



City Manager's Approval: _____

THE CITY OF POMONA

SAFETY POLICIES AND PROCEDURES

HEAT ILLNESS PREVENTION

I. PURPOSE

To provide information and guidance on the prevention of heat related illness, provisions of water, access to shade, written procedures, and training.

II. APPLICABILITY

This Policy applies to all Full-Time & Hourly, Part-Time City employees and volunteers.

III. POLICY

It is the policy of the City of Pomona that all aspects of Cal/OSHA's requirements for a Heat Illness Prevention Program, *California General Industry Safety Orders, Title 8, Subchapter 7, Group 2, Article 10, Section 3395*, shall be met or exceeded.

IV. DEFINITION OF TERMS

- A. "Acclimatization" - 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.
- 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. "Hot Environment" - Temperatures exceeding 90 degrees Fahrenheit.

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- 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.
- H. *"Sufficient Quantities of Water"* - when working in hot environments, at least one quart per employee per hour for drinking for the entire shift. Water replenishment procedures may be necessary.

V. RESPONSIBILITIES

- A. Department Directors shall:
Ensure that the Heat Illness Prevention Policy is implemented. The Department Director has the authority to delegate any or all portions of this Policy to designated staff members, but will be held responsible for compliance.
- B. Division Managers shall:
Be responsible for the effective implementation and maintenance of the Policy.
- C. Supervisors shall:
 - 1. Identify employees who are required to work in environments where the potential for heat illness could occur, ensure that adequate water, shade, and rest breaks are available when the environmental risk factors for heat illness are present.
 - 2. Ensure that all affected employees are trained on heat illness prevention.
 - 3. Document and report all incidents involving heat related illnesses to Human Resources/Risk Management and investigate actual or near miss incidents involving heat illness.
- D. Employees shall:
 - 1. Comply with all aspects of the Heat Illness Prevention Program.
 - 2. Attend training sessions, and report heat related illness symptoms to their

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supervisor.

- E. The Safety Officer shall:
Advise all levels of management on the Heat Illness Prevention Policy, maintain and update the policy on an annual basis, provide assistance in employee training, and on how to recognize signs and symptoms of heat illness should they appear.

VI. PROCEDURE

- A. Provision of Water Consumption: Employees who work in a hot environment shall be provided with water adequate to prevent dehydration and heat illness. This will be accomplished by assuring that piped, potable drinking water is available in or near all fixed facility work sites. Employees who work away from fixed sites shall take with them a minimum of 1 quart of water per employee per hour for the period they will be working. Water shall be stored in insulated containers filled with enough ice to keep the water at a palatable temperature throughout the work period. Water coolers have been placed in City field vehicles. Coolers shall be filled, cleaned, and maintained by the driver of the vehicle. Damaged coolers shall be reported to a supervisor so that they it can be replaced. Employees shall have access to ice in the ice bins at the Public Works Yard. Ice bins are accessible behind the office in the patio area, and in the Water Yard.
- B. Access to Shade - All employees shall be given access to shade, rest or other cooling measures to minimize the risk of heat related illnesses. Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided 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. Such access to shade shall be permitted at all times.
- C. Emergency Procedures - Affected departments shall develop procedures for recognizing and responding to symptoms of heat illness, including how emergency medical services will be provided (See Appendix A).

VII. TRAINING

Employees that may be exposed to high heat in their work shall receive training that encompasses the dangers of heat illness; heat illness recognition and first aid measures. Employees shall also be trained in the appropriate methods for seeking emergency medical assistance and in the factors that make them susceptible to heat illness and methods to protect themselves. Human Resources/Risk Management will conduct annual Heat Illness Prevention training at field tailgate meetings which shall

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include the following:

1. The City's Heat Illness Prevention Procedures;
2. Environmental and personal risk factors for heat illness;
3. Department procedures for preventing, reporting, and responding to heat illness;
4. The importance of frequent consumption of water when the work environment is hot;
5. The importance of acclimatization;
6. Sign and symptoms of the different types of heat illnesses;
7. Responsibilities in the Heat Illness Prevention Program.

VIII. ACTION

This Policy is effective March 20, 2012.

Appendix A

CITY OF POMONA

Specific Heat Illness Prevention Procedures For Departments

Department/Division: _____

Department Contact Person: _____

Departments implementing the City Heat Illness Prevention Program shall complete Appendix A, Department-Specific Heat Illness Prevention Information, and update the information whenever information or conditions change. The elements included within the City of Pomona Heat Illness Prevention Program are those contained in Title 8, Section 3395 and consist of the following:

- Provision of Water
- Access to Shade
- Emergency Procedures
- Training

I. PROVISION OF WATER

Employees will be provided access to sufficient quantities of water while working in hot environments, and will be provided at least one quart per employee per hour for drinking purposes for the entire shift. Water replenishment procedures may be necessary.

To ensure that sufficient quantities of potable drinking water are available and to encourage the frequent drinking of water during the time that employees are working in hot environments, the following steps will be taken:

Check all that Apply	Procedure
	1. Bring at least 2 quarts of water per employee at the start of the shift.
	2. When the temperature exceeds 85 degrees, supervisors will provide frequent reminders to employees to drink water more frequently.
	3. Supervisors on duty at jobsites will monitor drinking water levels within a container. Should the level drop below 50%, the water shall be replenished immediately. Water levels should not fall below the point that will allow for adequate water during the time necessary to refill the container.
	4. Employees working in locations where drinking fountains are within a 2 ½ minute walk will be encouraged to drink water frequently.
	5. Employees on motorcycles will be required to carry water bottles in their saddle bags.

HEAT ILLNESS PREVENTION APPENDIX A (Continued):

Check all that Apply	Procedure
	6. During extremely hot periods of time, there will be short tailgate meetings each morning to remind workers about the importance of frequent consumption of water throughout the shift.
	7. During extremely hot periods of time, vehicle drivers are expected to monitor water containers in their vehicles every 30 minutes, and employees are encouraged to report low water levels to the vehicle driver.

A. To ensure that access to sufficient quantities of potable drinking water is available and that employees are encouraged to frequently drink water, the following steps will be taken:

1. Employees have been given access to ice in the City ice bins as well as fixed water facets at the Public Works Yard.
2. Employees are encouraged to fill up their ice chests with ice before they begin their shifts, at lunch breaks or while visiting the yard for other business.
3. Employees will fill up their ice chests with water at the Public Works Yard.
4. Supervisors will encourage employees to drink water throughout the day.
5. On hot days, employees will be reminded to fill up the water container before they begin their workday.
6. Employees will be reminded that the Public Works Yard has ice and fixed faucets for their use.

II. ACCESS TO SHADE

Employees will be provided access to a shaded rest area that is either open to the air or provided with ventilation to provide cooling for employees. Access shall be provided at all times and whenever an employee is suffering from heat illness or believes a preventive recovery period is needed for a period of at least five minutes. To ensure access to shade when employees are working in hot environments, the following steps will be taken:

Check all that Apply	Procedure
	1. (Recommended for fixed locations). A supervisor will monitor the weather forecast and when the predicted high temperature for the following day exceeds 85 degrees, they will ensure that an adequate number of umbrellas, easy-ups, canopies or other portable shade devices are up at the beginning of the shift and present during the period of high temperatures. Shade structures should be placed in closed proximity (i.e. no more than 2.5 minutes) from the work area.

HEAT ILLNESS PREVENTION APPENDIX A (Continued):

Check all that Apply	Procedure
2.	(Recommended for mobile work zones). A supervisor will monitor the weather forecast and when the predicted high temperature for the following day exceeds 85 degrees, they will make sure that an adequate number of umbrellas, easy-ups, canopies or other portable shade are readily accessible. Further, that employees are informed that shade can be provided at their worksite upon their request.
3.	Employees shall be reminded to take rest breaks in an office or construction trailer or other building with air conditioning.
4.	When the temperature exceeds 85 degrees, supervisors will remind employees about the importance of rest breaks and where they can access shade.
5.	If an employee needs to take additional preventive recovery periods, supervisors shall consider seeking medical attention for the employee in order to ensure that medical needs are not being overlooked.

A. To ensure access to shade at all times and that employees have access to a preventative recovery period, the following steps will be taken:

1. Employees have access to City offices, construction trailer, or other building where air conditioning is present.
2. During hot time periods, there will be tailgate meetings to remind workers about the importance of rest breaks and the location of shade.
3. Any employee who becomes ill due to dehydration or exposure to high heat will be provided a shaded place to rest and recuperate.
4. A vehicle equipped with a working air conditioning system may be used to provide shade for an employee who needs it. Employees should rest in a shaded area such as under a patio, in the shade of a tree, or in a City building in order to recuperate from a heat-related illness.

III. EMERGENCY PROCEDURES

Supervisors and employees will be informed of the procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided if they become necessary. In addition, supervisors and employees will be trained on how to contact Emergency Medical Services (EMS) as well as how to provide EMS with clear and precise directions to the worksite.

To ensure that emergency medical assistance is provided without delay, the following steps will be taken:

HEAT ILLNESS PREVENTION APPENDIX A (Continued):

Check all that Apply	Procedure
	1. Co-workers will use a “buddy system” to watch each other closely for discomfort or symptoms of heat illness.
	2. When employees are working in hot environments, supervisors shall check in with employees and be alert to the presence of heat-related symptoms.
	3. Supervisors and employees will be reminded to never discount any signs or symptoms of heat illness that they are experiencing, and will immediately report them.
	4. When the forecasted temperature exceeds 85 degrees, supervisors will remind employees about the address and directions to the worksite and emergency procedures.
	5. If there is an employee at the worksite who is trained in First-Aid/CPR, and they have been trained in how to recognize the symptoms of heat illness, their response may range from allowing the employee to drink water and rest in the shade to summoning emergency medical attention.
	6. Employees shall always carry either a cell phone or radio, or have immediate access to a phone in order to call 911 to request medical assistance and to provide directions to the worksite. Once employees arrive at the worksite, they shall check their radios and/or cell phones to make sure that they are functional and that they have coverage in the area. Any communication problems shall be reported to their supervisor and other means of communication shall be arranged.
	7. In the event that emergency medical attention is needed, employees shall call 911 and stay on the phone to provide directions to the worksite.

A. To ensure that emergency medical services are provided without delay, the following steps will be taken:

1. Supervisors will carry cell phones or radios, to ensure that emergency services can be called. These communication devices will be checked to verify that they are functional prior to each shift.
2. Employees will be reminded about addresses and directions to the work site and emergency procedures.
3. The Safety Officer maintains the Heat Illness Prevention Training records in the Human Resources/Risk Management Department.
4. Field Divisions will be provided a copy of the attendance roster for employees that have attended the Annual Heat Illness Prevention training. Records of any heat-related illness shall be maintained by the Human Resources Department.

HEAT ILLNESS PREVENTION APPENDIX A (Continued):

IV. TRAINING

All employees engaged in field work shall receive Heat Illness Prevention training from their department prior to working in hot environments. To ensure that all affected employees are trained on the Heat Illness Prevention Program and their department specific procedures, the following actions will be taken:

Check all that Apply	Procedure
	1. The Division Manager or designee will develop a list of the affected employees who will need Heat Illness Prevention Training.
	2. A department-specific Heat Illness Prevention Procedure will be developed and this information will be included in the Heat Illness Prevention Training.
	3. All affected employees will be trained either by a division supervisor, crew chief or department lead person who has attended the Heat Illness Prevention training conducted by the City's Safety Officer.
	4. Heat Illness training will include the following topics: environmental and personal risk factors for heat illness; the importance of frequent consumption of water when the work environment is hot; the importance of acclimatization; signs and symptoms of different types of heat illness and supervisor responsibilities in the Heat Illness Prevention Program.
	5. Training records shall be maintained in the Human Resources Department.

A. To ensure supervisor and employees are trained; the following steps will be taken:

1. 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.

2. Employees:
Employees will be provided training on the following topics:
 - a. Environmental and personal risk factors for heat illness;
 - b. Procedures for identifying, evaluating, and controlling exposures to the environmental and personal risk factors for heat illness;
 - c. The importance of pre/post work hydration and frequent consumption of small quantities of water, up to 4 cups per hour, under extreme conditions of work and heat;
 - d. Importance of acclimatization;

HEAT ILLNESS PREVENTION APPENDIX A (Continued):

- e. Different types, signs, and symptoms of heat illness;
- f. Importance of immediately reporting symptoms or signs of heat illness in themselves or in coworkers to their supervisor; and
- g. Procedures for responding to symptoms of possible heat illness, including how emergency medical services will be contacted and provided, should they become necessary.

3. Supervisors of Affected Employees:

Supervisors or their designee will be provided training on the following topics:

- a. Information as detailed above in employee training requirements;
- b. Procedures the supervisor shall follow to implement the provisions of this program;
- c. Procedures the supervisor shall follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures;
- d. Procedures the supervisor shall follow to monitor weather reports and how to respond to weather advisories.

V. WEATHER MONITORING

To ensure that weather conditions and temperatures at worksites are adequately monitored, the following steps will be taken:

Check all that Apply	Procedure
1.	Prior to each workday, the supervisor on duty at the jobsite will review the forecasted temperature and humidity for the worksite and compare it against the National Weather service Heat Index to evaluate the risk level for heat illness. For instance, whether or not workers will be exposed at a temperature and humidity characterized as either “extreme caution” or “extreme danger” for heat illnesses such as heat stroke. It is important to keep in mind that the temperature at which these warnings occur must be lowered by as much as 15 degrees if the workers under consideration are in direct sunlight.
2.	Prior to each workday, the supervisor on duty at the jobsite will be responsible for monitoring the weather (using www.nws.noaa.gov or with the aid of a simple thermometer) at the worksite. This critical weather information will be taken into consideration to determine when it will be necessary to make modifications to the work schedule (such as stopping work early, rescheduling the job, working at night or during the cooler hours

HEAT ILLNESS PREVENTION APPENDIX A (Continued):

Check all that Apply	Procedure
	of the day, increasing the number of water and rest breaks).
	3. The supervisor on duty at the jobsite will be responsible for using a thermometer at the jobsite and checking the temperature every [60 mins] to monitor any sudden increases in temperature. The supervisor will also ensure that once the temperature exceeds 85 F, the shade structures will be opened and are accessible to the workers. Additionally, the supervisor will also make certain that once the temperature equals or exceeds 95 degrees Fahrenheit, additional preventive measures are implemented.

VI. OTHER PROCEDURES/INFORMATION

In order to reduce the risk of heat related illnesses, the following additional work practices or procedures will be implemented:

Check all that Apply	Procedure
	1. Working hours will be modified to work during cooler hours of the day, when possible.
	2. When a modified or shorter work-shift is not possible, more water and rest breaks will be provided.
	3. Supervisors will allow additional cooling measures, such as allowing employees to spend time in air-conditioned places or having them spray themselves with water.
	4. Supervisors will make sure that employees who are not acclimated to the heat will be provided with different work assignments until they become acclimated.
	5. Supervisors will consider switching physical fitness activities to indoor activities and do outside activities early in the morning.
	6. When the forecasted temperature exceeds 85 degrees, supervisors will remind employees to minimize their intake of coffee, tea, and cola products.
	7. When the forecasted temperature will exceed 85 degrees, supervisors will announce the projected high temperature for the day to all affected employees who will be working outdoors or in hot environments.

Effective Date of Procedure: March 20, 2012.