



CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS

Heat Illness Prevention

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Policy

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.

It is the policy of California State University, Dominguez Hills (CSUDH) that any employee who works outdoors in the heat and all individuals who supervise these employees must comply with the procedures in this program and in the Injury and Illness Prevention Program.

Authority

California Code of Regulations, Title 8, Section 3395¹.

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.

Definitions

Acclimatization - The 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 about two hours per day in the heat.

Environmental risk factors for heat illness - The 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 personnel protective equipment worn by employees.

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. See the appendix for specific information on the forms of heat illness.

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.

Preventative recovery period - A period of time to recover from the heat in order to prevent heat illness.

¹ <http://www.dir.ca.gov/title8/3395.html>

Shade - The 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. 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.

Accountability

Risk Management/Environmental Health and Occupational Safety (RM/EHOS) will:

- Prepare and maintain a written program which complies with the requirements of Cal/OSHA Title 8, 3395.
- 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.

Supervisors will:

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

Affected Employees will:

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

Program

Access to Water

Employees must have access to potable drinking water meeting all requirements of applicable sections including but not limited to the requirements that it be fresh, pure, suitably cool, and provided to employees free of charge. The water shall be located as close as practicable to the areas where employees are working. 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 shall be encouraged.

Shade

Shade shall be present when the temperature exceeds 80 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 80 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 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.

Shade shall be available when the temperature does not exceed 80 degrees Fahrenheit. When the outdoor temperature in the work area does not exceed 80 degrees Fahrenheit employers shall either provide shade as stated above or provide timely access to shade upon an employee's request.

Employees shall be allowed and encouraged to take a preventative 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 shall:

- Be monitored and asked if he or she is experiencing symptoms of heat illness;
- Be encouraged to remain in the shade; and
- 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.
- 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 supervisor shall provide appropriate first aid or emergency response according to the section below.

Exceptions to the previous section on shade:

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

Cooling measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if CSUDH can demonstrate that these measures are at least as effective as shade in allowing employees to cool.

High-Heat Procedures

CSUDH shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit. To the extent practicable, these procedures shall include the following:

- 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.
- Observing employees for alertness and signs or symptoms of heat illness. The direct supervisor shall ensure effective employee observation/monitoring by implementing one or more of the following:
 - Supervisor or designee observation of 20 or fewer employees, or
 - Mandatory buddy system, or
 - Regular communication with sole employee such as by radio or cellular phone, or
 - Other effective means of observation.
- Designating one or more employees at 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.
- Reminding employees throughout the work shift to drink plenty of water.
- Pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.

Emergency Response Procedures

CSUDH shall implement effective emergency response procedures including:

- Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services 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. If an electronic device will not furnish reliable communication in the work area, the employer will ensure a means of summoning emergency medical services.
- Responding to signs and symptoms of possible heat illness, including but not limited to, first aid measures and how emergency medical services will be provided.
 - If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness.
 - If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), the employer must implement emergency response procedures.
 - An employee exhibiting signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered onsite first aid and/or being provided with emergency medical services in accordance with the employer's procedures.
- Contacting emergency medical services and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider.
- Ensuring that, in the event of emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

Acclimatization

All employees shall be closely observed by a supervisor or designee during a heat wave. For the purpose 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.

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.

Work in Indoor Work Environments

Employees who work near sources of heat or inside buildings with limited cooling capabilities, such as warehouses without air conditioning, boiler rooms, greenhouses, etc., can also experience a heat-related illness.

Indoor work environment heat illness prevention steps include the following:

- **Frequent Drinking of Water:** Water is a key preventive measure against heat illness.
- **Resting in Cooler Areas:** Rest breaks provide time for cooling and the opportunity to drink water.
- **Acclimatization and Weather Monitoring:** Acclimatization is a gradual and temporary adjustment of the body to work in the heat. People need several days to adjust when working conditions are significantly hotter than they are used to. The weather is another significant factor and requires monitoring by managers and supervisors. Institute additional water and rest breaks during a heat wave. Indoor workers face a higher risk of heat illness during periods of high temperatures, if they are working in a building that is not temperature controlled.

Training

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:

- 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.
- Procedures for complying with the requirements of this standard, including, but not limited to, CSUDH'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.
- 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.
- The concept, importance, and methods of acclimatization pursuant to CSUDH's procedures stated in this program.
- 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 of immediately reporting to the direct supervisor symptoms or signs of heat illness in themselves, or in co-workers.
- CSUDH’s procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary (refer to Appendix A).
- CSUDH’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.
- CSUDH’s procedures for ensuring that, in the event of 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.

While it is not intended to be a substitute for formal heat illness prevention training, the Heat Illness Prevention Pocket Guide is a useful tool to remind supervisors and employees of the importance to take all necessary steps in order to prevent heat-related illnesses.

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:

- The information required to be provided by the previous on employee training.
- 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.

Records

All training records prepared in association with the Heat Illness Prevention Program will be maintained by Risk Management/Environmental Health and Occupational Safety or the department.

Additional References

- [California Department of Industrial Relations](#)
 - Pocket Pamphlet – [Protect Yourself from Heat Illness](#)
- [Governor’s Office of Emergency Services \(OES\)](#)
- [National Weather Service](#)

Heat Safety Tips



WATER. REST. SHADE.

The work can't get done without them.

HEAT SAFETY TIPS:

1) Drink water often – even if you aren't thirsty.

It's best to drink a small amount often, like a cup or two every 15 minutes. Avoid drinks like sodas, coffee, energy drinks or alcoholic drinks. They dehydrate you and make it more dangerous to work in the heat.

2) Rest in the shade when you need to cool down. You have the right to at least 5 minutes in the shade. This is allowed under California's heat standard, and is in addition to the regularly scheduled breaks for meals and rest. Regular breaks are 10 minutes (paid) for every 4 hours of work, and a 30-minute meal break (unpaid) for every five hours worked.

3) Report heat symptoms early. Watch out for each other and let your employer know right away if anyone has heat symptoms.

4) Know what to do in an emergency. Employers must train you on what to do and who to call if anyone has heat symptoms, and on how to give precise directions to the worksite in case you need to call for medical help. Heat illness can be deadly, so get help right away.

5) Wear hats and light-colored clothing – they help block the sun.

Cal/OSHA Pocket Guide Protecting Yourself from Heat Related Illness

Heat Kills



Heat illness includes **heat cramps, fainting, heat exhaustion, and heatstroke.**

Workers have died or suffered serious health problems from these conditions.

Heat illness can be prevented.



Know the symptoms of heat illness
Watch for symptoms in yourself and your coworkers. *If you feel any symptoms, tell your coworkers and supervisor immediately because you may need medical help. Know who to talk to and how to get help before you start each workday.*



Early symptoms

Fatigue
Heavy sweating
Headache
Cramps
Dizziness
High pulse rate
Nausea/vomiting



Life-threatening symptoms

High body temperature
Red, hot, dry skin
Confusion
Convulsions
Fainting



Preventing Heat Illness

Tell your supervisor if you are new to working in the heat or have had heat illness before.

Stay alert to the weather. During a heat wave you are at greater risk of getting sick. You need to watch yourself and coworkers more closely, and may need to drink more water, take more breaks, and use other measures.



Drink enough cool, fresh water
Drink at least one 8-ounce cup (3 cones) every 15 minutes during your entire work shift. *Do not wait until you are thirsty to drink water.*

Do not drink alcohol. Avoid coffee. Choose water over soft drinks.



Take rest breaks in the shade to cool down.

Wear proper clothing Loose fitting, light-weight and light-colored cotton clothes, a wide-brimmed hat or cap, and a bandana.

Talk to your doctor if you have illnesses like diabetes, are taking medicines or are on a low salt diet.

Know Your Rights

If you work outdoors, by law, your employer must provide you:

- Enough cool, fresh drinking water throughout the day.
- Access to shade or an equally cool spot for at least 5 minutes at a time.
- Training on how to prevent heat illness and how to call for emergency services.



For more information call the worker hotline at 1-866-924-9757

California Department of Industrial Relations



Illustrations by Kate Oliver and April Wells

Cal/OSHA Heat Illness Prevention for Indoor Working Environments



Cal/OSHA Heat Illness Prevention for Indoor Working Environments

“5 Must-Train preventive steps”



1. Frequent drinking of water
2. Rest in cooler areas
3. Give time to acclimatize
4. Know signs and symptoms
5. Know emergency steps

Employers with employees near sources of heat or inside buildings with limited cooling capabilities must ensure that their Injury and Illness Prevention Program is effective and in writing (i.e. work areas with risk of heat illness have been identified and evaluated, and appropriate corrective measures and training have been implemented to protect workers).

Examples include foundries, ovens, dryers, boilers, warehouses without AC.

Title 8 § 3203 (Injury and Illness Prevention Program,) directs employers to address all health or safety hazards within their worksite including heat illness. Other regulations that apply include, but are not limited to: T8 § 3363 Water Supply, T8 § 3400 Medical Services and First Aid.

Cal/OSHA has created this handout to raise awareness about indoor heat illness among employers and workers with a goal of reducing the number of heat illnesses. Cal/OSHA studies reveal that heat illness and even heat fatalities can occur indoors. The studies also show effective reduction of heat illness depends on written procedures, access to water, access to cooler areas, acclimatization and weather monitoring, emergency response and employee and supervisor training.

HEAT ILLNESS PREVENTION STEPS INCLUDE:

Written Procedures:

Per T8 §3203, all preventive steps, methods and procedures used by the employer to address indoor heat illnesses must be stated in the company's Injury and Illness Prevention Program (IIPP). These written procedures must indicate how to conduct worksite evaluation, how conditions or practices will be corrected if necessary, and how information is to be communicated to workers.

Frequent Drinking of Water:

Water is a key preventive measure against heat illness. Employers need to facilitate and



encourage the frequent drinking of water, and to be on the lookout for work situations that interfere with access to water, especially during a heat wave!

Resting in Cooler Areas:

Rest breaks provide time for cooling and the opportunity to drink water. Workers must have access to rest breaks in cooled or air conditioned areas and away from the sources of heat, particularly during a heat wave!

Acclimatization and Weather Monitoring:

Acclimatization is a gradual and temporary adjustment of the body to work in the heat. People need several days to adjust when working conditions are significantly hotter than they are used to. The weather is another significant factor and requires monitoring by employers and supervisors. Institute additional water and rest breaks during a heat wave. Indoor workers face a higher risk of heat illness during periods of high temperatures, if they are working in a building that is not temperature controlled.

Being Prepared for Emergencies:

Written procedures must include steps to be followed in an emergency, which will ensure a rapid effective response, including instructing workers on how to reach 911 despite possible language barriers, how to give instructions to find the worksite and how to administer first aid while an ambulance is in route.

Employee and Supervisor Training:

All workers and supervisors need to know about the importance of frequent drinking of water and resting in cooled areas, the signs and symptoms of heat illness, how to respond and who to report to when someone feels sick and may need to go to the hospital. A Cal/OSHA heat illness study revealed that supervisor training made a significant difference in the outcome of heat illness cases: victims whose supervisors were not trained on heat illness prevention were twice as likely to die as victims whose supervisors had received training. Hence, the effectiveness of your Heat Illness Prevention Procedures depends greatly on how you train your supervisor.

Campus Map

CSUDH CAMPUS MAP

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS



BUILDING NAMES & ID NUMBERS

1. SMALL COLLEGE COMPLEX 1 (SCC-1)
2. SMALL COLLEGE COMPLEX 2 (SCC-2)
3. SMALL COLLEGE COMPLEX 3 (SCC-3)
4. SMALL COLLEGE COMPLEX 4 (SCC-4)
5. SMALL COLLEGE COMPLEX 5 (SCC-5)
6. SMALL COLLEGE COMPLEX 6 (SCC-6)
7. SMALL COLLEGE COMPLEX 7 (SCC-7)
8. SMALL COLLEGE COMPLEX 8 (SCC-8)
9. SMALL COLLEGE COMPLEX 9 (SCC-9)
10. SMALL COLLEGE COMPLEX 10 (SCC-10)
11. SMALL COLLEGE COMPLEX 11 (SCC-11)
13. SMALL COLLEGE COMPLEX 13 (SCC-13)
14. COLLEGE OF EDUCATION (COE)
20. LEO F. CAIN LIBRARY (LIB)
- 20A. LIBRARY ADDITION (LIB)
23. JAMES L. WELCH HALL (WH)
25. STUDENT HEALTH CENTER (SHC)
26. LOKER STUDENT UNION (LSU)
30. SOCIAL AND BEHAVIORAL SCIENCES (SBS)
40. LACORTE HALL (LCH)
45. UNIVERSITY THEATRE (UT)
50. NATURAL SCIENCES AND MATHEMATICS (NSM)
52. SCIENCE AND INNOVATION (SI)
60. GYMNASIUM (GYM)
61. FIELD HOUSE (FH)
63. SWIMMING POOL (SP)
70. PUEBLO DOMINGUEZ (SH-1)
71. PUEBLO DOMINGUEZ (SH-2)
80. PHYSICAL PLANT (PP)
87. CENTRAL PLANT (CP)
102. SOUTH ACADEMY COMPLEX 2 (SAC-2)
103. SOUTH ACADEMY COMPLEX 3 (SAC-3)
106. EXTENDED EDUCATION (EE)
107. CALIFORNIA ACADEMY OF MATHEMATICS AND SCIENCE (CAMS)
111. BASEBALL/SOFTBALL STORAGE
116. EAST ACADEMIC COMPLEX (EAC)
118. CALIFORNIA ACADEMY OF MATHEMATICS AND SCIENCE (CAMS)
120. CHILD DEVELOPMENT CENTER (CDC)
121. INFANT TODDLER CENTER (ITC)

- Handicapped Parking
- Parking Permit Dispenser (\$8 Day Pass)
- Emergency Call Box Stations
- Fire Hydrants
- Police (CSU Police) - Open 24 Hours
Located in James L. Welch Hall (Building #23), For Emergency, Dial 911
- Jogging Trail with 12 Stretching Stations
- Information Booth