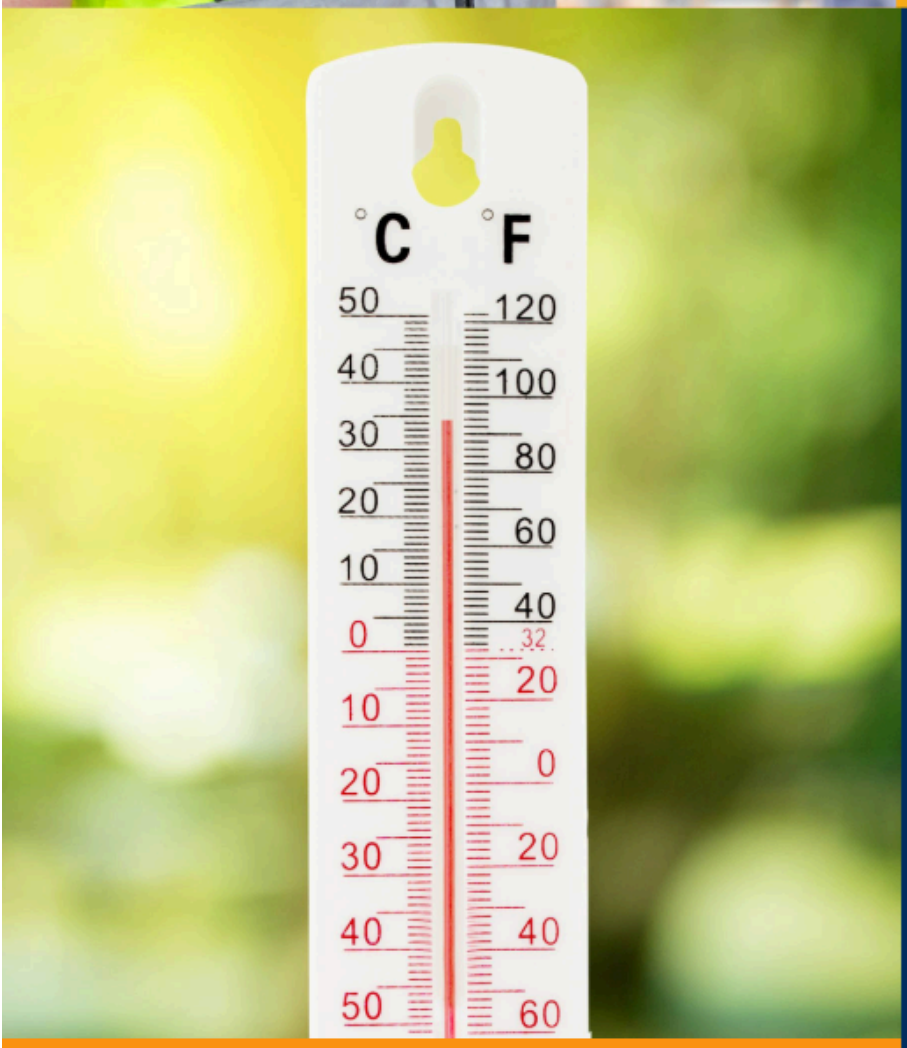

Heat Illness Prevention Program

For more information about safety at work, visit: **ehs.berkeley.edu**

Berkeley Environment, Health & Safety

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Purpose

Heat illness is a serious medical condition that results when the body is unable to cool itself sufficiently through sweating. Both personal and environmental factors can contribute to the likelihood of developing heat-related illnesses, which include heat stress, heat exhaustion, heat cramps, heat syncope (fainting), and ultimately, heat stroke.

The Outdoor Heat Illness Prevention Standard (CCR, Title 8, Section 3395), also known as the Maria Isabel Vasquez Jimenez Heat Illness Standard, requires all California employers with outdoor worksites to take steps to protect workers from heat illness. On July 23, 2024, the Occupational Health and Standards Board enacted (CCR, Title 8, Section 3396) which requires employers to also take steps to protect workers from indoor heat illness.

The UC Berkeley Heat Illness Prevention Program aims to protect all UC Berkeley employees in environments where there are risks of heat illness, whether their work is indoors, outdoors, or in other areas where environmental risk factors for heat illness are present. The UC Berkeley Heat Illness Prevention Program serves to ensure that employees are aware of the symptoms of heat illness, are knowledgeable on how to prevent it, and understand the proper steps to take if symptoms arise.

Applicability/Scope

The Heat Illness Prevention Program applies to all University employees that may be at risk of heat illness and applies to all indoor and outdoor places of employment where environmental risk factors for heat illness are present.

These procedures provide an overview of how UC Berkeley will comply with the requirements set forth by the Cal/OSHA Indoor and Outdoor Heat Illness Prevention Standards. Each applicable organization, department, and/or group is responsible for implementing policies and procedures that comply with this standard.

Exemptions:

- Places of employment where workers are teleworking that are not under the control of UC Berkeley.
- Emergency operations directly involved with the protection of life or property.
- Incidental heat exposures where employees experience temperatures between 82°F and 95°F for less than 15 minutes in any 60-minute period (this exemption does not apply to vehicles without air conditioning and shipping container loading and unloading work).

Roles/Responsibilities

Directors and Department Chairs

Directors and Department Chairs are responsible for:

- Providing the necessary resources to ensure the health and safety of their employees.
- Identifying individuals as supervisors and ensuring they are trained on their health and safety responsibilities.
- Ensuring departmental compliance with campus health and safety policies and procedures.

- Ensuring workplace hazards are identified and controlled.

Managers, Supervisors, and Principal Investigators

Managers, Supervisors, and Principal Investigators have the primary responsibility of ensuring the health and safety of their employees. Campus personnel who supervise employees with outdoor worksites, or indoor worksites that should reasonably be anticipated to result in exposure to the risk of heat illness (e.g., kitchens, boiler room, etc.), are responsible for:

- Ensuring their units comply with the UC Berkeley Heat Illness Prevention Program.
- Ensuring there is a written Work Planning & Site Checklist covering all indoor and outdoor worksites they have responsibility for (customizable work planning checklist available in PDF format).
- Being aware of the personal and environmental risk factors that contribute to heat illness.
- Ensuring employees have access to fresh drinking water and adequate cool down during breaks.
- Ensuring their employees have received documented heat illness training.
- Knowing how to respond to heat-related illness.
- Invoking High Heat and Emergency Response Procedures when required.

Employees, Students, and Volunteers

Employees, Students, and Volunteers are responsible for:

- Understanding and complying with campus health and safety policies and procedures.
- Notifying their supervisor or EH&S about any hazardous conditions observed on the worksite.
- Informing their supervisor of any factors that may increase their risk of heat-related illness.
- Reporting the signs or symptoms of heat illness in themselves, or others, to their supervisor or EH&S immediately.

The Office of Environment, Health & Safety (EH&S)

EH&S holds administrative responsibility for the campus Heat Illness Prevention Program and will assist departments and supervisors in meeting their requirements under the program upon request.

Definitions

Acclimatization: Acclimatization is defined as 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 at least two hours per day in the heat.

Administrative control: Administrative controls are adjustments made to work procedures, practices, or schedules to limit exposure to hazards. Examples of administrative controls that may be effective at minimizing the risk of heat illness in a particular work area include, but are not limited to: acclimatizing employees, rotating employees, scheduling work earlier or later in the day, using work/rest schedules, reducing work intensity or speed, reducing work hours, changing required work clothing, and using relief workers.

Clothing that restricts heat removal: Clothing that restricts heat removal is defined as full-body clothing covering the arms, legs, and torso that is any of the following: waterproof; or designed to protect the wearer from a chemical, biological, physical, radiological, or fire hazard; or designed to protect the wearer or the work process from contamination.

> ***EXCEPTION:*** *"Clothing that restricts heat removal" does not include clothing demonstrated by the employer to be ALL of the following: constructed only of knit or woven fibers, or otherwise an air and water vapor permeable material; and worn in lieu of the employee's street clothing; and worn without a full-body thermal, vapor, or moisture barrier.*

Cool-down area: A cool-down area is defined as an indoor or outdoor area that is blocked from direct sunlight and shielded from other high radiant heat sources to the extent feasible, and is either open to the air or provided with ventilation or cooling. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. A cool-down area does not include a location where: environmental risk factors defeat the purpose of allowing the body to cool; or employees are exposed to unsafe or unhealthy conditions; or employees are deterred or discouraged from accessing or using the cool-down area.

Engineering control: An engineering control is a method of control or a device that removes or reduces hazardous conditions or creates a barrier between the employee and the hazard. Examples of engineering controls that may be effective at minimizing the risk of heat illness in a particular work area include, but are not limited to, isolation of hot processes, isolation of employees from sources of heat, air conditioning, cooling fans, cooling mist fans, evaporative coolers (also called swamp coolers), natural ventilation where the outdoor temperature or heat index is lower than the indoor temperature or heat index, local exhaust ventilation, shielding from a radiant heat source, and insulation of hot surfaces.

Environmental risk factors for heat illness: Environmental risk factors for heat illness refer to working conditions that increase the likelihood of heat illness. These include but are not limited to: air temperature, air movement, relative humidity, radiant heat from the sun and other sources; conductive heat sources such as the ground, workload severity and duration, protective clothing, and personal protective equipment worn by employees.

Globe Temperature: Globe temperature means the temperature measured by a globe thermometer, which consists of a thermometer sensor in the center of a six-inch diameter hollow copper sphere painted on the outside with a matte black finish, or equivalent. The globe thermometer may not be shielded from direct exposure to radiant heat while the globe temperature is being measured.

High radiant heat area: High radiant heat area means a work area where the global temperature is at least five degrees Fahrenheit greater than the temperature.

Heat illness: Heat illness is 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.

Heat index: The Heat Index is a measure of heat stress developed by the National Weather Service (NWS) for outdoor environments which takes into account the dry bulb temperature and the relative humidity. For purposes of this document, the heat index refers to conditions in indoor work areas. Radiant heat is not included in the heat index. The required NWS heat index chart (2019) can be found in the appendix section of this document.

Heat wave: A Heat Wave occurs any day in which the predicted high outdoor temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit greater than the average high daily outdoor temperature for the preceding five days, for the purpose of Indoor Heat Illness Standard, section 3396.

Personal heat-protective equipment: Personal heat-protective equipment is worn to protect the user against heat illness. Examples of personal heat-protective equipment that may be effective at minimizing the risk of heat illness in a particular work area include, but are not limited to: water-cooled garments, air-cooled garments, cooling vests, wetted over-garments, heat-reflective clothing, and supplied-air personal cooling systems.

Personal risk factors for heat illness: Personal risk factors for heat illness are factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of medications that affect the body's water retention or other physiological responses to heat.

Types of Heat Illness

Types of heat illnesses include transient heat fatigue, heat cramps, heat rash, fainting/syncope, heat exhaustion, and heat stroke. The National Institute of Occupational Safety and Health's (NIOSH) publication Working in Hot Environments describes the symptoms and response measures for several types of heat illness, as follows:

- **Transient Heat Fatigue:** Transient Heat Fatigue is the temporary state of discomfort and mental or psychological strain arising from prolonged heat exposure. Workers unaccustomed to the heat are particularly susceptible and can suffer, to varying degrees, a decline in task performance, coordination, alertness, and vigilance. The severity of transient heat fatigue will be lessened by a period of gradual adjustment to the hot environment (heat acclimatization).
- **Heat Cramps:** Heat cramps are painful spasms of the muscles that occur among those who sweat profusely in heat and drink large quantities of water, but do not adequately replace the body's salt loss. The drinking of large quantities of water tends to dilute the body's fluids, while the body continues to lose salt. Shortly thereafter, the low salt level in the muscles causes painful cramps. The affected muscles may be part of the arms, legs, or abdomen, but tired muscles (those used in performing the work) are usually the ones most susceptible to cramps. Cramps may occur during or after work hours, and may be relieved by taking salted liquids by mouth. **CAUTION:** Persons with heart problems or those on a low-sodium diet who work in hot environments should consult a physician about what to do under these conditions.
- **Heat Rash:** Also known as prickly heat, heat rash is likely to occur in hot, humid environments where sweat is not easily removed from the surface of the skin by evaporation, and the skin remains wet most of the time. The sweat ducts become clogged and a skin rash soon appears. When the rash is extensive, or when it is complicated by infection, prickly heat can be very uncomfortable and may reduce a worker's performance. The worker can prevent this condition by resting in a cool place part of each day, and by regularly bathing and drying the skin.

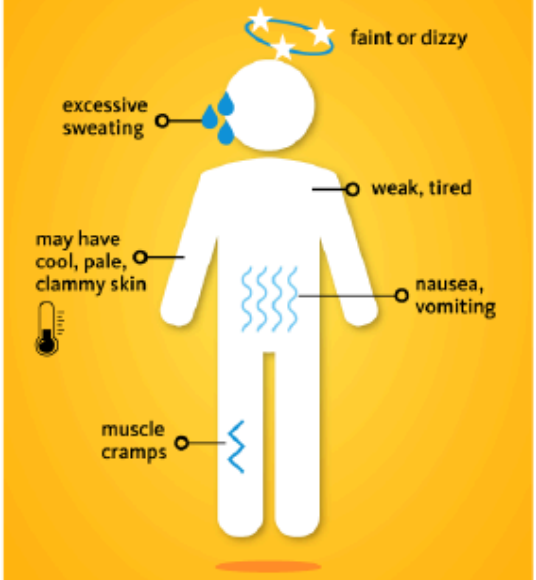
Image: *Heat Rash (CDC Public Health Image Library)*

- **Fainting/Syncope:** Fainting from heat illness, also known as heat syncope, occurs when a person feels lightheaded or loses consciousness due to prolonged exposure to high heat temperatures. In high heat blood vessels can dilate to help cool the body. The dilation can temporarily dramatically decrease blood pressure, reducing blood flow to the brain, and lead to fainting. Heat syncope often affects people who are dehydrated or unacclimated to hot weather, especially if they've been standing or exerting themselves for long periods. It's typically less severe than heat stroke but signals the need for cooling and hydration. Lying down in a cool area and slowly drinking water or an electrolyte beverage usually helps prevent further symptoms. If fainting is prolonged or accompanied by other severe symptoms like confusion or rapid pulse, it could indicate a more serious condition and immediate medical attention is recommended**.**
- **Heat Exhaustion:** Includes several clinical disorders whose symptoms may resemble the early symptoms of heat stroke. Heat exhaustion is caused by the loss of large amounts of fluid by sweating, sometimes with excessive loss of salt. A worker suffering from heat exhaustion still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. In more serious cases, the victim may vomit or lose consciousness. The skin is clammy and moist, the complexion is pale or flushed, and the body temperature is normal or only slightly elevated. In most cases, treatment involves having the victim rest in a cool place and drink plenty of liquids. Victims with mild cases of heat exhaustion usually recover spontaneously with this treatment. Those with severe cases may require extended care for several days. There are no known permanent effects. **CAUTION:** Persons with heart problems or those on a low-sodium diet who work in hot environments should consult a physician about what to do under these conditions.
- **Heat Stroke:** The most serious of health problems associated with working in hot environments. It occurs when the body's temperature regulatory system fails and sweating becomes inadequate. The body's only effective means of removing excess heat is compromised with little warning to the victim that a crisis stage has been reached. A heat stroke victim's skin is hot, usually dry, red, or spotted. Body temperature is usually 105°F or higher, and the victim is mentally confused, delirious, perhaps in convulsions, or unconscious. Unless the victim receives quick and appropriate treatment, death can occur. Any person with signs or symptoms of heat stroke requires immediate hospitalization. However, first aid should be immediately administered. This includes removing the victim to a cool area, thoroughly soaking the clothing with water, and vigorously fanning the body to increase cooling. Further treatment at a medical facility will be directed to the continuation of the cooling process and the monitoring of complications that often accompany the heat stroke. Early recognition and treatment of heat stroke are the only means of preventing permanent brain damage or death.

Health Effects of *Heat*

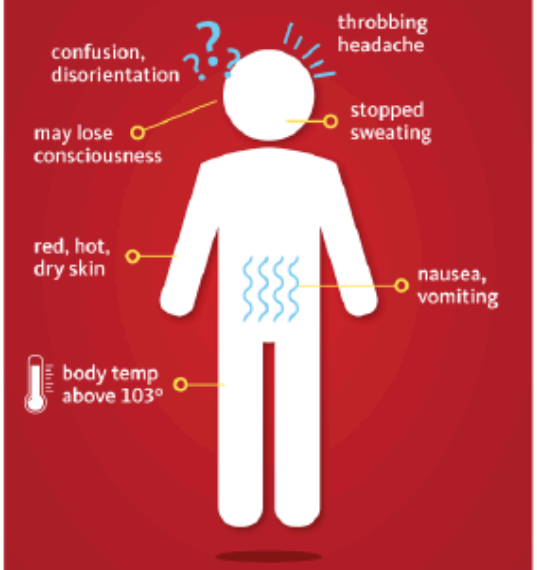
Heat Exhaustion

Symptoms may include:



Heat Stroke

Symptoms may include:



If experiencing these symptoms...

1. Get water, shade, and rest.
2. Stop all strenuous work in heat.
3. Monitor symptoms.

1. Call 9-1-1.
2. Take immediate action to cool down until help arrives.

To complete training, go to the UC Learning Center and search "Heat."

More resources are available at the UC Field Research Safety website, or contact your campus EH&S office for assistance. These suggestions were compiled by Sara Sousa, Research Safety Specialist at UC Berkeley Office of Environment, Health & Safety. She leads the UC Center of Excellence in Field Research Safety and may be reached at sarasousa@berkeley.edu.

Heat Illness Signs, Symptoms, and Treatment

Type of Heat Illness	Signs and Symptoms	Treatment
Heat Edema	Swelling of the hands, feet, and ankles is common during the first few days in a hot environment.	Heat edema is usually self-limiting and typically does not require any treatment.
Heat Rash	Sweat ducts become plugged, resulting in an itchy, red, bumpy rash on areas of the skin kept wet from sweating.	Cool and dry the affected skin and avoid conditions that may induce sweating.
Heat Cramps	Painful muscle spasms or cramps that usually occur in heavily exercised muscles. Spasms often begin when a person is resting after exercise.	Rest in a cool environment and gently apply steady pressure to the cramped muscle. Drink cold water containing a small amount of salt or a diluted sports hydration beverage.
Heat Exhaustion	Faintness, dizziness, headache, increased pulse rate, restlessness, nausea, vomiting, and possibly even a brief loss of consciousness.	This is the most common type of heat illness. Stop all exertion and move to a cool shaded place. Remove constrictive clothing. Drink water. Loosen clothing and spray clothes and exposed skin with water and a fan. Cool by placing ice or cold packs along the neck, chest, armpits, and groin (do not place ice directly on the skin). Do not return to work in the sun. If condition does not improve, seek medical help. Heat exhaustion can progress to heat stroke.
Heat Stroke	Symptoms similar to Heat Exhaustion, except that the skin is hot/dry/red, sweating has stopped, and there is a high fever (over 104°F).	This is a medical emergency. Call 9-1-1 and be prepared to provide emergency responders with the exact location of the employee. Try to cool the body while waiting for responders to arrive.

Heat Illness Prevention Procedures

Outdoor Work: The UC Berkeley Heat Illness Prevention Plan requirements shall be implemented when the ambient temperature equals or exceeds 80 degrees Fahrenheit.

Indoor Work: The UC Berkeley Heat Illness Prevention Plan is applicable when indoor workplace temperatures reach or exceed 82 degrees Fahrenheit, and additionally as follows:

- The indoor temperature or Heat Index equals or exceeds 87 degrees Fahrenheit when employees are present (additional requirements must be met)
- Employees wear PPE that restricts heat removal, and the temperature equals or exceeds 82 degrees Fahrenheit (additional requirements must be met)
- Employees work in a high radiant heat area and the temperature equals or exceeds 82 degrees Fahrenheit (additional requirements must be met)

Supervisors are responsible for developing procedures for the following measures and ensuring they are implemented, as appropriate, to help prevent heat illness among employees:

Work Planning and Site Checklist: A Work Planning & Site Checklist shall be completed and implemented at each outdoor and indoor worksite, where it could be reasonably anticipated that exposure to heat-related illness could occur. Supervisors must ensure that there is a written Work Planning & Site Checklist for each worksite under their responsibility, and employees covered by the Heat Illness Prevention Program have reviewed it and are trained on its procedures prior to commencing work in high-heat environments.

Monitor Weather Conditions: Supervisors are responsible for monitoring weather conditions and scheduling work appropriately. All employees shall be closely observed by a supervisor or designee during a heat wave. Make sure to monitor the weather at the specific location(s) where work activities are occurring. Prior to each workday, have a designated person check the weather forecast in the areas of work activities. The weather can be monitored by using local radio and television stations, websites, and electronic or other devices. See the Resources section for some specific weather monitoring resources.

Work Scheduling: There is no absolute temperature cutoff, below which, heat illness ceases to be a risk. Heavy work conducted in high humidity, especially if workers are wearing protective clothing or are not acclimated, can present a risk even at ambient temperatures of 70°F or below. Whenever possible, schedule outdoor work during cooler times of the day to reduce the risk of heat illness.

Acclimatization: Employees are more likely to develop heat-related illness if they are not allowed or encouraged to take it easy when a heat wave strikes, or when they start a new job that exposes them to heat. Cal/OSHA reported that 80% of the heat illness cases investigated in 2005 involved employees who had been on the job for fewer than 4 days; 46% of the incidents occurred on the worker's first day on the job. Acclimatization is fully achieved in most people within 4 to 14 days of regular work involving at least 2 hours per day in the heat.

Drinking Water: Supervisors shall ensure employees have access to potable drinking water at all times. Drinking water shall 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.

Rest Breaks: Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade or cool-down area 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. 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 or cool-down area
- Not be ordered back to work until any signs or symptoms of heat illness have abated. Additionally, the employee cannot be ordered back to work before their cool-down period has ended (minimum 5 minutes in addition to the time needed to access the shade or cool-down area).

Cool-Down Areas: Employees shall have access to at least one cool-down area, as close as possible to the work area, which must be kept at a temperature below 82°F and shielded from high radiant heat. The area must be large enough to accommodate the number of workers on rest breaks so they can sit comfortably without touching each other.

Shade: Supervisors shall ensure shade is available to their outdoor workers when the temperature exceeds 80 degrees Fahrenheit, and upon employee request when temperatures are below 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.

Training: Documented Heat Illness Training covering the requirements in the Training Requirements section of this document shall be provided to all applicable workers before they begin work in hot environments.

Employee Monitoring: Supervisors should continuously monitor employees closely for signs and symptoms of heat illness. During heat waves and with new employees, supervisors must be extra vigilant. All employees shall be closely observed by a supervisor or designee during a heat wave. A “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.

Indoor Heat Illness Control Procedures - Additional Actions

When the indoor temperature reaches or exceeds 87°F, or reaches or exceeds 82°F and employees wear restrictive clothing or work in high radiant heat areas, the following additional control measures must be implemented:

1. Measure and record the temperature and heat index, whichever is greater.
2. Use engineering controls to maintain the temperature and heat index below 87°F, or below 82°F if employees wear heat-restrictive clothing or work in high radiant heat areas. Where meeting these thresholds is not feasible, the temperature and heat index should be reduced to the lowest achievable level, and identify additional engineering controls to reduce the risk of heat illness.
3. Use administrative controls: If engineering controls are not sufficient, administrative controls must be applied to reduce heat exposure. This may include altering work schedules, providing cooldown areas, and rotating workers to reduce the risk of heat illness.
4. Use personal heat-protective equipment: If both engineering and administrative controls are not sufficient, personal protective equipment (PPE) should be used to further protect employees from heat illness.

Emergency Response Procedures

As part of their Work Planning & SIte Checklist, supervisors shall develop and implement effective worksite emergency response procedures. Emergency response procedures shall include:

- How effective communication by voice, observation, or electronic means will be 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.
- How to respond to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.
- How to contact emergency medical services and, if necessary, how employees will be transported to a place where they can be reached by an emergency medical provider.
- How in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. In non-remote areas throughout the United States, emergency medical services are generally available by calling 911. Supervisors are to ensure that employees are able to provide clear concise directions to their worksite. In remote field locations, developing procedures for emergency medical services may require extensive planning, and supervisors must ensure employees are informed of exactly how and where medical attention may be received. Always make sure employees have communication means and knowledge of how to guide emergency services to their location.

If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in an 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), emergency response procedures shall be

implemented. 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. Supervisors must reiterate to all employees the importance of immediately reporting any symptoms or signs of heat illness in themselves or co-workers and remind employees what to do in case emergency medical treatment is needed.

On-campus procedures for responding to heat illness:

- Dial 510-642-3333 for campus police dispatch or 911 (9-911 from a campus phone) for emergency medical help.
- Tell the dispatcher this is a heat-related illness.
- Provide information on the exact location of the incident using maps and building information which are readily displayed around campus if necessary.
- Provide first aid to victim until emergency responders arrive.
- Notify your supervisor.

High Heat Procedures

High-heat procedures are only required for workers who perform jobs in the industries listed below. However, it is recommended that similar procedures be implemented for non-required industries to reduce the risk of heat-related illness whenever possible.

- Agriculture
- Construction
- Landscaping
- Oil and gas extraction
- 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.

Supervisors of employees that fall under the categories listed above shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit. These procedures must include the following to the extent practicable:

- Scheduling work during the cooler hours of the day, or if possible postponing work until ambient temperatures decrease.
- 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.
- Remind employees throughout the work shift to drink plenty of water.

- Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
- 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.
- Observing employees for alertness and signs or symptoms of heat illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following:

    a. Supervisor or designee observation of 20 or fewer employees, or

    b. Mandatory buddy system, or

    c. Regular communication with sole employee such as by radio or cellular phone, or

    d. Other effective means of observation.

Considerations for Agricultural Operations

For workers employed in agriculture, the following **cool-down rest period** requirement also applies:

- When temperatures reach 95 degrees or above, the employer 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 is required and 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 an already scheduled required meal or rest period, no additional preventative cool-down rest period is required within an eight-hour workday as the cool-down period has already been accounted for.
    - However, 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).

Training Requirements

All employees, including supervisors, who may work in outdoor or indoor conditions where there are environmental risk factors for heat illness shall be provided with sHeat Illness Prevention training initially upon assignment on the information contained in this document, including:

- 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 Cal/OSHA requirements.
- The importance of frequent consumption 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 importance of acclimatization.

- The different types of heat illness, and the common signs and symptoms of heat illness.
- Importance of employees immediately reporting symptoms or signs of heat illness in themselves, or in co-workers.
- Employer's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided.
- 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, including clear and precise directions to the work site.

In addition, 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 supervisor shall be trained on their responsibilities in this Heat Illness Prevention Program.
- The procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.
- How to monitor weather reports, and how to respond to hot weather advisories.
- How to assess indoor workspaces.

Online training is provided by EH&S through the UC Learning Center- Heat Illness Prevention Training.

Record Keeping

Employees who take the online Heat Illness Prevention Training through the UC Learning Center will have their attendance recorded automatically. Additionally, supervisors should provide onsite training via tailgates, toolbox talks, or safety committee meetings, that are specific to their employees' work environment, and they shall complete the Worksite Planning and Checklist document. This document is to be kept on file for review by EH&S or Cal/OSHA upon request.

References

Outdoor Heat Illness Prevention Standard (CCR, Title 8, Section 3395)

Indoor Heat Illness Prevention Standard (CCR, Title 8, Section 3396)

Additional Resources

1. Work Planning and Site Checklist
2. National Weather Service Heat Index Chart
3. CalOSHA Heat Illness Prevention Guidance and ResourcesIndoor Heat Illness Prevention & Response Fact Sheet
4. Heat Illness Prevention in Indoor Workplaces Information for Employers Fact Sheet (Cal/OSHA)
5. National Weather Service
6. Weather Underground

Issuance/Revision History

REVISION DATE	SECTIONS REVISED	SUMMARY OF CHANGES	CHANGE WRITTEN BY / AUTHORIZED BY
November 2024	Indoor Heat Illness Control Procedures	Program review, implementation of Indoor Heat Illness Prevention Standard	Reviewed and approved by Associate Director, Health and Safety, EH&S