

HEAT ILLNESS PREVENTION PROGRAM
FOR
NAPA VALLEY COMMUNITY COLLEGE DISTRICT



Date Revised
1-2014
8/2017
9/2020

TABLE OF CONTENTS

I.	SCOPE.....	1
II.	PURPOSE.....	1
III.	LOCATION.....	1
IV.	POLICY.....	1
V.	STATUTORY AUTHORITY.....	1
VI.	DEFINITIONS.....	1
VII.	RESPONSIBILITY.....	3
VIII.	PROCEDURES.....	4
	a. PROVISION OF WATER.....	4
	b. ACCESS TO SHADE.....	4
	c. MONITORING THE WEATHER.....	4
	d. HIGH HEAT.....	4
	e. ACCLIMATIZATION.....	5
	f. IDENTIFYING ENVIRONMENTAL RISK FACTORS.....	5
	g. IDENTIFYING PERSONAL RISK FACTORS.....	6
	h. EMERGENCY RESPONSE.....	6
	i. HANDLING A SICK EMPLOYEE.....	6
	j. TRAINING.....	7
IX.	DOCUMENTATION.....	8

I. SCOPE

This Heat Illness Prevention Program and emergency regulations apply to any and all outdoor places of employment, at the times when environmental risk factors for heat illness are present.

II. PURPOSE

The Napa Valley Community College District has developed this Heat Illness Prevention Program to control the risk of occurrences of heat illness and to comply with the California Code of Regulations Proposed State Standard, Title 8, Chapter 4, Section 3395. The plan is designed to educate employees and their supervisors on the symptoms of heat illness, causes of these symptoms, ways to prevent heat illness, and what to do if they or a fellow employee experience symptoms of heat illness. Employees that fall under this regulation could include, but are not limited to, maintenance, grounds, and transportation workers, custodians, security personnel, physical education teachers, and playground supervisors.

III. LOCATION

A copy of this plan will be kept in the Facilities Services and College Police Departments, as well as each department whose employees are covered by this plan.

An individual copy of this plan is available to employees, to Cal/OSHA, and to NIOSH upon request from the Facilities Services Office (707) 256-7580.

IV. POLICY

It is the policy Napa Valley Community College 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 program.

V. STATUTORY AUTHORITY

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

VI. 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 factors 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 or above. These procedures include observing and being in constant contact with employees, closely supervising new employees and reminding all workers to drink water. 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
- Landscaping means providing landscape care and maintenance services and/or installing trees, shrubs, plants, lawns, or gardens, or providing these services in conjunction with the design of landscape plans and/or the construction (i.e. installation) of walkways, retaining walls, decks, fences, ponds, and similar structures, except for employment by an employer who operated a fixed establishment where the work is to be performed and where drinking water is plumbed.
- Personal risk factors for heat illness includes 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 effect 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. Sufficient blockage is when an object does not cast a shadow in the area of the blockage. Shade is not acceptable if heat in the shaded area prevents the body from cooling. Shade shall be open to the air or otherwise provided with ventilation and/or climate controlled. 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 80 degrees, and located as close as practicable to the areas where employees are working. When temperatures are below 80 degrees, employers shall provide timely access to shade upon an employee's request.
- 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 of some other object from direct contact by sunlight.

VII. RESPONSIBILITY

The ultimate responsibility for establishing and maintaining the policies of the Heat Illness Prevention Plan specific to District facilities and operations rests with the Director of Facilities Services (707) 256-7580.

General policies, which govern the activities and responsibilities of the Heat Illness Prevention Program, are established under the Risk Manager's final authority.

It is the responsibility of the employee immediate supervisor to identify all employees 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.

VIII. PROCEDURES

1. Provision of Water

- a. At the beginning of each shift, all employees who work outside when environmental risk factors for heat illness are present shall have sufficient quantities and immediate access to at least one (1) quart of potable drinking water per hour for the entire shift (at least two (2) gallons of potable water per person per eight-hour shift).
- b. Smaller quantities may be provided if the District has an effective procedure for replenishment that meets the above quantity and time requirements.
- c. The importance of frequently drinking water shall be conveyed and encouraged as described in the training section.
- d. Water must be fit to drink. Water containers CAN NOT be refilled from non-potable water sources (e.g. irrigation wells, sprinkler or firefighting systems).
- e. Care must be taken to prevent contamination of the drinking water supplied to the workers
- f. Water containers will be placed as close as possible to the workers.

2. Access to Shade

- a. When temperature does not exceed 80 degrees F, provide shade or timely access to shade upon request.
- b. Where temperatures equal or exceed 80 degrees F or during a heat wave, adequate shade must be provided for no less than 25% of the work force, at anyone time.
- c. Access to shade shall be made available at all times to any employee experiencing heat illness, symptoms of heat illness, or believing a preventative recovery period is needed.
- d. Locate the shade as close as practical to the area where employees are working.
- e. The preventative recovery period shall be at least five (5) minutes.
- f. Water shall be made available in the shade/preventative recovery period area.

3. Procedures for Monitoring 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's phone numbers (see local CA numbers below). Additionally, a weather station is located in the Facilities service office for local information. The work scheduled will be planned in advance, taking in to consideration whether high temperatures or a heat wave is expected. This type of advanced planning should take place all summer long.

CALIFORNIA Dial-A-Forecast

Sacramento 916-979-3038

San Francisco 831-656-1725 (#1)

4. High Heat Procedure

The District shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit

- a. Daily, workers will be reminded of the location of the water coolers and of the importance of drinking water frequently. When the temperature exceeds or is expected to exceed 90 degrees Fahrenheit, brief 'tailgate' meetings will be held each morning to review

with employees the importance of drinking water, the number and schedule of water and rest breaks and the signs and symptoms of heat illness.

- b. Ensure effective communication (by voice, observation or electronic means).
- c. Employees will observe each other for alertness and signs and symptoms of heat illness.
- d. Give more frequent reminders to drink plenty of water.
- e. Closely supervise new employees, for the first 14 days.

When temperatures reach 95 degrees or above, the District shall ensure that the employee takes a minimum ten minute net preventative cool-down rest period every two hours. The preventative cool-down rest period required by this paragraph may be provided concurrently with any other meal or rest period required by Industrial Welfare Commission Order No. 14 (8 CCR 11140) if the timing of the preventative cool-down rest period coincides with a required meal or rest period thus resulting in no additional preventative cool-down rest period required in an eight hour workday. If the workday will extend beyond eight hours, then an additional preventative cool-down rest period will be required at the conclusion of the eighth hour of work; and if the workday extends beyond ten hours, then another preventative cool-down rest period will be required at the conclusion of the tenth hour and so on. For purposes of this section, preventative cool-down rest period has the same meaning as “recovery period” in Labor Code Section 226.7(a).

5. Acclimatization

- a. 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.
- b. 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.

6. Identifying, Evaluating and Controlling Environmental Risk Factors for Heat Illness

- a. To identify if environmental risk factors are present, the District shall obtain temperature and humidity measurements for the work areas, either by direct measurements or by weather forecasts that are adjusted to match worksite conditions.
- b. To evaluate if an environmental risk factor is present, the District shall obtain the Heat Index, calculated by the National Weather Service, to rate the risk of heat illness depending on air temperature and humidity. The District shall assume there is a significant risk of heat illness when the Heat Index for an employee working in the sun is 80 or above, and 90 or above when employees are working in the shade. If workers are wearing more than “light” clothing, the risk of heat illness shall be considered significant at a lower Heat Index.
- c. To control and reduce the exposure to environmental risk factors, the District shall utilize the following control measures:

- X *Schedule outdoor and/or vigorous work in the cooler hours of the day*
- X *Schedule more breaks during the day*
- X *Suspend work when alternative hours are not available*

7. Identifying, Evaluating and Controlling Personal Risk Factors for Heat Illness

- a. The District shall train employees on the factors that can affect their vulnerability to heat illness. These factors include an employee's age, level of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, overall health, and use of prescription medications that may alter the body's ability to retain water or otherwise affect its physiological response to heat. The District shall convey the importance of acclimatization, and shall take steps to aid employees in becoming acclimatized. An employer shall not request any of the above personal information from an employee.

8. Emergency Response Procedures

- a. The District shall account for the whereabouts of all employees at appropriate intervals during and at the end of the work shift by ***observations or electronic communications***. This procedure shall be followed whenever the outdoor work environment creates a heat hazard that could result in the collapse of an employee due to heat illness.
- b. Communication between the Supervisor and their crew is of the utmost importance.
- c. **Employees exhibiting signs or symptoms of heat illness, or who observe a co-worker with signs or symptoms, shall report these symptoms to their immediately supervisor.**
- d. It shall be the responsibility ***of the supervisor*** to respond to all reports and/or observations of heat illness symptoms and signs
- e. When a sick employee is unable to communicate, it shall be the responsibility ***of the supervisor*** to contact emergency services (campus police/9-1-1) when required, and to provide accurate and precise directions to the employee's location. This individual shall be immediately available to perform this function.

9. Handling a Sick Employee

When an employee displays possible signs or symptoms of heat illness;

- a. A sick worker will not be left alone in the shade, as he or she can take a turn for the worse!
- b. 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 called.
- c. 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
- d. 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, as they can get lost or die before reaching a hospital!

TRAINING

Training shall be administered to all employees and their supervisors who fall under the scope of this plan. The District shall ensure the effectiveness of the training by one of the following methods:

 X *Tailgate meetings before a shift begins*

 X *Conduct the training on a regular basis*

- a. Employees and supervisor shall be trained on:
 - i. Are trained before beginning work that should reasonably be anticipated to result in a heat illness
 - ii. Environmental and personal risk factors for heat illness
 - iii. District procedures for identifying, evaluating and controlling the exposure to environmental and personal risk factors for heat illness
 - iv. Importance of frequent consumption of small amounts of water under extreme conditions
 - v. Acclimatization and its importance
 - vi. Types of heat illness and their symptoms, signs, and differences
 - vii. Immediately reporting the signs and symptoms of heat illness in themselves or in a co-worker, to their supervisor.
 - viii. Procedures for the District to respond to symptoms of heat illness, which shall include how emergency medical services will be provided, if needed.
 - ix. Procedures for contacting emergency medical services and transporting employees to a readily accessible location for emergency medical services to reach them.
 - x. How to provide clear and precise directions to emergency medical services.
 - xi. Encourage employees to take a cool-down rest in the shade, for a period of no less than 5 minutes at a time.

- b. Supervisors shall be trained on:
 - i. All information included in subsection (6)(a) above
 - ii. Procedures a supervisor shall follow when implementing this Heat Illness Prevention Plan
 - iii. The procedures a supervisor shall follow when an employee exhibits symptoms of a possible heat illness, which includes emergency response procedures
 - iv. Prior to each workday, the supervisor will monitor the weather (using <http://www.nws.noaa.gov/> or with the aid of a simple thermometer, available at most hardware stores) 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 of the day, increasing the number of water and rest breaks).
 - v. A supervisor will use a weather station in the Facilities Services office and the energy management system to monitor for sudden increases in

temperature, and to ensure that once the temperature exceeds 85 degrees Fahrenheit, shaded areas will be opened and made available to the workers. In addition, when the temperature equals or exceeds 95 degrees Fahrenheit, additional preventive measures such as the High Heat Procedures will be implemented.

DOCUMENTATION

Documentation of all aspects of this Heat Illness Prevention Plan shall be managed in accordance with the District's Injury and Illness Prevention Program.