



# MT DIABLO UNIFIED SCHOOL DISTRICT HEAT ILLNESS PREVENTION PLAN

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### **Purpose**

The Mt. Diablo Unified School District has developed this Heat Illness Prevention Plan to reduce the risk of heat-related illnesses and to ensure compliance with the California Code of Regulations, Title 8, Chapter 4, Section 3395. This plan serves to educate employees and supervisors about the causes, symptoms, prevention strategies, and appropriate responses related to heat illness.

The plan applies to employees who may be exposed to high temperatures during the course of their duties. This includes, but is not limited to, personnel working in maintenance, grounds, facilities, transportation, custodial services, security, physical education, and campus or noon supervision.

By implementing this plan, the District affirms its commitment to maintaining a safe and healthful work environment for all employees, especially those working in outdoor or heat-exposed settings.

## **SECTION I INTRODUCTION AND POLICY**

It is the policy of Mt. Diablo Unified School District that all employees and supervisors of those employees who perform job functions in areas where the environmental risk factors for heat illness are present shall comply with the procedures set forth in this plan.

## **SECTION II STATUTORY AUTHORITY**

California Code of Regulations Proposed State Standard, Title 8, Chapter 4, Section 3395

## **SECTION III DEFINITIONS**

### **DEFINITIONS**

The California Occupational Safety and Health Standards Board propose definitions of key terminology, as they relate to the standard, as follows:

- **Acclimatization** means the temporary, gradual adaptation of the body to work in the heat when a person is exposed to it. Usual acclimatization time while working in the heat for at least two hours per day ranges from four to fourteen days.
- **Environmental risk factor for heat illness means** the working conditions that create the possibility for a heat illness to occur. Risk factors include air temperature, air movement, relative humidity, workload, work severity, work duration, radiant heat, conductive heat, and personal protective equipment (PPE) worn by an employee.

- **Heat Illness** means a serious medical illness, which results from the body's inability to cope with a heat load. Heat illnesses include heat cramps, heat exhaustion, heat stroke and heat syncope (fainting).
- **High-Heat Procedure** is now required for five industries when temperatures reach 95 degrees F or above. These procedures include observing and being in constant contact with employees, closely supervising new employees and reminding all workers to drink water and take cool down breaks. The industries specified under this modification are: 1) Agriculture, 2) Construction, 3) Landscaping, 4) Oil and Gas extraction, 5) Transportation or Delivery of agricultural products, construction material or other heavy materials
- **Personal risk factors for heat illness** include factors such as an employee's age, level of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, overall health, and use of prescription medications which may alter the body's ability to retain water or otherwise affect its physiological response to heat. The District shall not request any of the above personal information from an employee.
- **Preventative Recovery Period** means a period of time for an employee to recover from a heat illness or signs of a heat illness. The amount of time for a recovery period shall be no shorter than five minutes and shall be taken in a shaded area.
- **Shade** means the blockage of direct sunlight. One indicator that blockage is when an object does not cast a shadow in the area of the blockage. Shade is not adequate when heat in the shaded area prevents the body from cooling. 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 and that does not deter or discourage access or use. Access to shade shall be made available at all times.
- **Shade Requirements** must be adequate to accommodate 25% of the employees on the shift at any time when temperatures exceed 85 degrees, and located as close as practicable to the areas where employees are working. When temperatures are below 85 degrees,

employers shall provide timely access to shade upon an employee's request.

## **SECTION IV RESPONSIBILITY**

The Heat Illness Prevention Program Administrator is under the direction of the Superintendent and Injury and Illness Prevention Program Administrator.

The Heat Illness Prevention Program Administrator has the authority and the responsibility for implementing and maintaining this program for the Mt. Diablo Unified School District.

General policies, which govern the activities and responsibilities of the Heat Illness Prevention Plan, are established under the Executive Director of MO&F, Risk Management, and Safety Committee.

It is the responsibility of the Safety Committee, Executive Director of MO&F, and Risk Management to develop procedures, which ensure effective compliance with the Heat Illness Prevention Plan.

It is the responsibility of the Director of MO&F, Executive Director of HR, and Director of Transportation, to identify employee groups required to work outdoors where the environmental risk factors for heat illness are present.

Supervisors are responsible for enforcement of this Plan among the employees under their direction by carrying out the various duties outlined herein, setting acceptable safety policies and procedures for each employee to follow and ensuring that employees receive the required Heat Illness Prevention training. Supervisors must also ensure that appropriate job specific safety training is received, and that safety responsibilities are clearly outlined in the job descriptions, which govern the employees under their direction.

Supervising others also carries the responsibility for knowing how to safely accomplish the tasks assigned to each employee, for providing appropriate preventative controls (water, shade, PPE, etc), and for evaluating employee compliance.

Supervising new employees or new employees to the job site must take into account the importance of acclimatization. These employees must be closely monitored for the first 14 days.

Immediate responsibility for workplace heat illness prevention and safety rests with each individual employee. Employees are responsible for following the established work procedures and safety guidelines in their area, as well as those identified in this Plan. Employees are also responsible for using the personal protective equipment issued to protect them from identified hazards, ensuring that they have adequate amounts of drinking water, access to shade, and for reporting any unsafe conditions to their supervisors.

## **SECTION V SCOPE**

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

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 employee awareness regarding heat illness symptoms, ways to prevent illness, and what to do if symptoms occur.

## **SECTION VI ACCOUNTABILITY**

### **Mt. Diablo Unified School District Administration**

- 1) Prepare and maintain a written program which complies with the requirements of Cal/OSHA Title 8, 3395.
- 2) Provide training to all potentially impacted employees and their supervisors on the risks and prevention of heat illness, including how to recognize symptoms and respond when they appear. Training should be provided annually as a refresher prior to the start of the summer season.

## **Administrators, Directors, Managers, and Supervisors**

- 1) Identify all employees who are required to work outdoors where potential heat illness could occur and identify the supervisor of the employees.
- 2) Assure that adequate water and shade are available at a job site when the environmental risk factors for heat illness are present.
- 3) Ensure that all affected employees have received proper training on heat illness prevention.
- 4) Ensure that the requirements in this program are followed.
- 5) Contact appropriate emergency medical services in the event medical assistance is required. Administrator will direct emergency medical services to the work site.

## **Affected Employees**

- 1) Comply with the provisions of the Heat Illness Prevention Program, as described in this document and in the training sessions they attend.
- 2) Ensure they have drinking water available at all times when the environmental risk factors for heat illness are present.
- 3) Ensure they have access to a shaded area to prevent or recover from heat related symptoms.
- 4) Report heat related illness symptoms to your supervisor or to Company Nurse (877) 518-6702.
- 5) Look for the signs and symptoms of heat stress on your co-workers.

## **SECTION VII PROCEDURES**

### **Procedures for Provision of Water**

- 1) Employees shall have access to potable drinking water that must be fresh, pure, suitably cool, and provided to employees free of charge.
- 2) The water shall be located as close as practicable to the areas where employees are working.
- 3) Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. (at least two (2) gallons of potable water per person per eight-hour shift).
- 4) Employees may begin the shift with smaller quantities of water provided the Supervisor has put in place effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour.
- 5) The frequent drinking of water shall be encouraged.

### **Procedures for Access to Shade**

- 1) Shade from a nearby site is not readily available or accessible, shade structures will be opened and placed as close as practical to the employees, when the temperature equals or exceeds 80 degrees Fahrenheit. When the temperature is above 80 degrees Fahrenheit, access to shade will be provided promptly, when requested by an employee. Note: The interior of a vehicle may not be used to provide shade unless the vehicle is air-conditioned and the air conditioner is on.
- 2) The amount of shade present shall be at least enough to accommodate the number of employees on recovery or rest periods, so that they can

sit in a normal posture fully in the shade without having to be in physical contact with each other. The shade shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain onsite.

- 3) Employees shall be allowed and encouraged to take a cool-down rest in the shade when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times. An individual employee who takes a preventative cool-down rest (A) shall be monitored and asked if he or she is experiencing symptoms of heat illness; (B) shall be encouraged to remain in the shade; and (C) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.
- 4) If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the employer shall provide appropriate first aid or emergency response.

### **Procedures for Monitoring the Weather**

**Supervisors** will be trained and instructed to check in advance the extended weather forecast. Weather forecasts can be checked with the aid of the internet (<http://www.nws.noaa.gov/>), or by calling the National Weather Service phone number: 831-656-1725 (#1) or by checking the Weather Channel TV Network. The work schedule will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected. This type of advance planning should take place all summer long.

### **Handling a Heat Wave**

- 1) During a heat wave or heat spike, and before starting work, emails will be sent and/or meetings will be held, to review the District Heat Illness Prevention Program procedures, the weather forecast and emergency



response. In addition, if schedule modifications are not possible, employees will be provided with an increased number of water and rest breaks and will be observed closely for signs and symptoms of heat illness.

- 2) 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.

### **High Heat Procedures**

High Heat Procedures are additional preventive measures that the District will use when the temperature equals or exceeds 95 degrees Fahrenheit.

- 1) Frequent communication will be maintained with employees working by themselves or in smaller groups (keep tabs on them via phone or two-way radio), to be on the lookout for possible symptoms of heat illness.
- 2) The employer shall ensure effective employee observation/ monitoring by implementing one or more of the following:
  - a. Supervisor or designee observation of 20 or fewer employees, or
  - b. Mandatory buddy system, or
  - c. Regular communication with sole employee such as by radio or cellular phone, or
  - d. Other effective means of observation.
- 3) Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
- 4) Reminding employees throughout the work shift to drink plenty of water.

- 5) It is recommended that there be pre-shift communications before the commencement of work to review the high heat procedures, and include encouraging employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.

### **Procedures for Acclimatization**

Acclimatization is 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 yet adjusted.

- 1) All employees shall be closely observed by a supervisor or designee during a heat wave. For purposes of this section only, "heat wave" means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.
- 2) An 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 employment.

### **Procedures for Handling a Sick Employee**

- 1) Emergency service providers will be called immediately if an employee displays signs or symptoms of heat illness (loss of consciousness, incoherent speech, convulsions, red and hot face), does not look OK or does not get better after drinking cool water and resting in the shade. While the ambulance is 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 join area and fan the victim). Do not let a sick worker leave the site!

### **Procedures for Employee and Supervisory Training**

Training will be provided for employees working on job tasks where environmental risk factors for heat illness are present, and training will be provided for their respective supervisors. Training will include the District's written prevention procedures and refresher training will be provided annually.

- a. Employee Training -Effective training in the following topics shall be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness.
- b. Procedures for complying with the requirements of this standard, including, but not limited to, the employer's responsibility to provide water, shade, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.
- c. Different types, signs, and symptoms of heat illness.
- d. The concept, importance, and methods of acclimatization.
- e. The different types of heat illness and, the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness, and in addition, that heat illness may progress quickly from mild symptoms and signs to serious and life threatening illness.
- f. The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers.
- g. The employer's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.

- h. The employer's procedures for contacting emergency medical services, and if necessary, transporting employees to a point where they can be reached by an emergency medical service provider.
  - i. The employer'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. These procedures shall include designating a person to emergency responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.
- 2) **Supervisors and Affected Employees** - Supervisors shall receive training on the following topics prior to being assigned to supervise outdoor employees:
- a. Information as detailed above in employee training requirements.
  - b. Training will include the District's written procedures and the steps supervisors will follow when employees' exhibit symptoms consistent with heat illness.
  - c. Supervisors will be trained on how to track the weather at the job site (by monitoring predicted temperature highs and periodically using a thermometer). Supervisors will be instructed on how weather information will be used to modify work schedules and/or to increase the number of water and rest breaks or cease work early if necessary.

## **SECTION VIII RECORDS**

All training records prepared in association with the Heat Illness Prevention Program will be maintained by the Maintenance, Operations and Transportation Department or the Human Resources Department or Risk Manager.

## **SECTION IX ADDITIONAL REFERENCES**

- 1) CIF and Sports  
[https://www.cifstate.org/sports-medicine/heat\\_illness/index](https://www.cifstate.org/sports-medicine/heat_illness/index)
- 2) Cal/OSHA <http://www.dir.ca.gov/dosh/heatillnessinfo.html>
- 3) California Heat Warnings: <http://www.wrh.noaa.gov/sto/heatindex.php>
- 4) Cal/Osha Indoor Heat:  
[https://www.dir.ca.gov/dosh/dosh\\_publications/Indoor-Heat-Employers-fs.pdf](https://www.dir.ca.gov/dosh/dosh_publications/Indoor-Heat-Employers-fs.pdf)

## **SUPPORTING DOCUMENTS**

### **Heat Illness Signs/Symptoms/Treatment**

**Heat Cramps** - strong, involuntary muscle spasms usually in calves, thighs, shoulders or back

**Treatment** - rest in cool place, drink water/electrolytes

**Heat Syncope** - faint or light headed feeling/actual fainting spell

**Treatment** - rest in cool/shaded place, drink water/electrolytes

**Heat Exhaustion:** Dehydration, fatigue, dizziness/nausea, pale moist skin, possible temperature elevation

**Treatment:** Rest in cool/shaded place, drink water/electrolytes/non-caffeinated fluids

**Heat Stroke:** Mental confusion, fainting, seizures, hot/dry/red skin (sweating has stopped)

**Treatment: Call 911 *immediately***, soak clothing with cool water, move victim to cool/shaded area

