Heat Illness Prevention Program

Department of Environmental Health & Safety
August 2020 Revision 2.0

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RECORD OF REVISIONS

Revision	By	Date	Description of Revision
1.0	RL	June 2019	New program, supersedes previous versions
2.0	CG	August 2020	Program reviewed, no change to procedural content. Updated document format for standardization.

Legend:

RL: Ruth LeBlanc
CG: Christy Gorman

DEFINITIONS

Acclimatization: The temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to a hot environment over a number of consecutive days. 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: Refers to 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 (fainting) and heat stroke.

Environmental Risk Factors for Heat Illness: 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.

High Heat Conditions: When temperatures are expected to reach or exceed 95 °f or higher.

Personal Risk Factors for Heat Illness: Risk 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.

Potentially Impacted Employees: Employees whose job tasks expose them to environmental risk factors for heat illness.

Preventative Recovery Period: A period of time to recover from the heat in order to prevent heat illness.

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 that 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.

1.0 INTRODUCTION

This program describes the safe work practices and procedures to protect Sonoma State University employees from occupational heat exposure.

1.1 Purpose & Scope

To ensure that all employees are protected from heat illness while working where environmental risk factors for heat illness are present.

2.0 RESPONSIBILITIES

2.1 Environmental Health and Safety (EH&S)

- Establish and update the written Heat Illness Prevention Program.
- Provide consultation/training to departments who fall within the Program.
- Assist departments in determining when, where, and how shade is provided.

2.2 Department

- Identify tasks/employees who are required to work outdoors where potential heat illness could occur.
- Ensure all affected employees receive proper training on heat illness prevention and comply with appropriate procedures.
- Maintain training records for three (3) years.
- Ensure that adequate water and shade are available at the job site when the environmental risk factors for heat illness are present.

2.3 Supervisors

- Ensure access to a shaded area is available when temperatures are expected to reach or exceed 85°f to prevent or recover from heat related symptoms.
- Monitor weather information / advisories and respond to High Heat Conditions (temperatures ≥ 95°f).
- Contact Police Services at 911 or (4-4444) from a campus to request emergency medical services in the event medical assistance is required.

2.4 Employees

- Awareness and compliance with all appropriate heat illness prevention procedures while performing assigned duties.
- Employees are ultimately responsible for drinking adequate amounts of hydrating fluids when the environmental risk factors for heat illness are present.
- Inform their supervisor if shade and/or water is inadequate.
- Identify and report symptoms of heat related illness promptly to their supervisor.
- Employees exhibiting or reporting signs or symptoms of heat illness shall be monitored and not left alone.
- Contact University Police at 911 or (4-4444) from a campus phone to request emergency medical services in the event medical assistance is required.

3.0 GUIDELINES/RULES

3.1 Water and Shade

Employees shall have access to potable drinking water. Where water is not plumbed, or otherwise continuously supplied, it shall be available in sufficient quantity at the beginning of the work shift to provide one (1) quart per employee per hour for drinking for the entire shift. The frequent drinking of water, as described in the training section, shall be encouraged.

3.2 Access to Shade/Ventilation

Employees suffering from heat illness or believing a preventative recovery period is needed shall be provided access to an area with shade that is either open to the air or provided with adequate general ventilation or cooling for a period of no less than five minutes. Such access to shade / ventilation shall be permitted at all times.

4.0 PROCEDURES

Departments will identify all employees, and their supervisors, who are required to work where environmental risk factors for heat illness are present. Identification of potentially impacted employees will be made at the department level.

Provide training for all potentially impacted employees, and their supervisors, working where environmental risk factors for heat illness are present. Training information shall include, but not be limited to, the topics listed in the training section of this written program. All potentially impacted employees and their supervisors must be trained on the risk and prevention of heat illness, including how to recognize symptoms and how to respond should symptoms present.

One quart per hour of drinking water shall be available at all times, for each employee, for the duration of their shift, while working outdoors in the heat. Supervisors shall remind employees to drink water frequently.

Employees shall have access to a shaded area to prevent or recover from heat illness symptoms and where they can take rest breaks from temperatures greater than 85°F. Should an employee feel unusual discomfort from the heat, a preventative recovery period shall be offered to allow employees an opportunity to cool down and prevent the onset of heat illness.

When temperatures are expected to reach or exceed 95°F or higher (high-heat conditions), employees should work in teams to monitor and observe each other for signs or symptoms of heat related illness. In addition, Supervisors shall do all of the following:

- Ensure employees have a means of communication [voice, electronic (e.g. cell phones, radios)] to contact a Supervisor
- Remind employees to drink throughout the day and to stay hydrated
- Hold pre-shift meetings on heat illness prevention
- Designate one or more employees to call for emergency services.

Employees exhibiting or reporting signs or symptoms of heat illness shall be monitored and not left alone.

Contact Police Services at 911 or (4-4444) from a campus phone to request emergency medical services in the event medical assistance is required.

5.0 TRAINING

5.1 Level of Training

Employees working on job tasks where environmental risk factors for heat illness are present shall receive training. Supervisors whose employees perform said job tasks shall also receive training.

5.1.1 Employees

Training shall be provided for all employees working on job tasks where environmental factors for heat illness are present prior to being assigned to work tasks. Training shall include the following:

- Environmental and personal risk factors for heat illness.
- Procedures for identifying, evaluating, and controlling exposure to environmental risk factors for heat illness.
- The importance of frequent consumption of hydrating fluids, up to 4 cups of water per hour, when environmental risk factors for heat illness are present, particularly when an employee is excessively sweating during the exposure.
- The importance of and procedures for acclimatization.
- Different types of heat illness and the common signs and symptoms of heat illness.
- The importance of immediately reporting symptoms or signs of heat illness, in themselves or in co-workers, to their supervisor.
- Understanding the department's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by emergency medical service.
- The department's procedures for ensuring that, in the event of an emergency, clear and precise direction to the work site can and will be provided to emergency responders.

5.1.2 Supervisors

Supervisors shall receive training on the following topics prior to being assigned to supervise outdoor employees:

- The training information required of the employees, detailed above.
- Procedures the supervisor is to follow to implement the provisions of this program.
- Procedures the supervisor shall follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.
- How to monitor weather information / advisories and respond to High Heat Conditions (temperatures ≥ 95°F).

6.0 References/Resources

California Code of Regulations, Title 8, Article 10, Section 3395

State of California Department of Industrial Relations, Heat Illness Prevention