

**THE CLAREMONT COLLEGES SERVICES**  
**EMPLOYEE HEAT ILLNESS PREVENTION PROCEDURES**

**Revised July 2018**

This document is based on the Cal/OSHA “Employer Sample Procedure for Heat Illness Prevention, 2015”

**Application:**

The Claremont Colleges Services (TCCS) managers, supervisors, and employees will comply with the State of California Heat Illness Prevention Standard - Title 8 California Code of Regulations (T8 CCR) Section 3395. These procedures will reduce the risk of work related heat illnesses among TCCS employees in outdoor work settings.

These procedures are in addition to any other applicable California Code of Regulations, Title 8 (T8 CCR) sections, particularly the T8 CCR 3203 Injury and Illness Prevention Program (IIPP). Other standards apply to Heat Illness Prevention such as the requirement to provide for drinking water, first aid, and emergency response.

These procedures describe required actions for heat illness prevention applicable to most outdoor work settings and are a key to reducing the incidence of heat related illnesses. In working conditions with a higher risk for heat illness TCCS may choose to exercise greater caution with additional protective measures beyond what is listed in this document to protect employees.

**TCCS Operations Subject to the Cal/OSHA Heat Illness Prevention Program for outdoor work per Cal/OSHA Regulations:**

Central Facilities Services: All construction and landscaping activities outdoors.

Contract and Vendor Supervision: All TCCS staff retaining a contractor or vendor for outdoors work shall provide a copy of this policy and procedure to the contractor prior to starting work as an example policy and procedure. Contractors are responsible of the safety of their employees, including heat illness prevention per Cal/OSHA Regulations.

**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 landscape vegetation or providing these services in conjunction with the design of landscape plans and/or the construction of walkways, retaining walls, decks, fences, and similar structures.

“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.

**Responsibility Requirements:**

1. These procedures will be communicated to TCCS employees, supervisors with assigned responsibilities, and managers by the affected employee’s supervisors and manager through trainings, meetings, and posting on TCCS’s intranet.
2. Heat Illness Prevention Training will be provided for new hires, will be provided annually to affected employees, and will be scheduled by the employee’s supervisor. Heat Illness Prevention Training classes should be scheduled by the through TCCS’s Environmental Health and Safety.
3. Training shall cover the specific Heat Illness Prevention Procedures outlined in this document.
4. The Director of the employees/supervisor’s unit shall ensure that these procedures are implemented, training is completed, and documentation is kept.

**The following designated person or persons have the authority and responsibility for implementing the provisions of this program at TCCS:**

**Name/Title/Phone Number**

- Central Facilities Vice President, John Moe, Phone: 909-607-4175
- All Supervisors, Central Facilities Services
- Health and Safety staff will report observed and reported procedure violations to supervisor and/or the Director of the employee’s unit.

**Procedures for the Provision of Water and Access to Shade (required):**

- Supervisors will ensure that drinking water containers (of 5 - 10 gallons per container) will be provided to the worksite by and will verify there is sufficient water on site so that at least two quarts per employee are available at the start of the shift. All workers whether working individually or in smaller crews, will have access to drinking water.

- Paper cone rims or bags of disposable cups and the necessary cup dispensers will be made available to workers and will be kept clean until used.
- The water level of crew portable drinking water containers will be checked every morning and afternoon by a designated employee, and more frequently when the temperature rises. Water containers will be refilled with cool water as needed. Additional water supplies will be carried by the employee's supervisor to replace water as needed.
- Water will be fresh, pure, and suitably cool. Supervisors will verify the water is clean and sanitary every shift. During hot weather the water must be cooler than the ambient temperature. Water containers will be located as close as practicable to the areas where employees are working. If field terrain prevents the water from being placed as close as possible to the workers, bottled water or personal water containers will be made available, so that workers can have drinking water readily accessible.
- All water containers will be kept in sanitary condition with only potable water used. If water hoses or connections are used as drinking water sources they must be supplied from a potable drinking water municipal system.
- Supervisors will remind workers of the location of the water coolers and of the importance of drinking water frequently. When the temperature exceeds or is expected to exceed 80 degrees Fahrenheit, brief 'tailgate' meeting or safety update will be held each morning by the supervisor 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.
- When the temperature equals or exceeds 95 degrees Fahrenheit, pre-shift meetings prior to the commencement of outdoor work will be held to encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary will be conducted. The number of water breaks will be increased. The supervisors will lead by example and workers will be reminded throughout the work shift to drink water.
- Individual water containers or bottled water provided to workers will be adequately identified to eliminate the possibility of drinking from a co-workers container or bottle.

**Procedures for Required Access to Shade:**

- If other shade is not readily available (such as indoor areas on campus) shade structures will be opened and placed as close as practical to the workers when the temperature equals or exceeds 80 degrees Fahrenheit. When the temperature is below 80 degrees Fahrenheit, access to shade will be provided promptly, when requested by an employee.
- The interior of a vehicle may not be used to fulfill the requirement to provide shade unless the vehicle is air-conditioned and the air conditioner is on.

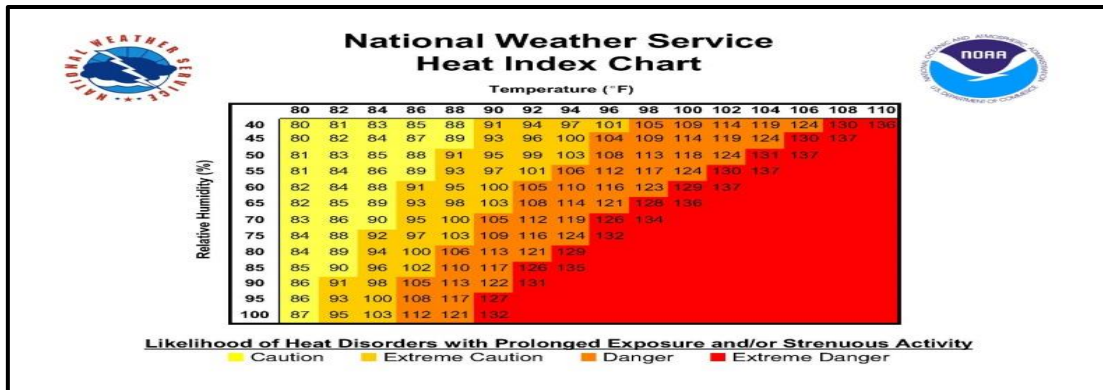
- Enough shade structures will be available at the site to accommodate all of the employees who are on a break at any time. During meal periods there will be enough shade for all of the employees who choose to remain in the general area of work or in areas designated for recovery and rest periods.
- Workers will be informed of the location of the shade and shade structures and will be encouraged to take a five-minute cool-down rest in the shade. Employees who take a preventative cool-down rest break will be monitored and asked by another designated employee on the crew if he/she is experiencing symptoms of heat illness and in no case will the employee be ordered back to work until signs or symptoms of heat illness have abated. (see also the section on Emergency Response for additional information).
- Shade structures will be relocated to follow along with the crew and they will be placed as close as practical to the employees, so that access to shade is provided at all times. All employees on a recovery, rest break or meal period will have full access to shade so they can sit in a normal posture without having to be in physical contact with each other.

**Procedures for Monitoring the Weather:**

- The supervisor will be trained and instructed to check in advance the extended weather forecast. Weather forecasts can be checked on the internet (<http://www.nws.noaa.gov/>), or by calling the National Weather Service phone numbers (see CA numbers below) or by checking the Weather Channel network. The work schedule will take into consideration whether high temperatures or are expected.

CALIFORNIA Dial-A-Forecast Los Angeles 805-988-6610 (Option 1)

- How to use the heat chart: Prior to each workday, the forecasted temperature and humidity for the worksite will be reviewed and will be compared against the National Weather Service Heat Index to evaluate the risk level for heat illness. Determination will be made of whether or not workers will be exposed at a temperature and humidity characterized as either “extreme caution” or “extreme danger” for heat illnesses. It is important to note that the temperature at which these warnings occur must be lowered as much as 15 degrees if the workers are in direct sunlight. Using the chart below for example the average August humidity in Los Angeles County ranges from 60-80%, with an average temperature of 77 degrees F, and a max of over 110 degrees F during the hottest part of the day (1-3 pm). From the chart, the heat index could range across the width of the chart during a hot day.



- Prior to each workday, the supervisor will monitor the weather using <http://www.nws.noaa.gov/>, or with the aid of a thermometer at the worksite, or cellphone weather app. The weather information will be taken into consideration to determine if it will be necessary to make modifications to the work schedule.
- A thermometer or equivalent online application will be used at the jobsite by the supervisor to monitor for sudden increases in temperature, and to ensure that once the temperature exceeds 80 degrees Fahrenheit, shade structures will be opened and made available to the workers if other shade is not available. In addition, when the temperature equals or exceeds 95 degrees Fahrenheit, additional High Heat Procedures will be implemented.

**High Heat Procedures to be followed when the temperature equals or exceeds 95 degrees F (required):**

- High Heat Procedures are additional preventive measures that this company will use when the temperature equals or exceeds 95 degrees Fahrenheit.
- Effective communication by means such as voice, direct observation, a mandatory buddy system, or electronic means will be maintained so that employees at the worksite can contact a supervisor when necessary. If the supervisor is unable to be near the workers then an electronic device may be used for this purpose if reception in the area is reliable.
- Frequent communication will be maintained with employees working by themselves or in smaller groups to be on the lookout for possible symptoms of heat illness. The employee(s) will be contacted regularly throughout the day.
- Effective communication and direct observation for alertness and/or signs and symptoms of heat illness will be conducted frequently. When the supervisor is not available, a designated alternate responsible person must be assigned to look for signs and symptoms of heat illness. If a supervisor, designated observer, or any employee reports any signs or symptoms of heat illness in any employee, the supervisor or designated person will take immediate action commensurate with the severity of the illness (see Emergency Response Procedures).

- Employees will be frequently reminded by supervisor throughout the work shift to drink plenty of water and take preventative cool-down rest break when needed.

### **Acclimatization Procedures:**

- 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.
- Inadequate acclimatization can be significantly more perilous in conditions of high heat and physical stress. Employers are responsible for the working conditions of their employees, and they must act effectively when conditions result in sudden exposure to heat their employees are not used to.
- The supervisor will be aware of sudden heat wave(s), or sudden increases in temperatures to which employees haven't been exposed to for several weeks or longer.
- New employees, or those employees who have been newly assigned to a high heat area will be closely observed by the supervisor or designee for the first 2 weeks of work with consideration given to providing a two-week transition period if needed such as scheduling slower paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day.
- Supervisors will remain vigilant with new employees and alert to the presence of heat related symptoms.
- New employees will be assigned another coworker to watch each other closely for discomfort or symptoms of heat illness during the acclimatization process.
- Employees and supervisors will be trained on the importance of acclimatization, how it is developed, and how these company procedures address it.

### **Procedures for Emergency Response:**

- Prior to assigning a crew to a particular worksite, workers and the foreman will obtain a map of the campus site available at: <http://www.TCCS.claremont.edu/wp-content/uploads/2017/05/TCCmap.pdf> along with clear and precise directions to avoid a delay of emergency medical services.
- Emergency services shall be contacted by an employee by calling BOTH "911" AND Campus Safety. (7-2000, or 909-607-2000).
- Prior to assigning a crew to a particular worksite, efforts will be made to ensure that a

qualified and appropriately trained and equipped person is available at the site to render first aid if necessary.

- Prior to the start of the shift, a determination will be made of whether or not a language barrier is present at the site and steps will be taken (such as assigning the responsibility to call emergency medical services to the foreman or an English speaking worker) to ensure that emergency medical services can be immediately called in the event of an emergency.
- All foremen and supervisors will carry cell phones or other means of communication, to ensure that emergency medical services can be called.
- When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep the stricken employee cool and comfortable once emergency service responders have been called (to reduce the progression to more serious illness). Under no circumstances will the affected employee be left unattended.
- At remote locations such as lots or undeveloped areas, the supervisor will designate an employee or employees to maintain station at the nearest road or highway where emergency responders can see them. If daylight is diminished, the designated employee(s) shall be given a reflective vest or flashlights in order to direct emergency personnel to the location of the worksite, which may not be visible from the road or highway.
- During a heat wave or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any heat illness signs or symptoms they are experiencing.
- Employees and supervisors training will include the details of these written emergency procedures.

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

- When an employee displays possible signs or symptoms of heat illness, a worker or supervisor trained in first aid will check the sick employee and determine whether resting in the shade and drinking cool water is sufficient or if emergency service providers will need to be called. A sick worker will not be left alone.
- 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.
- A supervisor or employee will call the emergency service providers (911 and Campus Safety) immediately if an employee displays signs or symptoms of heat illness (such as decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, or 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 groin area and fan the victim). Do not let a sick worker leave the site, as they could get lost or die before reaching a hospital.

- If an employee does not look OK and displays signs or symptoms of severe heat illness (such as decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, red and hot face), and the worksite is located more than 20 minutes away from a hospital, call 911 for emergency service providers and potentially an air ambulance, and communicate the signs and symptoms of the victim.

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

- To be effective, training must be understood by employees. All supervisors must maintain records of the training showing the date of training, who performed the training, who attended training and subject(s) covered.
- Supervisors will be trained prior to being assigned to supervise other workers. Training will include TCCS's written procedures and the steps supervisors will follow when employees' exhibit symptoms consistent with heat illness.
- Supervisors will be trained on their responsibility to provide water, shade, cool-down rest breaks, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.
- Supervisors will be trained in appropriate first aid and/or emergency responses to different types of heat illness, and that heat illness may progress quickly from mild symptoms and signs to serious and life threatening illness.
- Supervisors will be trained on how to track the weather at the job site. Supervisors will be instructed on, how weather information will be used to modify work schedules, to increase the number of water and rest breaks or cease work early if necessary.
- All employees and supervisors will be trained prior to working outside in Heat Illness Prevention. Training will include the components of implementing this Heat Illness Prevention Plan including but not limited to; providing sufficient water, providing access to shade, high-heat procedures, emergency response procedures and acclimatization contained in the company's written prevention procedures.
- Employees will be trained on the steps that will be followed for contacting emergency medical services, including how they are to proceed when there are non-English speaking workers, how clear and precise directions to the site will be provided and the importance of making visual contact with emergency responders at the nearest road or landmark to direct them to their worksite.



- When the temperature is expected to exceed 80 degrees Fahrenheit, short ‘tailgate’ meetings will be held to review the weather report, to reinforce heat illness prevention with all workers, to provide reminders to drink water frequently, to inform them that shade can be made available upon request and to remind them to be on the lookout for signs and symptoms of heat illness.
- New employees will be assigned a “buddy” or experienced coworker to ensure that they understand the training and follow company procedures.

**Heat Illness Prevention Training will cover the following Cal/OSHA required topics:**

- 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.
- TCCS’s **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 the heat illness prevention standard, without retaliation.
- 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 sweating more than usual in the performance of their duties.
- The concept, importance, and methods of **acclimatization**.
- The different **types of heat illness**, 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.
- The importance to employees of **immediately reporting heat illness signs and symptoms to the employer**, directly or through the employee's supervisor.
- TCCS procedures for responding to signs or symptoms of possible heat illness, including how **emergency medical services** will be provided and if necessary for transporting employees to a point where they can be reached by an emergency medical service provider.
- TCCS 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.
- **Supervisor training** will be provided prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness. Training on the following topics shall be provided to the supervisor:
  - The information required to be provided by section above.
  - The procedures the supervisor is to follow to implement the applicable provisions in this section.
  - The procedures the supervisor is to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures.
  - How to monitor weather reports and how to respond to hot weather advisories.