I. Purpose

This section outlines the policy and procedures for the prevention of heat illness to ensure all employees working outdoors are protected from heat illness and are knowledgeable regarding methods of prevention.

II. Definitions

A. Acclimatization—temporary adaptation of the body to work in the heat that occurs gradually through exposure.

B. Environmental risk factors—working conditions that create the possibility of heat illness, including air temperature, relative humidity, radiant heat from the sun or other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing, and personal protective equipment worn by employees.

C. Heat illness—a serious medical condition resulting from the body's inability to cope with a particular heat load, including heat cramps, heat exhaustion, heat syncope, and heat stroke.

D. Preventative cool-down rest—employee-optional rest period in shade with water available when needed for protection from overheating, not to be less than 5 minutes.

E. Recovery and rest period—normal breaks required to be offered under Industrial Welfare Commission wage orders (https://www.dir.ca.gov/iwc/wageorderindustries.htm).

F. Shade—blockage of direct sunlight provided by any natural or artificial means that neither exposes employees to unsafe or unhealthy conditions, nor deters or discourages access or use.

III. Policy

A. University employees must be protected from heat illness during the course of their work through appropriate access to potable drinking water and shade.

B. Departments must identify employees who are required to work where environmental risk factors for heat illness are present.

C. Employees who have not been acclimated to working out of doors in elevated temperatures (e.g., new hires, transfers) must be permitted an appropriate period of time before transitioning into full shift work.

   Generally, acclimation occurs within 4-14 days of regular work for at least two hours per day in the heat.

D. Employees who display symptoms of heat illness must seek medical assistance.

IV. Roles and Responsibilities

A. Department head

   1. Assures implementation of this section as part of the department's comprehensive health and safety program, in accordance with Section 290-15.
2. Assures that the UC Davis Heat Illness Prevention Procedures Manual is made available to employees.

B. Supervisors and Principal Investigators

1. Identify and maintain records of all outdoor tasks and employees that are required to work outdoors where potential heat illness could occur.
2. Provide proper training on heat illness prevention to all affected employees.
3. Keep a written copy of the UC Davis Heat Illness Prevention Manual at the worksite available to employees and representatives of Cal/OSHA. The plan should be in English and in the language understood by the majority of the employees.
4. Monitor weather reports and conditions for potential environmental risk factors.
5. Ensure adequate water and shade is available at the job site when environmental risk factors for heat illness are present.
6. Assure recovery and rest periods as required by law and allow a preventative cool-down rest when needed to prevent overheating.
7. Encourage employees to drink water frequently.
8. Maintain clear and precise directions to work sites for emergency responders.
9. Call 911 to request emergency medical services when required.

C. Employees

1. Follow all appropriate heat illness prevention procedures while performing assigned duties.
2. Drink adequate amounts of water when environmental risk factors for heat illness are present.
3. Take rest breaks in the shade for at least 5 minutes when a recovery and rest period is required.
4. Take preventative cool-down rests in the shade and drink water at any time needed to prevent overheating.
5. Inform the supervisor if shade or water availability is inadequate.
6. Report symptoms of heat related illness promptly to their supervisors.
7. Call 911 to request emergency medical services if required.

D. Environmental Health and Safety (EH&S)

1. Provide consultation and training to department supervisors and employees who fall within the scope of this program.
2. Assist departments in determining when, where, and how water and shade are provided.

V. Procedures

A. Shade

1. Access to shade must always be readily available and is mandatory to be present when the temperature exceeds 80 degrees Fahrenheit.
2. Employees must have access to a shaded area for recovery and rest periods and preventative cool-down rests to prevent heat illness
   a. The shaded area must be either open to the air or provided with ventilation or cooling.
   b. Shade is not adequate when heat in the area does not allow the body to cool (e.g., a car that is not air conditioned).
3. Access to shade must be within 5 minutes of the employee’s assigned work area.
4. Employees must be allowed and encouraged to take a preventative cool-down rest in the shade for a period of no less than five minutes at a time when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times.

B. Water
1. Employees must have access to potable drinking water that is fresh, pure, suitably cool, and provided free of charge, located as close as practicable to the areas where employees are working.
2. Where water is not plumbed or otherwise continually supplied, it shall be provided in sufficient quantity to provide one quart per employee, per hour, for the entire shift.
3. Employees assigned to duties away from a readily-accessible source of drinking water must be provided with suitable containers for carrying drinking water.
4. Employees are encouraged to drink small quantities of water frequently, 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.
5. Employees and supervisors must be provided a means of communication (e.g., cell phone, radio) to ensure emergency services can be contacted if necessary.

VI. Further Information
Additional information is available from EH&S, (530) 752-1493.

VII. References and Related Policies
A. California Code of Regulations, Title 8, Section 3395, Heat Illness Prevention.
B. California Division of Occupational Safety and Health (DOSH) Heat Illness Prevention webpage.
C. State of California, Department of Industrial Relations, Industrial Welfare Commission wage orders.
E. UC Davis EH&S:
   1. Heat Illness Prevention webpage.