** number **(909) 386-8655** or your **Department Risk Control Specialist**.
Please have the following information available:
 - Name of injured employee(s)
 - Hospital injured employee(s) were transported to for care
 - Name and phone number of supervisor
 - Where and when the injury occurred (e.g. roadway, address location)
 - Brief details of how the injury occurred (e.g., accident, fall, etc.)
2. Follow up by completing the **appropriate claim paperwork** and sending to Risk Management via email **SBCRMnewclaimintake@rm.sbcounty.gov**, or fax **(909) 386-8711**. Risk Management is available Monday through Friday from 8 a.m. to 5p.m.
3. For injuries that occur after hours, please contact the Director of Risk Management using his county cell (909) 268-1111 or Paul Kiehl at (909) 268-1111.

CLICK HERE 



8. Training

Heat-Related Illness Training

Supervisors are responsible for ensuring that their employees meet all training needs per Cal/OSHA requirements and county guidelines, policies and procedures.

Employees will complete the initial Heat-Related Illness Training available through PERC.

Training Topics

All employees whose positions and titles are identified in this plan will undergo initial training on the following topics:

1. [The Heat Illness Prevention Plan \(HIPP\) and Fact Sheet](#)
2. The [environmental and personal risk factors](#) influencing heat illness
3. The preventive measures mandated by this program
4. The various types, signs, and [symptoms of heat illness](#)
5. How to read/understand the [Heat Index Reference Chart](#)
6. The importance of frequent [consumption of water](#)
7. The importance of [acclimatization](#)
8. The importance of PPE and how to use it properly
9. The importance of reporting heat illness symptoms immediately
10. Emergency responses to heat illness injuries (First Aid/CPR training provided in separate training).
11. Outdoor High Heat Procedures (see [Section 5, Response Procedures](#))



Periodic meetings covering key aspects (e.g. hydration, water/ shade breaks, modified work schedules, etc.) of this plan will be conducted by Supervisor(s) or Lead personnel when heat illness is possible. Similarly, a quick meeting will be conducted when high heat procedures are initiated, and employees are expected to work outdoor (see [Section 5, Response Procedures](#)).

Supervisors of employees who work in conditions that pose a risk of heat illness will additionally be trained on the following topics:

1. How to anticipate the risk of heat illness, Risk factors are discussed in [Section 4: Hazard Recognition](#).
2. The procedures that must be followed to implement the requirements of this program, The procedures that must be followed when an employee exhibits signs or symptoms of heat illness, including emergency response procedures, and.
3. Importance of preventative cooling rest breaks.



9. Recordkeeping

All training records prepared in association with the Heat Illness Prevention Program (e.g., training sign-in sheets, safety meeting minutes, etc.) will be retained in a centralized location within <https://workforce.sbcounty.gov/workforce-development-staff/handbooks-manuals-guides/> Records of Heat Illness prevention Training records for departments are also available upon request. Requests may be sent to PERC or Risk Management at SafetySection@rm.sbcounty.gov.

Recordkeeping Timelines

| What | Where | How Long |
|--|---------------------------------|----------------------|
| Temperature & humidity logs | On file with Department | 1 year |
| Incident investigations regarding Heat Illnesses | On file with Department | 5 years |
| Safety meeting agendas for Heat Illness | On file with Department | 5 years |
| Employee training records | On file with Department or PERC | Length of employment |

**Access to employee medical records will be limited in accordance with departmental policies, state and federal guidelines.*

In our department, the following people know where these records are kept:

| Name/Title | Contact Info |
|------------------------------------|--|
| Fred Burks – Deputy Director | fburks@wdd.sbcounty.gov |
| Andrew Escobedo – Staff Analyst II | Andrew.escobedo@wdd.sbcounty.gov |
| | |

A

Forms & Templates



All forms, templates, and training resources referenced in the HIPP are available in Appendices A and B by clicking links provided below and on the next page. You can also access the documents by going to the Risk Management internal website ([DRM website](#)) to download copies for use.

Heat Illness Prevention Plan

[Heat Illness Prevention Plan template](#)

Use this template to develop and update your department's HIPP. DRM will keep this template updated to comply with regulatory and county requirements.

[Addendum of Worksite Specific Procedures template](#)

Use this addendum to include specific worksite procedures. DRM will keep this template updated to comply with regulatory and county requirements

Temperature Assessment

[Temperature Log template](#) (includes Heat Index Chart)

Site Supervisor's Office

Digital Thermometer manual

[Link](#)

[National Oceanic and Atmospheric Administration \(NOAA\)](#)

[Nation Weather Service](#)

[The Weather Channel](#)

[Weather Underground](#)

Reporting

[Workers' Compensation Claim Form](#)

[Employer's Report Form \(5020\)](#)

[Incident Report Form](#)

[Series Illness/Injury Reporting Instructions](#) flyer

B

Training and Information Resources

Heat-Related Training Resources

[Heat-Related Illness Prevention \(online training\)](#) PERC LMS

[Acclimatization Fact Sheet](#)

[Environmental and Personal Risk Factors](#)

[Heat Illness Symptoms](#)

[Hydration](#)

[Heat Index Reference Chart](#)

[HVAC Malfunction Fact Sheet](#)

[Indoor Heat Illness Prevention Fact Sheet](#) 8 CCR 3396

[Outdoor Heat Illness Prevention Fact Sheet](#) 8 CCR 3395

[Cal/OSHA Heat Illness Prevention Guidance and Resources](#)

C

Worksite Specific Heat Illness Prevention Plan

Heat Illness Prevention Plan

The **Workforce Development Department**, in conjunction with San Bernardino County Risk Management, has developed a Heat Illness Prevention Plan (HIPP) for all employees to address exposure prevent heat-related illnesses. The document describes the goals, statutory authority, and the responsibilities of all employees under the Plan. It addresses Compliance, Hazard Recognition, Response Procedures, General Response to Heat Illnesses, Emergencies, Training, and Documentation.

RESPONSIBLE PARTIES

All employees at this worksite are expected to review their individual responsibilities in Section 3 of the department's HIPP and adhere to all safety guidelines outlined in this plan.

Heat-Related Illness Training

Training will be conducted in accordance with Section 8 of the Department's HIPP. New employees will also be trained in their specific worksite procedures related to the prevention and response to heat-related illnesses.

Acclimation of Employees

Acclimation of employees will be conducted in accordance with [Section 5, Response Procedures](#) of the Department's HIPP.

Water

Water is located at each worksite

Employees at the worksites are reminded and encouraged to frequently consume small quantities of water throughout their shift.

For outdoor work locations or employees, 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. [See Section 5, Response Procedures](#) for full details on the department's plan for provisions of water.

C

Worksite Specific Heat Illness Prevention Plan

Shade/Cooling Breaks

Preventative cool-down rest periods will be at least 5 minutes, in addition to the time needed to access the cool-down area. Cool-down areas(s) for this site are located Employees are encouraged to take a five-minute rest in these areas.

- The temperature in the indoor cool-down areas will be maintained at less than 82 degrees Fahrenheit by portable AC units.
- As outdoor work 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, employees are responsible for moving the shade structures in each location. 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.
- See [Section 5, Response Procedures](#) for full details on the department's plan for shaded cool-down areas.

Control Measures

This worksite will utilize the **Engineering, Administrative and PPE Controls**: in accordance with Section 5 of the Department's HIPP

Employee Heat Illness Symptoms and Emergencies

This worksite will address heat-related illnesses and emergencies in accordance with Sections 6 and 7 of the Department's HIPP. Effective communication at this worksite will be ensured by voice, direct observation, mandatory buddy system, or electronic means, such as cell phone, or text and will be maintained so that workers can contact a supervisor when necessary.

Worksite Map

Emergency Exit or Site Plans are posted at each location near exits and in the Injury & Illness Prevention Plan (IIPP). This site map will be used to help direct Emergency Medical Services as needed.