

**Heat Illness Prevention Program**

City of Stockton *Enter Department Name Here*

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Revised: December 2013

**City of Stockton Department of *Department Name Here***  
**Heat Illness Prevention Program**

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## I. Overview

Employees who work in outdoor places of employment or who work in other locations where environmental risk factors for heat illness are present are at risk for developing heat related 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.

## II. References

This program was written based on the California Code of Regulations ,Title 8, Chapter 4, Section 3395- Heat Illness Prevention, and sections 1512, 1524, 3203, 3363 and 3400. Sections 1230(a), 3439, 3457, 6251, 6512, 6969, 6975, 8420 and 8602(e) do not apply to these operations.

## III. Policy

It is the policy of the City of Stockton and the **DEPARTMENT NAME** Department to provide a safe, healthy and secure workplace for all employees by implementing an effective safety program. This Heat Illness Prevention Program applies to the control of risk of occurrence of heat illness and applies to all outdoor places of employment and other locations when the environmental risk factors for heat illness are present. Any employee participating in job tasks when environmental risk factors for heat illness are present will comply with the procedures in this document and in the Injury and Illness Prevention Program.

## IV. Definitions

*"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.

*"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.

*"Environmental risk factors for heat illness"* means 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.

*"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 prescription medications that affect the body's water retention or other physiological responses to heat.

*"Shade"* means blockage of direct sunlight. 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. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions.

*"Temperature"* means the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor temperature in an area where there is no shade. While the temperature measurement must be taken in an area with full sunlight, the bulb or sensor of the thermometer should be shielded while taking the measurement, e.g. with the hand or some other object, from direct contact by sunlight.

## **V. Responsibility**

### **A. Risk Services**

1. Aiding departments with developing a written program which adheres with the requirements of the Cal/OSHA regulations.
2. Assisting with providing training tools to all potential employees who may be impacted and their supervisors on the risks and prevention of heat illness, including how to recognize symptoms and respond when they appear.

### **B. Directors, Managers, and Supervisors are responsible for:**

1. Identifying all employees who are required to work outdoors or in other environments where potential heat illness could occur and identify the supervisor of the employee.
2. Assuring that adequate water, shade, and necessary rest breaks are available when the environmental risk factors for heat stress are present.
3. Ensuring that all affected employees are trained on heat illness prevention.
4. Ensuring that the requirements in this document are followed.

C. Affected employees are responsible for:

1. Complying with the provisions of the Heat Illness Prevention Program, as described in this document and in the training sessions they attend.
2. Ensuring that they have the appropriate amount of drinking water available at all times when the environmental risk factors for heat illness are present.
3. Ensuring they have access to a shaded area to prevent or recover from heat related symptoms.
4. Reporting heat related illness symptoms to the supervisor.

## VI. Program Requirements

A. Identification

The Department of **Department Name Here** has identified the following list of job titles that are required to work where environmental factors for heat illness are present.

**List Job Titles Here**

B. Training

Training is the most important component of the **Department Name Here** Heat Illness Prevention Program and shall be provided to all potentially impacted employees working where environmental risk factors for heat illnesses are present. Supervisors will also be trained to recognize the dangers of heat illnesses. The training requirements are included but not limited to topics listed under the training section of this program (pg 7).

C. Water Consumption and Availability

Drinking water in the quantity of at least one quart per hour (four 8-ounce cups) shall be available for each employee where it is not plumbed or continuously supplied. This requirement shall be met at the beginning of the shift and for the entire shift. The shift may begin with small quantities as long as an effective procedure is in place for replenishing water during the shift as needed so that the employees can meet the one quart per hour requirement. Water shall be as close to the employee as practicable. See appendix A for additional water requirements.

**Describe the steps the department will take in providing and replenishing water here.**

#### D. Access to Shade

1.) When outdoor temperatures exceed 85 degrees Fahrenheit, shade shall be maintained in one or more areas while employees are present. The shade shall either be open to the air or provided with ventilation or cooling (see shade definition on page 4).

The shade provided shall be enough to accommodate 25% of employees on the shift at any time. They shall be able to sit in a normal posture fully in shade without having to be in physical contact with each other. This shaded area shall be located as close as practicable to the areas where employees are working and shall not be more than a 2 ½ minute walk.

2.) When outdoor temperatures do not exceed 85 degrees Fahrenheit, either shade shall be provided as above or provide timely access to shade upon an employee's request.

#### E. High- Heat Procedures

When the outdoor temperatures exceed 95 degrees Fahrenheit, high-heat procedures shall be implemented and shall include the following to the extent practicable:

**NOTE:** This section only applies to industries in agriculture, construction, landscaping, oil and gas extraction, and transportation or delivery of agriculture products, construction materials or other heavy materials. Delete this section from your program if not applicable.

1.) Ensuring effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary.

Describe how employees will communicate with supervisors. Note: Cell phones can only be used when reception is reliable.

2.) Observing employees for alertness and signs or symptoms of heat illness.

3.) Reminding employees throughout the work shift to drink plenty of water.

4.) Close supervision of a new employee by a supervisor or designee for the first 14 days of the employee's employment by the employer, unless the employee indicates at the time of hire that he or she has been doing similar outdoor work for at least 10 of the past 30 days for 4 or more hours per day.

Describe the steps the department will take in providing shade here. Note: In order for a vehicle to be used as a source of shade

and cooling, it must be cool at any time that rest from the heat is needed.

#### F. Weather Monitoring

In order to prepare employees and work locations for the requirements of this program and to determine the shade requirement outlined above, supervisors shall review the forecasted temperature from the National Weather Service prior to each workday. The supervisor may call the National Weather Service office (916) 979-3051, check the status on the Weather Channel TV Network or go to [www.nws.noaa.gov](http://www.nws.noaa.gov).

During a heat wave or heat spike (e.g., a sudden increase in daytime temperature of 9 degrees or more), at the start of the workday, the supervisor will hold a tailgate meeting with the workers to review the department's heat illness prevention procedures, the weather forecast and emergency response.

#### G. Recovery Periods

Employees shall be allowed and encouraged to take a cool-down rest in the shade for a period of no less than five minutes at a time when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times.

#### H. Emergency Procedures

The City of Stockton Department emergency procedures shall be followed for those employees who are experiencing life threatening conditions as a result of a heat related illness. An appropriate number of employees per work location shall be trained in first aid to render first aid until emergency medical personnel arrive.

#### I. Worksite Assessments

Initial assessments of all worksites shall be made by the Supervisor to minimize the effects of heat exposure and when deemed necessary due to changes of the work environment (ex., change in a work process, personal protective equipment requirement, etc.). Work locations include fixed and mobile worksites, emergency related activities, and special assignments. The following factors shall be assessed:

- Environmental conditions (average temperatures and relative humidity)
- Physical load imposed by job related tools and equipment
- Level and duration of work
- Rest areas
- Personal adaptation (acclimatization)
- Availability of potable water

## VII. Training

### A. Levels of Training

Training shall be provided for employees working at locations where environmental risk factors for heat illness are present, as well as training for their respective supervisors.

### B. Employees

Before being assigned to a task where environmental factors are present for heat related illnesses, employees shall be trained in the following areas:

1. Environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
2. Procedures for identifying, evaluating, and controlling exposures to the environmental and personal risk factors for heat illness;
3. The importance of pre/post work hydration and frequent consumption of small quantities of water, up to 4 cups per hour or more if needed by the employee when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.
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.
8. The Department's procedures for contacting emergency medical services, and if necessary, for transportation employees to a point where they can be reached by an emergency medical service provider.
9. The Department's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. **Enter Designated Person Here** will be available to ensure that emergency procedures are invoked when appropriate.

### C. Supervisors of Affected Employees

Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness, effective training on the following topics shall be provided to the supervisor:

1. Information as detailed above in employee training requirements.
2. Procedures the supervisor shall follow to implement the provisions of this program.
3. Procedures the supervisor shall follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures. See section VI, part F, Emergency Procedures.
4. How to monitor weather reports and how to respond to hot weather advisories. See section VI, part E, Weather Monitoring.

### D. Training Mechanism and Frequency

Supervisors shall train staff annually before they begin work that should reasonably be anticipated to result in exposure to the risks of heat illness. Supervisors shall provide copies of the employee version of the Heat Illness Prevention Handbook to the employees. This handbook is available through the Department Safety Coordinator (Name here) or through Risk Services. The supervisor shall cover the entire handbook with employees and also go over this Heat Illness Prevention Program.

Training shall be documented to include the topic of the training, the date of the training, the person(s) providing the training, a legible list of employees participating in the training along with their signature. Retention of the training records shall be according to section IX.

## VIII. Program Audits

### A. Responsibility

The elements of the Heat Illness Prevention Program shall be audited by the Supervisors and the Department's Safety Committee. Risk Services shall be available to provide consultation when needed.

### B. Frequency

The audit of the Heat Illness Program shall be performed annually or as necessary to ensure that the program is working effectively.

## C. Contents

1. The audit shall review the program to ensure that heat illness prevention procedures are in place according to the elements of this program and are being properly followed.
2. The audit process and findings shall be certified in writing. Any deficiency found shall be relayed to the Department Safety Committee and the Department Head.

## IX. Records

All training, audit, and other records prepared in association with the Heat Illness Prevention Program shall be managed in accordance with the requirements of the *Department Name Here* Injury and Illness Prevention Program.

**Appendix A-** California Code of Regulations, Title 8, Section 1524, and 3363.

**Subchapter 4. Construction Safety Orders**  
**Article 3. General**

**§1524. Water Supply.**

(a) Potable Water.

(1) An adequate supply of potable water shall be provided in all places of employment.

(2) Portable containers used to dispense drinking water shall be equipped with a faucet or drinking fountain, shall be capable of being tightly closed and shall be otherwise designed, constructed and serviced so that sanitary conditions are maintained. Water shall not be dipped from containers.

(3) Any container used to store or dispense drinking water shall be clearly marked as to the nature of its contents and shall not be used for any other purpose.

(4) Where drinking fountains are not provided, single-service cups (to be used but once) shall be supplied. Where single-service cups are supplied, a sanitary container for the unused cups and a receptacle for disposing of the used cups shall be provided.

(b) Nonpotable Water.

(1) Nonpotable water shall not be used for the purposes of drinking, washing, or food preparation.

(2) Outlets for nonpotable water, such as water for industrial or firefighting purposes, shall be posted in a manner understandable to all employees to indicate that the water is unsafe and is not to be used for drinking, washing or cooking purposes.

(3) Nonpotable water systems or systems carrying any other nonpotable substance shall be maintained so as to prevent backflow or backsiphonage into a potable water system.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

**HISTORY**

1. New section filed 7-12-74; effective thirtieth day thereafter (Register 74, No. 28).

2. Repealer and new section filed 1-7-75; effective thirtieth day thereafter (Register 75, No. 2).

3. Amendment filed 9-27-85; effective thirtieth day thereafter (Register 85, No. 40).

**Subchapter 7. General Industry Safety Orders**  
**Group 2. Safe Practices and Personal Protection**  
**Article 9. Sanitation**

**§3363. Water Supply.**

(a) Potable water in adequate supply shall be provided in all places of employment for drinking and washing and, where required by the employer of these orders, for bathing, cooking, washing of food, washing of cooking and eating utensils, washing of food preparation or processing premises, and personal service rooms. (Title 24, Part 5, Section 5-1001; Exception No. 2: (b))

(b) All sources of drinking water shall be maintained in a clean and sanitary condition. Drinking fountains and portable drinking water dispensers shall not be located in toilet rooms. (Title 24, Part 5, Section 5-1001; Exception No. 2: (c))

(c) Portable drinking water dispensers shall be equipped with a faucet or drinking fountain, shall be capable of being tightly closed and shall be otherwise designed, constructed and serviced so that sanitary conditions are maintained. Such dispensers shall be clearly marked as to their contents.

(d) The dipping or pouring of drinking water from containers, such as from barrels, pails or tanks, is prohibited regardless of whether or not the containers are fitted with covers.

(e) The common use of a cup, glass or other vessel for drinking purposes is prohibited.

(f) Nonpotable water shall not be used for drinking, washing, or bathing, washing of clothing, cooking, washing of food, washing of cooking or eating utensils, washing of food preparation or processing premises or other personal service rooms. (Title 24, Part 5, Section 5-1012 (a))

(g) Outlets for nonpotable water, such as water for industrial or fire-fighting purposes, shall be posted in a manner understandable to all employees to indicate that the water is unsafe and shall not be used for drinking, washing, cooking or other personal service purposes. (Title 24, Part 5, Section 5-1012 (c))

(h) Nonpotable water systems or systems carrying any other nonpotable substance shall be installed so as to prevent backflow or back-siphonage into a potable water system. (Title 24, Part 5, Section 5-1012 (b))

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

**HISTORY**

1. Amendment filed 7-16-76; effective thirtieth day thereafter (Register 76, No. 29).

2. Repealer of subsections (c), (e), (h) and consecutive relettering of subsections (d)-(k); effective thirtieth day thereafter (Register 81, No. 4).

3. Amendment filed 1-17-86; effective thirtieth day thereafter (Register 86, No. 3).

## **Appendix B- City of Stockton Emergency Procedures for Accidents and Serious Injury**

### Accidents

1. Do not move a seriously injured person unless there is a life-threatening situation.
2. Try to calm and assist the injured person. Never move them until their condition can be determined or they can do so on their own. If the victim is unconscious or unable to speak, render First Aid and/or CPR if you are trained to do so and have determined it is necessary. Instruct someone to immediately call 911 (9-911) if you have not been trained in First Aid or CPR.
3. Stand by and wait for the ambulance and/or Emergency Services Personnel to arrive.
4. If the victim appears unhurt, has minor injuries and is conscious, ask the victim if an ambulance is needed. In any instance, notify Emergency Services Personnel and wait for them to respond.

### Serious Injury

1. Check the scene and the injured person to determine the danger potential and the extent of the injury. Do not move a seriously injured person unless there is an immediate and imminent danger, such as fire, flood or poisonous gas. If you must move the injured person, do it as quickly and carefully as possible. If there is no immediate danger, do not move the injured person, and advise the bystanders the injured person is not to be moved.
2. Call 911 immediately if the injured person is unconscious. Sometimes a conscious, injured person will tell you not to call an ambulance, and you may not be sure what to do. You should call for an ambulance if the injured person is or becomes unconscious; has trouble breathing or is breathing in a strange way; has chest pain or pressure; is bleeding severely; has pressure or pain in the abdomen; has slurred speech; appears to have been poisoned; has injuries to the head, neck or back; or has possible broken bones.
3. Keep the injured person calm and as comfortable as possible. Administer CPR or First Aid if you have been trained in these areas. A First Aid kit should be used and precautions should be taken to minimize exposure to blood and body fluids. Remain with the injured person until Emergency Services Personnel arrives.