

The City of
Redlands



Heat Illness Prevention Program

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Heat Illness Prevention Program

I. Policy

California employers with any outdoor places of employment must comply with the Heat Illness Prevention Standard-Title 8 California Code of Regulations (T8 CCR) Section 3395. Employees working in outdoor places of employment or in other areas at times when the environmental risk factors for heat illness are present, are at risk for developing heat illnesses if they do not protect themselves appropriately. The objective of this program is to reduce the potential for heat illnesses by making employees aware of heat illnesses, ways to prevent illness, and actions to take if symptoms occur. It is the policy of the City of Redlands that any employee who works outdoors in the heat, and all individuals who supervise these employees, must comply with the procedures in this program.

II. Authority

California Code of Regulations, Title 8, Section 3395

III. Scope

This program applies to all employees and supervisors working in various places of employment during those times when the environmental risk factors for heat illness are present.

IV. Definitions

- A. **Acclimatization**- *the temporary and gradual physiological change in the body that occurs when the environmentally induced heat load to which the body is accustomed is significantly and suddenly exceeded by sudden environmental changes. In more common terms, the body needs time to adapt when temperatures rise suddenly, and an employee risks heat illness by not taking it easy when a heat wave strikes or when starting a new job that exposes the employee to heat to which the employee's body hasn't adjusted.*

**Inadequate acclimatization can be significantly more perilous in conditions of high heat and physical stress. Employers are responsible for the working conditions of their employees, and they must act effectively when conditions result in sudden exposure to heat their employees are not used to.*

- B. **Environmental risk factors for heat illness**- working conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by employees.
- C. **Heat Illness**- 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.
- D. **High Heat Procedures**- *additional preventative measures that this company will use when the temperature equals or exceeds 95 degrees Fahrenheit.*
- E. **Personal risk factors for heat illness**- factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.
- F. **Preventative recovery period**- a period of time to recover from the heat in order to prevent heat illness.
- G. **Shade**- blockage of direct sunlight. Canopies, umbrellas and other temporary structures or devices may be used to provide shade. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning.

V. Responsibilities

RISK MANAGEMENT

- A. Prepare and maintain a written program which complies with the requirements of Cal/OSHA Title 8, Section 3395.
- B. Review and revise the Heat Illness Prevention Program:
 - 1. On an annual basis;
 - 2. When changes occur to CCR T8 3395, that prompt revision of this document; and
 - 3. When there is an accident or near miss that relates to this section.
- C. Provide training to all potentially impacted employees and their supervisors on the risks associated with, and methods of prevention of, heat illness, including how to recognize symptoms and respond when they appear. Training shall be provided on a three-year basis as a refresher prior to the start of the summer season for all employees working in outdoor places of employment.
- D. Maintain training records.

DIRECTORS, MANAGERS, AND SUPERVISORS

- A. Identify all employees who are required to work outdoors where potential heat illness could occur and identify the supervisor of those employees.
- B. Assure that adequate water and shade are available at a job site when the environmental risk factors for heat illness are present.
- C. Ensure that all affected employees have received proper training on heat illness prevention.
- D. Ensure that the requirements in this program are followed.
- E. Contact the Police or Fire Department to request emergency medical services in the event medical assistance is required.
- F. Should an incident occur, complete a Report of Employee Injury or Incident form and any additional documentation needed to investigate work related injuries and illnesses.
- G. When the temperature equals or exceeds 95 degrees Fahrenheit or during a heat wave, a supervisor must conduct a pre-shift meeting before the commencement of work to encourage employees to drink plenty of water and remind them of their rights to take a cool-down rest period when necessary.

AFFECTED EMPLOYEES

- A. Comply with the provisions of the Heat Illness Prevention Program, as described in this document and in the training sessions attended.
- B. Ensure that drinking water is available at all times when the environmental risk factors for heat illness are present. Immediately notify supervisor if they are not available.
- C. Ensure there is access to a shaded area to prevent, or recover from, heat related symptoms.
- D. Report heat related illness symptoms to the immediate supervisor.
- E. Be present and aware, looking out for the signs and symptoms of heat stress on your co-workers.

VI. Program

ACCESS TO WATER

- A. Employees must have access to potable drinking water and are encouraged to frequently consume small amounts of water throughout the day - up to 4 cups per hour, depending upon heat conditions. If plumbed potable water is not readily accessible, provide portable water containers or bottled water.
- B. Paper cone rims or bags of disposable cups and the necessary cup dispensers will be made available to workers and will be kept clean until used.
- C. Water will be fresh, pure, and suitably cool and provided to employees free of charge. During hot weather, the water must be cooler than the ambient temperature but not so cool as to cause discomfort.
- D. Water containers will be located as close as practicable to the areas where employees are working, to encourage the frequent drinking of water.
- E. All water containers will be kept in sanitary conditions. Water from non-approved or non-tested water sources is not acceptable.
- F. Individual water containers or bottled water provided to workers will be adequately identified to eliminate the possibility of drinking from a co-workers container or bottle.
- G. As part of the Effective Replenishment Procedures, the water level of all containers will be checked periodically (e.g. every hour), and more frequently when the temperature rises. Water containers will be refilled with cool water, when the water level within a container drops below 50 percent. Contact your supervisor when levels reach 50 percent to refill water accordingly.

ACCLIMATIZATION

- A. The weather will be monitored daily. The supervisor will be on high alert for sudden heat wave(s), or increases in temperatures to which employees haven't been exposed to for several weeks or longer.
- B. During a heat wave or heat spike, the work day will be cut short (example 12 p.m.), will be rescheduled (example conducted at night or during cooler hours) or if at all possible cease for the day.
- C. New employees, or those employees who have been newly assigned to a high heat area will be closely observed by the supervisor or designee for the first 14 days. The intensity of the work will be lessened during a two-week break-in-period (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.

ACCESS TO SHADE

- A. Shade structures will be opened and placed as close as practical to the workers, when the 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.
- B. Employees suffering from heat related illnesses or in need of a recovery period from the heat must be provided with access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes.
- C. The interior of a vehicle may be used to provide shade only if it is equipped with air-conditioning and the air conditioner is on.

CITY VEHICLES

- A. Employees that are provided City Vehicles with functioning temperature control systems are advised to adjust those systems to create a cool climate that will allow remediation of core temperature increases when environmental risk factors for heat illness are present. If there are problems with these systems, employees shall notify their immediate supervisor to get the issue resolved in a timely matter.
- B. Potable water should be stocked in vehicle before it is taken out to conduct job related activities when environmental risk factors for heat illness are present.
- C. Employees shall notify their immediate supervisor if they feel symptoms of heat illness and refrain from operating the vehicle until being cleared by their supervisor or heat illness symptoms have receded.

EMERGENCY RESPONSE

- A. Prior to assigning a crew to a particular worksite, efforts will be made to ensure that a qualified and appropriately trained and equipped person is available at the site to render first aid if necessary.
- B. All foremen and supervisors will carry cell phones or other means of communication, to ensure that emergency medical services can be called.
- C. When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep the stricken employee cool and comfortable once emergency service responders have been called (to reduce the progression to more serious illness). Under no circumstances will the affected employee be left unattended.

EMPLOYEES (PRIMARILY INDOOR WORKPLACES)

- A. To date, Cal/OSHA considers office temperature and humidity a matter of human comfort, and thus does not have any specific regulations addressing the issue. Their recommendation is that temperature controls be set between 68- 78 degrees Fahrenheit.
- B. When internal temperatures do begin to rise in office spaces, the main issue of concern is the onset of heat-related illnesses such as heat rash, heat cramps, heat exhaustion, and of most concern, heat stroke. If symptoms of either heat rash, heat cramps, or heat exhaustion present themselves, such as headache, nausea/vomiting, dizziness, light headedness, or weakness, it is recommended by OSHA that the employee relocate to a cooler area, drink fluids, and rest for up to an hour to see if symptoms digress in severity. If they do not digress, or begin to worsen, seek medical attention. If an employee begins to show signs of heat stroke; confusion, fainting, seizures, excessive sweating, or very high body temperature, **call emergency services immediately**. Until their arrival, place the employee in a cool area, loosen clothing, place ice packs in armpits, provide fluids, and monitor their progress until help arrives.
- C. Based on these OSHA guidelines, Human Resources/ Risk Management recommends that:
 - 1. Should internal office temperatures exceed 85 degrees Fahrenheit, without an indication that air temperature management systems will be restored before the end of the working day, a Department Director may choose to release any employees for the rest of the day, upon the employees request, that may have potential health issues or health conditions that may be exasperated by the heat. This time will not be compensated, however, employees may request to use accruals to be paid for the remainder of their shift.

HANDLING A SICK EMPLOYEE

- A. When an employee displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will check the sick employee and determine whether resting in the shade and drinking cool water will suffice or if emergency services providers will need to be called. Under no circumstances will the sick employee be left unattended.

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- B. Emergency service providers will be called immediately if an employee displays signs or symptoms of heat illness (decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, red/hot face, etc.), does not look OK or does not get better after drinking water and resting in the shade. While emergency responders are in route, first aid will be initiated (cool the worker: place the worker in the shade, remove excess layers of clothing, place ice pack in the armpits, and fan the victim). Do not let a sick worker leave the worksite alone.

HIGH HEAT PROCEDURES

- A. Effective communication by voice, direct observation, mandatory buddy system, or electronic means will be maintained, so that employees at the worksite can contact a supervisor when necessary. If the supervisor is unable to be near the workers (to observe or communicate with them), then an electronic device, such as cell phone, may be used for this purpose if reception in the area is reliable.
- B. Frequent communication will be maintained with employees working by themselves or in smaller groups, to be on the lookout for possible symptoms of heat illness. The employee(s) will be contacted regularly and as frequently as possible throughout the day, since an employee in distress may not be able to summon help on his/her own.
- C. Employees will be reminded constantly throughout the work shift to drink plenty of water and take preventative cool-down rest breaks when needed.

TRAINING

Training must be provided for employees working on job tasks where environmental risk factors for heat illness are present, and training for their respective supervisors. Refresher training must be provided on a three-year basis.

- A. All employees, including supervisors, working on job tasks where environmental risk factors for heat illness are present shall receive instruction before being assigned to work tasks. Training topics shall include the following:
 1. Environmental and personal risk factors for heat illness;
 2. Procedures for identifying, evaluating, and controlling exposures to the environmental and personal risk factors for heat illness;
 3. Employees who experience excessive sweating require frequent consumption of small quantities of water, up to 4 cups per hour when working in extreme conditions of heat;
 4. Importance of acclimatization;
 5. Different types, signs, and symptoms of heat illness;
 6. Importance of immediately reporting symptoms or signs of heat illness in themselves or in coworkers to their supervisor;
 7. Procedures for responding to symptoms of possible heat illness, including how emergency medical services will be contacted and provided, should they become necessary; and
 8. City procedures for contacting emergency medical services.

CONTRACTORS

- A. Contractors who perform work on City property must adhere to the City's Heat Illness Prevention Program. It is the responsibility of the Project Manager to ensure these procedures are carried out.
- B. Contractors must also make a copy of their Heat Illness Prevention Program available to Risk Management for review.
- C. Contractors are expected to enforce their Program at all times while performing work for the City.
- D. If there is a conflict in procedures between Contractor and City programs, notification will be sent to Risk Management for support.
- E. Contractors with an insufficient program will not be allowed to begin work until their program meets or exceeds the requirements of this program.

VII. Recordkeeping

All training records prepared in association with the Heat Illness Prevention Program will be maintained by the Office of Human Resources/Risk Management.

VIII. Additional References

Cal/OSHA- <http://www.dir.ca.gov/dosh/heatillnessinfo.html>