



Heat Illness Prevention

A Program for Compliance with California Code of Regulations
Title 8, Section 3395 Heat Illness Prevention

I. OVERVIEW AND OBJECTIVES

Employees who work in outdoor places of employment or on job tasks in other areas at those 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.

This written program is based on the California Code of Regulations, Title 8, Section 3395.

II. SCOPE

McKenna General Engineering's Heat Illness Prevention Program applies to the control of risk of occurrence of heat illness and applies to all outdoor places of employment at those times when the environmental risk factors for heat illness are present.

III. POLICY

It is the policy of McKenna General Engineering that any employee participating in job tasks when environmental risk factors for heat illness are present will comply with the procedures in this document and in the Injury and Illness Prevention Program.

IV. PURPOSE

To ensure that all employees on the McKenna General Engineering job sites are protected from heat illness while working on job tasks where environmental risk factors for heat illness are present and to establish the minimum requirements for working in this environment.

V. DEFINITIONS

The term "acclimatization" means 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" means 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.

The term “heat illness” means 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.

“Personal risk factors for heat illness” means 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” means a period of time to recover from the heat in order to prevent heat illness.

The term “shade” means 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.

VI. RESPONSIBILITIES

A. Environmental Health and Safety (EH&S) is responsible for:

1. Preparing and maintaining a written program which complies with the requirements of applicable Cal/OSHA requirements.
2. Assisting with providing 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.

B. Directors, Managers, and Supervisors are responsible for:

1. Identifying all employees who are required to work outdoors where potential heat illness could occur and identifying the supervisor of the employees.
2. Assuring that adequate water and shade are available at a job site when the environmental risk factors for heat illness are present.
3. Ensuring that all affected employees have received proper training on heat illness prevention.
4. Ensuring that the requirements in this document are followed.
5. Contacting Public Safety to request emergency medical services in the event medical assistance is required. Public Safety will direct



emergency medical services to the work site.

C. Affected employees are responsible for:

1. Complying with the provisions of the Heat Illness Prevention Program, as described in this document and in the training sessions they attend.
2. Ensuring they have drinking water available at all times when the environmental risk factors for heat illness are present.
3. Ensuring they have access to a shaded area to prevent or recover from heat related symptoms.
4. Reporting heat related illness symptoms to the supervisor or directly to Work Control.

VII. BASIC REQUIREMENTS

The following basic requirements apply to all employees while working where environmental risk factors for heat illness are present.

1. All employees shall be identified who are required to work where environmental factors for heat illness are present.
2. Training shall be provided for all potentially impacted employees working where environmental risk factors for heat illness are present and their supervisors. 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 supervisors who supervise these employees must be trained on the risks and prevention of heat illness, including how to recognize symptoms and respond when they appear.
3. Drinking water in the quantity of 1 quart per hour shall be available at all times for each employee for the duration of the entire shift while working outdoors in the heat. Supervisors shall remind employees to drink frequently and this topic will be addressed at tailgate meetings.
4. Employees shall have access to a shaded area to prevent or recover from heat illness symptoms and where they can take their rest breaks. The importance of taking rest breaks and recognizing when a preventative recovery period is needed allowing employees to cool shall be addressed at tailgate meetings.
5. In the event an employee feels discomfort from the heat, a preventative recovery period is needed to allow the employee to cool down and prevent the onset of heat illness.
6. Supervisors and employees shall carry radios or other means of communication to ensure that emergency services can be called. Verification that the radios or other means of communication are functional at the work site shall be carried out prior to each shift.

VIII. TRAINING



A. LEVELS OF TRAINING

Training shall be provided for employees working on job tasks where environmental risk factors for heat illness are present, and training for their respective supervisors.

B. EMPLOYEES

All employees working on job tasks where environmental risk factors for heat illness are present shall receive instruction before being assigned to work tasks. Training topics shall include the following:

1. Environmental and personal risk factors for heat illness.
2. Procedures for identifying, evaluating, and controlling exposures to the environmental and personal risk factors for heat illness.
3. Employees who experience excessive sweating require frequent consumption of small quantities of water, up to 4 cups per hour when working in extreme conditions of heat.
4. Importance of acclimatization.
5. Different types, signs, and symptoms of heat illness.
6. Importance of immediately reporting symptoms or signs of heat illness in themselves or in coworkers to their supervisor.
7. Procedures for responding to symptoms of possible heat illness, including how emergency medical services will be contacted and provided, should they become necessary.

C.. SUPERVISORS OF AFFECTED EMPLOYEES

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

1. Information as detailed above in employee training requirements.
2. Procedures the supervisor shall follow to implement the provisions of this program.
3. Procedures the supervisor shall follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

IX. PROGRAM AUDITS

A. RESPONSIBILITY

Audits of the Heat Illness Prevention Program shall be performed by Supervisors and Environmental Health and Safety.



B. FREQUENCY

Audits of the Heat Illness Prevention Program shall be performed annually.

C. CONTENTS

1. The audit shall review the program to ensure that heat illness prevention procedures are in place and are being properly followed.

IX. RECORDS

All training, audit, and other records prepared in association with the Heat Illness Prevention Program shall be managed in accordance with the requirements of the McKenna General Engineering Injury and Illness Prevention Program.