

**Heat Illness Prevention Program**

Cuesta College

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**Created on: July 5th, 2011**

**Revised on: October 12, 2017**

**Updated on : May 2, 2018**

**Policy**

The purpose of this program is to ensure that all Cuesta College employees, working in outdoor places or in other areas when environmental risk factors for heat illness are present, are protected from heat illness and are knowledgeable of heat illness symptoms, methods to prevent illness, and procedures to follow if symptoms occur. Any employee who works outdoors in the heat and all individuals who supervise these employees must comply with the procedures in this program, the Injury and Illness Prevention Program, and the applicable Cal/OSHA regulations.

**Authority**

Title 8 of the California Code of Regulations, Section 3395.

**Scope**

This Program applies to employees and supervisors working in outdoor areas in the district where they may be assigned work during those times when the environmental risk factors for heat illness are present, and where environmental conditions cannot be mitigated by engineering controls.

Positions/departments in the district that must adhere to this program include but are not limited to (in alphabetical order):

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| * Athletics
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| * Children's Center
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| * Custodial
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| * Engineering & Technology
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| * Facilities/Maintenance
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| * Fine Arts
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| * Grounds
* Information Technology
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| * Performing Arts
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| * Any other employee working under intense heat circumstances.
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**Program Responsibilities**

Managers and supervisors will:

* Ensure that employee work assignments both indoors and outdoors are evaluated and the components of this plan are implemented when the heat index is above 90° F.
* Ensure that initial and periodic training is provided to employees under their supervision and are consistent with the requirements of this program and the Regulations.
* Maintain employee training records.

Employees will:

* Comply with the requirements of this program.
* Understand the responsibilities of both the district and employees in maintaining compliance with this plan.
* Take steps to mitigate any personal risk factors that may exist prior to working in a regulated hot environment.
* Immediately report unsafe conditions to their supervisor.
* Observe their fellow employees for signs of heat related illness, and take quick action to ensure that rapid assistance is provided if applicable.

**Training**

Training will be provided for employees and supervisors working on job tasks where environmental risk factors for heat illness are present.

**Employee training**

Training topics include:

* Requirement to complete one of the following:
-SIPE online module – Heat Illness Prevention and exam at, **www.getsafetytrained.com**
- or review the Cuesta College Heat Illness Program annually,
* Environmental and personal risk factors for heat illness,
* The provisions set forth in T8 CCR 3395 (See pages 9-11),
* Employer’s procedures for complying with the requirements of T8 CCR 3395,
* Importance of frequent consumption of small quantities of water when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties, whether working inside or outside,
* Importance of acclimatization,
* Different types of heat illness and the common signs and symptoms of heat illness,
* 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 coworkers,
* Employer’s procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.

**Supervisor training**

Prior to assignment to supervision of employees working in the heat, training on the following topics will be provided:

* Requirement to complete one of the following:
-SIPE online module – Heat Illness Prevention and exam, at **www.getsafetytrained.com**
- or review the Cuesta College Heat Illness Program annually,
* Information required to be provided by the employee training section above,
* Procedures the supervisor is to follow upon notification or noticing that an employee is exhibiting symptoms consistent with possible heat illness, including emergency response procedure,
* How to monitor weather reports to determine if dangerous conditions are present and use the [heat index calculator](http://www.srh.noaa.gov/epz/?n=wxcalc_heatindex) and [heat index chart](http://www.nsis.org/weather/heatindex.html) (See page 4) to determine actual conditions,
* The provisions set forth in T8 CCR 3395 (See Pages 9-11).

**Program Compliance Strategy**

All employee positions identified in the Scope section of this program are required to work outdoors and in other areas where environmental factors for heat illness are present. Training will be provided for all employees working where environmental risk factors for heat illness are present in addition to their supervisors. Training information will include, but not be limited to, the topics listed in the training section of this written program. All potentially impacted employees and their supervisors will be trained on the risks and prevention of heat illness, including how to recognize symptoms and how to respond when they appear.

Managers and supervisors will ensure that they are aware of the most current and accurate meteorological information (ambient temperature and relative humidity) in areas of the district where they will be assigning employees to work. The manager and/or supervisor shall implement the proper controls when local weather conditions are expected to be favorable for inducing heat illness among workers. A heat index above 90° F requires extreme caution in the workplace. Anything above 105° F is considered to be dangerous. The [National Weather Service](http://www.nws.noaa.gov/) will initiate alert procedures when the Heat Index is expected to exceed 105°- 110°F (depending on local climate) for at least 2 consecutive days.

In these conditions, the manager and/or supervisor shall implement the following worker protection controls.

* Prior to the start of the work shift, managers and/or supervisors will meet with their employees, and review the work procedures to be used during the high heat period.
* Managers and/or supervisors will ensure that exposed employees have access to cool potable drinking water.
* Managers and/or supervisors will encourage frequent drinking of water by employees.
* Managers and/or supervisors will ensure that employees assigned work outdoors and exposed to high environmental temperatures shall have quick and effective access to a rest area where shade is available, or to an area where ventilation or cooling is provided for a period of not less than 5 minutes. Employees shall have access to shade or cooling at all times during the work shift.

**Recognizing Heat Related Illness**

When an employee is showing signs and symptoms of heat related illness:

1. Contact 9-1-1 if the person is not alert or seems confused,
2. Move the person out of the sun and into the shade or air-conditioned vehicle or district building, begin active cooling using fans and water, provide cool drinking water and contact the supervisor.
3. If the affected employee is not able to reach an easily identifiable location, be prepared to give precise directions or meet EMS at the site main entrance.



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**Heat Illness Prevention**

People suffer from heat-related illness when their bodies are unable to compensate and properly cool themselves. The body normally cools itself by sweating. Under certain conditions, sweating will fail to cool the body and the storage of heat over time will lead to the signs and symptoms of heat illness. Even short periods of high temperatures can cause serious health problems. Doing too much on a hot day, spending too much time in the sun or staying too long in an overheated place can cause heat related illness.  As the body temperature rises, various effects take place, including damage to the brain and other vital organs. Staying cool and making simple changes in fluid intake, activities and clothing during hot weather can help you to remain safe and healthy.

If it’s necessary to go out into the heat for extended periods of time please use the necessary precautions:

* Limit the amount of time spent in the heat until fully acclimatized.
* Properly hydrate your body by drinking more fluids before, during and after exposure to heat.
* Don’t wait until you’re thirsty to drink.
* Avoid liquids that contain alcohol, caffeine or large amounts of sugar – they cause your body to lose more fluid.
* Avoid very cold drinks – cool (50°–60°) is ideal. Cold drinks may cause stomach cramps.
* Eat light meals – avoid hot and heavy meals.
* Wear lightweight, light-colored, loose-fitting clothing.
* Take frequent rest breaks in a cool shaded area.
* Protect yourself from the sun by wearing a wide-brimmed hat and use sunscreen of SPF 15 or higher.
* Avoid overexertion – slow down and avoid strenuous activity.
* Become familiar with the early warning signs and symptoms of the various heat-related illnesses.
* Electric fans may provide comfort, but when the temperature is in the high 90s, fans will not prevent heat-related illness. Taking a cool shower or bath, or moving to an air-conditioned place is a much better way to cool off.
* NEVER leave anyone in a closed, parked vehicle.

The Heat Index (HI) is an accurate measure of how hot it really feels when the relative humidity is added to the actual air temperature. To check your HI please visit:  <http://www.wpc.ncep.noaa.gov/html/heatindex.shtml>

<http://www.wpc.ncep.noaa.gov/>

Information provided by and for more information:
[**https://www.cdc.gov/disasters/extremeheat/index.html**](https://www.cdc.gov/disasters/extremeheat/index.html)

**Signs, Symptoms and Treatment of Heat Illness**

Even short periods of high temperatures can cause serious health problems. Doing too much on a hot day even inside or spending too much time in the sun or staying too long in an overheated place can cause heat-related illness

**Types of Heat Illness**

**Heat Rash**

Heat rash is a skin irritation (also known as prickly heat) caused by excessive sweating during hot, humid weather. It is likely to occur where sweat is not easily removed from the surface of the skin by evaporation and skin remains wet most of the time. Sweat ducts become plugged, which eventually leads to a rash. It is manifested as red papules and usually appears in areas of restrictive clothing. It can occur at any age but is most common in young children.

 **Symptoms:**

* Red clusters appear on the skin
* Prickling sensation
* General discomfort
* Usually found on the neck, upper chest, groin area and in elbow creases
* Areas of infection can develop if not treated.

**Treatment:**

* Move person to a cool, less humid environment
* Bathe thoroughly
* Allow skin to dry
* Usually does not require medical treatment.

**Heat Syncope (fainting)**

In heat syncope, the brain does not receive enough oxygen because the blood pools in the extremities. Workers not accustomed to hot environments and who stand erect and immobile in the heat may faint. Onset is usually rapid and unpredictable.

**Symptoms:**

* Light-headed feeling
* Sudden fainting

**Treatment:**

* Move to a cool area
* Allow person to lie down on his/her back
* After a brief period, have the person walk around slowly
* Allow person to gradually become acclimatized to the hot conditions

**Heat Cramps:**

Heat cramps are usually caused by strenuous activity in a hot environment. Painful spasms of the muscles are caused when workers drink large quantities of water but fail to replace their body’s electrolytes loss. Cramps can be caused by both too much and too little salt in the system. The muscles most susceptible are those that become tired from performing the energetic activity. Cramps may occur during or after work hours.

 **Symptoms:**

* Painful muscle spasms or cramps
* Persistent muscle contraction during and after activity

 **Treatment:**

* Rest in a cool area
* Drink carbohydrate/electrolyte replacement liquids
* Lightly stretch and massage affected muscles
* Seek medical attention in the case of severe cramping

**Heat Exhaustion:**

Heat exhaustion is a serious illness that can gradually develop during exposure to high temperatures and inadequate or unbalanced replacement of fluids. It is the body’s response to an excessive loss of the water and salt contained in sweat. Body temperature may be normal or slightly elevated. If not properly treated heat exhaustion may rapidly progress to heat stroke

**Symptoms:**

* Headache
* Dizziness/lightheadedness
* Weakness or fatigue
* Loss of coordination
* Heavy sweating
* Pale of flushed complexion
* Irritability
* Nausea and vomiting
* Muscle cramps
* Fast heartbeat
* Normal or slightly elevated body temperature

**Treatment:**

* Move the person to a cool, shaded area
* Remove excess clothing and equipment
* Cool with water and/ or fans
* Have the person lie down with legs elevated about 12”
* Drink cool water or electrolyte replacement liquids
* If the person does not recover quickly, seek medical attention promptly.

**Heat Stroke:**

Heat stroke is a medical emergency. It occurs when the body’s system of temperature regulation fails, sweating becomes inadequate and the body’s core temperature rises to critical levels. The body’s only effective means of removing excess heat is compromised, with little warning to the victim. Body temperature is usually above 106F or higher. Unless the victim receives quick and appropriate treatment, death or permanent disability can occur.

 **Symptoms:**

* Red, hot and dry skin
* Lack of sweating (usually, but not always)
* Extremely high body temperature
* Rapid strong pulse
* Rapid or difficult breathing
* Throbbing headache
* Dizziness
* Nausea
* Mental confusion
* Irrational behavior
* Restlessness and irritability
* Convulsions
* Unconsciousness

 **Treatment:**

* Call emergency medical personnel-911
* Move the person to a cool, shaded area
* Remove excess clothing and equipment
* Use cool water to drench the person – cover with wet towels
* Place ice packs on the neck, arm pits, and the groin area
* Fan the person vigorously to increase cooling
* Have the person lie down with legs elevated about 12”
* Monitor the person’s airway, breathing and circulation
* DO NOT give the person fluids to drink

Subchapter 7. General Industry Safety Orders Group 2. Safe Practices and Personal Protection Article 10. Personal Safety Devices and Safeguards

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§3395. Heat Illness Prevention

(a) Scope and Application.

(1) This standard applies to all outdoor places of employment.

Exception: If an industry is not listed in subsection (a)(2), employers in that industry are not required to comply with subsection (e), High-heat procedures.

(2) List of industries subject to all provisions of this standard, including subsection (e):

(A) Agriculture

(B) Construction

(C) Landscaping

(D) Oil and gas extraction

(E) Transportation or delivery of agricultural products, construction materials or other heavy materials (e.g. furniture, lumber, freight, cargo, cabinets, industrial or commercial materials), except for employment that consists of operating an air-conditioned vehicle and does not include loading or unloading.

(3) This section applies to the control of risk of occurrence of heat illness. This is not intended to exclude the application of other sections of Title 8, including, but not necessarily limited to, sections 1512, 1524, 3203, 3363, 3400, 3439, 3457, 6251, 6512, 6969, 6975, 8420 and 8602(e).

Note No. 1: The measures required here may be integrated into the employer's written Injury and Illness Program required by section 3203, or maintained in a separate document. Note No. 2: This standard is enforceable by the Division of Occupational Safety and Health pursuant to Labor Code sections 6308 and 6317 and any other statutes conferring enforcement powers upon the Division. It is a violation of Labor Code sections 6310, 6311, and 6312 to discharge or discriminate in any other manner against employees for exercising their rights under this or any other provision offering occupational safety and health protection to employees.

(b) 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.

“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 operates a fixed establishment where the work is to be performed and where drinking water is plumbed.

“Oil and gas extraction” means operating and/or developing oil and gas field properties, exploring for crude petroleum or natural gas, mining or extracting of oil or gas or recovering liquid hydrocarbons from oil or gas field gases.

“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.

(c) Provision of water. Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable. 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. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in subsection (f)(1)(C), shall be encouraged.

(d) Access to shade.

(1) Shade required to be present when the temperature exceeds 85 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 85 degrees Fahrenheit, the employer shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate 25% of the employees on the shift at any time, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shaded area shall be located as close as practicable to the areas where employees are working.

(2) Shade required to be available when the temperature does not exceed 85 degrees Fahrenheit. When the outdoor temperature in the work area does not exceed 85 degrees Fahrenheit employers shall either provide shade as per subsection (d)(1) or provide timely access to shade upon an employee's request.

(3) 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.

Exceptions to subsection (d):

(1) Where the employer can demonstrate that it is infeasible or unsafe to have a shade structure, or otherwise to have shade present on a continuous basis, the employer may utilize alternative procedures for providing access to shade if the alternative procedures provide equivalent protection.

(2) Except for employers in the agricultural industry, cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if the employer can demonstrate that these measures are at least as effective as shade in allowing employees to cool.

(e) High-heat procedures. The employer shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit. These procedures shall include the following to the extent practicable:

(1) Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area 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.

(f) Training.

(1) 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:

(A) The 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.

(B) The employer's procedures for complying with the requirements of this standard.

(C) The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.

(D) The importance of acclimatization.

(E) The different types of heat illness and the common signs and symptoms of heat 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 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, for 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 be available to ensure that emergency procedures are invoked when appropriate.

(2) Supervisor training. 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:

(A) The information required to be provided by section (f)(1) above.

(B) The procedures the supervisor is to follow to implement the applicable provisions in this section.

(C) The procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

(D) How to monitor weather reports and how to respond to hot weather advisories.

(3) The employer's procedures for complying with each requirement of this standard required by subsections (f)(1)(B), (G), (H), and (I) shall be in writing and shall be made available to employees and to representatives of the Division upon request.

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

HISTORY

1. New section filed 8-22-2005 as an emergency; operative 8-22-2005 (Register 2005, No. 34). A Certificate of Compliance must be transmitted to OAL by 12-20-2005 or emergency language will be repealed by operation of law on the following day.

2. New section refiled 12-20-2005 as an emergency; operative 12-20-2005 (Register 2005, No. 51). A Certificate of Compliance must be transmitted to OAL by 4-19-2006 or emergency language will be repealed by operation of law on the following day.

3. New section refiled 4-19-2006 as an emergency; operative 4-19-2006 (Register 2006, No. 16). A Certificate of Compliance must be transmitted to OAL by 8-17-2006 or emergency language will be repealed by operation of law on the following day.

4. Certificate of Compliance as to 4-19-2006 order, including amendment of section heading and section, transmitted to OAL 6-16-2006 and filed 7-27-2006 (Register 2006, No. 30).

5. Amendment filed 10-5-2010; operative 11-4-2010 (Register 2010, No. 41).