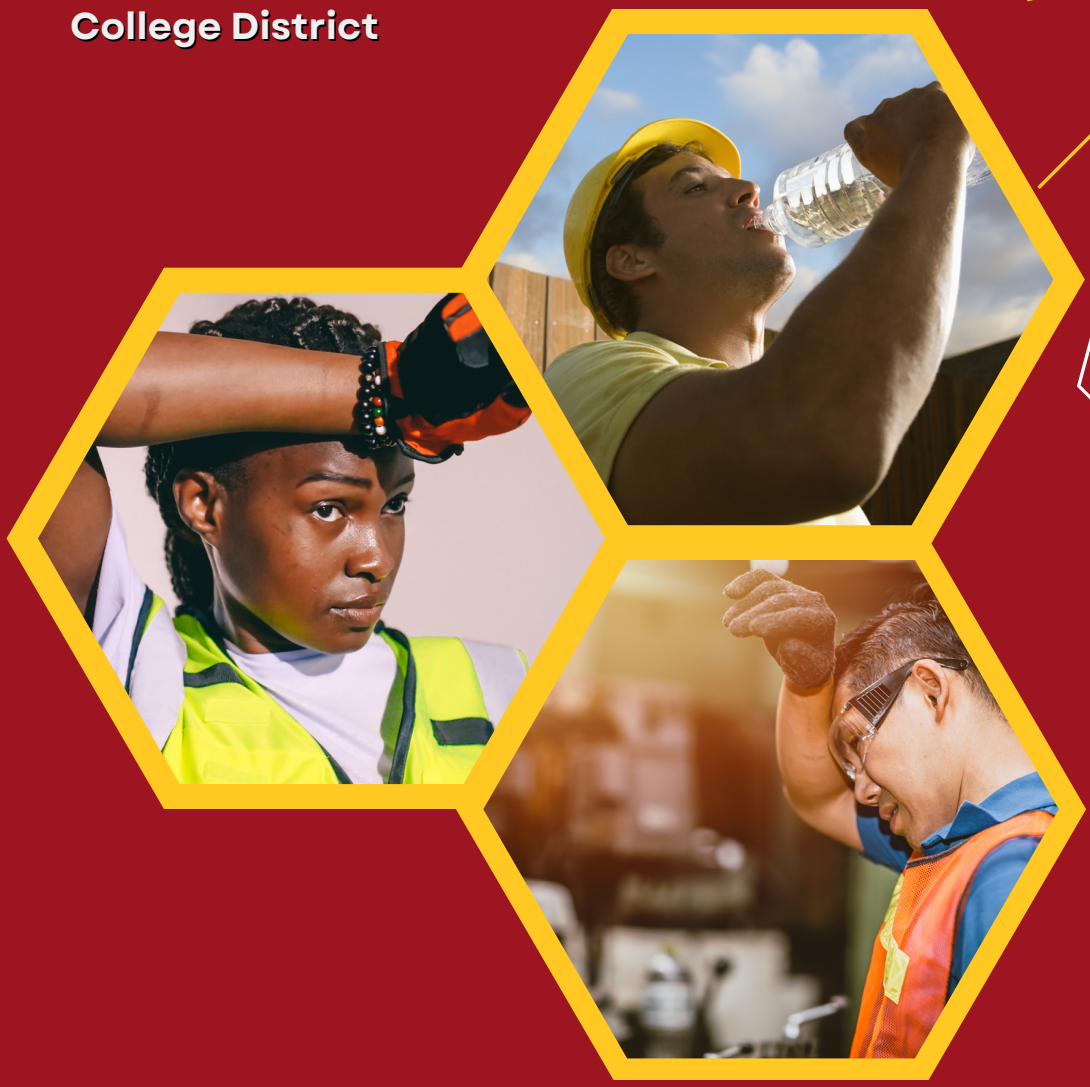
Pasadena Area
Community
College District



HEAT ILLNESS PREVENTION PLAN

Introduction

The Pasadena Area Community College District ("District") prioritizes a safe work environment that promotes the well-being of its employees. In accordance with our mission, we have developed the Heat Illness Prevention Plan (HIPP) to prioritize the safety of employees engaged in outdoor work.

This plan encompasses the following elements:

- Program Administration
- Heat Illness
- Environmental & Personal Risk
- Hydration
- Shade Access
- Weather Monitoring
- Heat Wave
- High Heat Communication
- Acclimatization
- Emergency Response
- Severe Heat Illness
- Employee & Supervisor Training

The plan strives to protect employees from the hazards associated with heat illness and ensure compliance in accordance with the provision of the California Occupational Safety and Health Administration (Cal/OSHA) Heat Illness Prevention Standard (Title 8 CCR Section 3395).

Program Administration

The implementation of the Heat Illness Prevention Plan (HIPP) is the responsibility of the Assistant Superintendent/Vice President of Business and College Services, Executive Director of Business Services, Assistant Superintendent/Vice President of Human Resources, Executive Director of Facilities and Construction Services, and Chief of Campus Police and Safety Services, collectively known as the Administrators. The Administrators or their designated representatives will regularly maintain, review, and update the HIPP, at least once a year and as needed to incorporate any new or modified tasks and procedures.

Managers/Supervisors/Leads are designated Responsible Parties and accountable for ensuring that employees working in hot conditions comply with this program and receive necessary training. Their responsibilities include:

- Providing adequate water and shade
- Knowing the procedures to follow when an employee shows signs or reports symptoms of possible heat illness
- Being familiar with emergency response procedures
- Monitoring weather reports and responding to hot weather advisories

Employees are expected to follow the procedures outlined in this program, promptly notify their supervisor of any heat illness symptoms, and report any unsafe practices that deviate from the program procedures.

Heat Illness

Heat illness is a severe medical condition that occurs when the body is unable to handle excessive heat. Exposure to heat can lead to illness and even death, making it crucial for employees to recognize the symptoms of heat illness and take necessary precautions. Heat illness includes conditions such as heat rash, cramps, syncope, exhaustion, and heat stroke, and can present the symptoms below.

Heat Rash - Can cover large areas of the body, resembling a cluster of red pimples or small blisters. It often appears on the neck, chest, groin, under the breasts, or in elbow creases. Infections can complicate it.

Heat Cramps - Painful muscle spasms in the stomach, arms, legs, and other body parts that may occur after work or at night.

Heat Syncope (Fainting) - Sudden dizziness, lightheadedness, and loss of consciousness.

Heat Exhaustion - Heavy sweating, painful muscle cramps, extreme weakness and fatigue, nausea and vomiting, dizziness and headache, normal or slightly high body temperature, fainting, fast and weak pulse, fast and shallow breathing, clammy, pale, cool, and moist skin.

Heat Stroke - Absence of sweating due to the body's inability to release heat, mental confusion, delirium, convulsions, dizziness, hot and dry skin (red, bluish, or mottled),

uncontrollable muscle twitches, rapid and weak pulse, throbbing headache, shallow breathing, seizures, loss of consciousness and coma, body temperature rising to 102° - 104° Fahrenheit or higher within 10-15 minutes.

Environmental & Personal Risk

A combination of environmental and personal factors influences heat illness risk. Environmental influences include working conditions that involve intense physical labor under high temperatures, such as outdoor work assignments, which play a crucial role. Various factors come into play, including air temperature, relative humidity, radiant and conductive heat sources, air movement, workload severity, duration, and the type of clothing or protective equipment used.

Personal risk factors include an individual's physiology, which can play a significant role. Factors such as water, caffeine, and alcohol consumption can impact the body's ability to regulate temperature and hydration. Additionally, acclimatization to heat, age, health status, and the use of certain medications can all contribute to an individual's susceptibility to heat illness. It is worth noting that certain populations are particularly vulnerable, such as the elderly and individuals with chronic conditions like diabetes or heart disease. These individuals may face challenges in maintaining temperature stability and proper hydration levels due to the underlying health conditions they are managing.

By understanding and considering both environmental and personal factors, we can effectively mitigate the risk of heat illness and ensure the well-being of those working or exposed to high temperatures.

Hydration

Drinking water is available to employees, as desired, throughout the day. Water fountains and dispensers are located in each building throughout the District campuses. Drinking water containers will be provided to employees who work outside. The containers will be large enough so that at least two quarts per employee are available at the start of the shift. Disposable cups will be made available to employees and kept clean until used. Employees are encouraged to drink water during breaks and during high temperatures. Water coolers and cups will be located as close as practicable to the areas where employees work (depending on the working conditions and layout of the worksite) to encourage frequent water drinking.

Pre-Work Hydration: Employees should properly hydrate before beginning their workday. This is essential to maintaining a balance of fluids throughout the day. Starting the day dehydrated can lead to continuous fluid deficiency, as compensating for the body's water needs may prove challenging.

Staying Hydrated On The Job: It's advisable to hydrate before you feel thirsty, as the sensation of thirst often signals that dehydration has already set in. This is particularly important in minimizing the risk of heat exhaustion. Even without noticeable symptoms, dehydration can impact your work performance negatively. When working in a hot environment, make it a habit to drink 1 cup (8 ounces) of water every 15-20 minutes. This equates to approximately ¾-1 quart (24-32 ounces) per hour. Regular, small amounts are more effective than infrequent, large quantities. However, be mindful not to exceed 48 oz (1½ quarts) per hour. Overconsumption of fluids, including water and sports drinks, can

lead to hyponatremia - a serious medical condition caused by low sodium levels in the blood.

Post-Work Hydration: Replenishing your body's water supply post-work is crucial, especially after extended periods of heat exposure. It can take several hours to adequately replace the fluids lost to sweating. The sooner you begin to hydrate post-work, the less strain you place on your body from dehydration. Regular hydration after work is critical to preventing chronic dehydration, which can increase the risk of health complications like kidney stones.

Shade Access

Shaded coverings (tent or canopy) are available for employees working outside when the temperature equals or exceeds 80 degrees Fahrenheit. Each District building is equipped with air conditioning. Additionally, various shaded outdoor areas are available for employees to receive protection from the sun. Employees are encouraged to access shade or air-conditioned buildings as close as possible to their work areas for maximum comfort and well-being when seeking relief from the heat or experiencing heat illness symptoms. This ensures employees have a comfortable environment and protection from the heat. It is important to note that while seeking shade is encouraged, the interior of a vehicle should not be used for shade unless the vehicle is air-conditioned and the air conditioner is functioning properly.

Sufficient shaded and air-conditioned areas are available to accommodate employees during their breaks. These areas are located throughout the campus, making it convenient for employees to find a cool spot to relax. Employees will be informed about the locations

of shade structures and encouraged to take a brief five-minute cool-down break whenever they feel the need to do so. This proactive approach protects employees from heat-related illnesses and ensures their well-being.

Employees who experience overheating symptoms, such as high body temperature, throbbing headache, fast pulse, nausea, confusion, disorientation, dizziness, lightheadedness, weakness, fatigue, excessive sweating, or muscle cramps and spasms, are strongly encouraged to take a preventative cool-down rest break. Employees will be monitored during this time to ensure their safety and well-being. Only when all signs and symptoms of heat illness have subsided will employees be required to return to work. The health and safety of our employees are our top priorities, and we strive to create a work environment that promotes their well-being and comfort.

Weather Monitoring

Supervisors will regularly monitor the weather forecast before each workday to ensure optimal conditions. This information will guide decisions on modifying the work schedule, such as adjusting work hours, rescheduling tasks, working during cooler periods or at night, and increasing the frequency of water and rest breaks.

In cases of anticipated extreme temperatures or heatwaves, the work schedule may be adjusted accordingly. Proactive planning is crucial whenever the temperature is expected to reach 80 degrees Fahrenheit or higher. Weather forecasts can be accessed through an internet search, by contacting the National Weather Service, or by tuning into the Weather Channel TV Network.

Furthermore, careful consideration will be given to determine if employees will be exposed to temperature and humidity levels that warrant either "extreme caution" or "extreme danger" for heat illnesses. It is important to note that if employees are working in direct sunlight, the temperature thresholds for these warnings must be lowered by up to 15 degrees. Additional measures will be taken to address these hazards.

Moreover, supplementary preventive actions will be promptly implemented when the temperature reaches or exceeds 95 degrees Fahrenheit.

Heat Wave

For the purpose of this section, “heat wave” refers to an extended period of excessively hot weather, surpassing 80 degrees Fahrenheit, often accompanied by high temperatures and humidity. It is typically characterized by stagnant or low wind conditions, intensifying the perception of heat. Heat waves can present significant health risks, particularly for vulnerable populations such as the elderly, children, and individuals with chronic health conditions.

Adjustments to the workday will be made during a heat wave or spike. Prior to commencing work, meetings will be conducted to review the District's Heat Illness Prevention Plan, assess the weather forecast, and outline emergency response procedures. Additionally, if schedule modifications are not possible, employees will receive increased access to water and rest breaks and will be closely monitored for any signs or symptoms of heat illness.

High Heat Communication

To ensure the well-being of our employees during periods of high heat, this District has implemented additional preventive measures. When the temperature reaches or exceeds 95 degrees Fahrenheit, the following protocols will be in place:

- *Effective Communication:* We will maintain open lines of communication through various means such as voice, direct observation, mandatory buddy system, or electronic devices. This will enable employees to contact their supervisors whenever necessary, even if the supervisors are not physically present.

- *Frequent Monitoring:* Employees working alone or in smaller groups will be regularly contacted via phone or two-way radio to check for any signs of heat illness. This proactive approach allows us to promptly identify and address any potential health concerns.

- *Alertness and Observation:* Supervisors will conduct frequent checks to ensure employees' well-being, paying close attention to signs and symptoms of heat illness. In the absence of a supervisor, a designated alternate responsible person will assume this role.

- *Emergency Response:* If any employee, supervisor, or designated observer reports signs or symptoms of heat illness, immediate action will be taken in accordance with our Emergency Response Procedures.

- *Hydration and Rest Breaks:* Employees will be consistently reminded to stay hydrated by drinking plenty of water throughout the work shift. They are also encouraged to take necessary cool-down rest breaks to prevent overheating.

Additionally, pre-shift meetings will be conducted to review the high-heat procedures, emphasize the importance of hydration, and remind employees of their right to rest and cool down as needed.

By implementing these measures, we aim to prioritize the well-being of our employees and maintain a safe working environment during high-heat conditions.

Acclimatization

Acclimatization refers to the body's temporary adjustment to working in hot conditions, which occurs gradually with repeated exposure. It is crucial to allow the body enough time to adapt when faced with sudden rises in temperature. Failing to do so puts employees at risk of heat-related illnesses, particularly when working in high-temperature environments or under physical strain. Employers bear the responsibility of ensuring safe working conditions for their staff and should implement additional protective measures when sudden heat exposure is expected.

Regular monitoring of weather conditions is necessary to identify heat waves, spikes, or temperatures that employees have not experienced for an extended period. Supervisors should assess whether the intensity of work can be reduced during the hottest parts of the day and consider scheduling the most physically demanding tasks for cooler periods, such as early mornings or evenings.

During heat waves, close observation of all employees is essential, with frequent communication via phone or radio to check for symptoms of heat illness. Supervisors should remain vigilant and promptly address any signs of heat-related symptoms, especially when overseeing new employees.

Employees and supervisors will be trained on the significance of acclimatization, its development, and the company's procedures to address it.

Emergency Response

An emergency response procedure will be implemented to ensure all employees' safety. This procedure will maintain effective voice, observation, or electronic communication, allowing employees to promptly contact a supervisor or emergency medical services if needed. If reliable reception is available, electronic devices like radios, cell phones, or text messaging devices may be utilized for communication purposes. However, if the work area lacks reliable communication through electronic devices, supervisors will ensure alternative means of summoning emergency medical services.

In the event of potential heat illness, appropriate action will be taken, including but not limited to providing first aid and emergency medical services. If a supervisor observes or an employee reports any signs or symptoms of heat illness, immediate action will be taken based on the severity of the condition. Severe heat illness indicators, such as decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, or convulsions, will warrant the immediate involvement of emergency medical services.

Employees displaying signs or symptoms of heat illness will be closely monitored and will not be left unattended or sent home without being offered onsite first aid or emergency medical services.

For emergency medical services, please contact Campus Police at (626) 585-7484 or Pasadena City Police at 911. Rest assured that clear and precise directions to the work site will be provided to emergency responders in case of an emergency.

Severe Heat Illness

When an employee shows signs or symptoms of heat illness, a trained first aid employee or supervisor should promptly assess the situation. They will determine whether the employee can recover by resting in a shaded or air-conditioned area and drinking cool water or if emergency services need to be contacted. It is crucial to ensure that an unwell employee is not left unattended in the shade, as their condition could worsen.

If an employee displays severe indications of heat illness, such as decreased consciousness, stumbling, vomiting, confusion, irrational behavior, incoherent speech, convulsions, or a flushed and overheated face, swift action will be taken. If no trained first aid employee or supervisor is available on-site, the Campus Police should be immediately notified. The Campus Police will call emergency services if the employee's condition does not improve even after consuming cool water and resting in a shaded or air-conditioned area. While waiting for the ambulance to arrive, appropriate first aid measures will be taken, including moving the employee to a shaded or air-conditioned area, removing excess clothing, applying ice packs to the armpits and groin, and using a fan. In such cases,

ensuring that an unwell employee stays on-site until emergency services arrive is vital. The emergency service provider should be informed about the specific signs and symptoms exhibited by the employee.

Employee & Supervisor Training

For training to be effective, it is crucial that employees understand it. Therefore, training should be delivered using language and vocabulary that the employees easily understand. Detailed training records will be maintained, including the date of training, the trainer, the attendees, and the topics covered.

Supervisors will receive training before they are assigned to supervise other employees. This training will cover the company's written procedures and the steps supervisors should take when employees show symptoms consistent with heat illness. Additionally, supervisors will be trained on their responsibility to provide water, shade, cool-down rest periods, and access to first aid. They will also be made aware of the employee's right to exercise their rights under this standard without facing any form of retaliation.

Supervisors will be trained in appropriate first aid and emergency response for different types of heat illness. They will be informed that heat illness can rapidly progress from mild signs and symptoms to severe, life-threatening conditions. Furthermore, supervisors will be taught how to monitor the weather at the job site, including monitoring online temperature forecasts and using periodic thermometer readings. They will be instructed on how this weather information should be used to modify work schedules, increase water and rest breaks, or even cease work early if necessary.

All employees and supervisors will undergo training before working outdoors. This training will encompass all aspects of implementing an effective Heat Illness Prevention Plan, including providing sufficient water, access to shade or air-conditioning, high-heat procedures, emergency response protocols, and acclimatization procedures outlined in this Plan. Employees and supervisors will also be educated on heat illness environmental and personal risk factors, emphasizing the importance of promptly reporting signs and symptoms.

In addition to initial training, employees will receive annual retraining sessions. During these sessions, employees will be trained on the steps to follow when contacting emergency medical services. This will include guidance on how to proceed when non-English speaking employees are involved, ensuring clear and precise directions are provided to the site. Employees will also be reminded of the importance of making visual contact with emergency responders at the nearest road or landmark, guiding them to their worksite.

Meetings will be conducted when the temperature is expected to exceed 80 degrees Fahrenheit. These meetings will review the weather report, reinforce heat illness prevention measures with all employees, remind them to drink water frequently, inform them about the availability of shade, and emphasize the need to watch out for signs and symptoms of heat illness.

To ensure a thorough understanding of the training and adherence to company procedures, new employees will be paired with an experienced co-worker, acting as their "buddy." This buddy system will provide support and guidance to new employees.