



Heat Illness Prevention Program

**For Compliance with
Federal and State
Heat Illness Regulations**

***Approved by Mesa Safety Committee
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REVISION RECORD

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Table of Contents

PURPOSE	1
REGULATORY CITATIONS	1
DIVISION OF RESPONSIBILITIES.....	1
Vice President of Administrative Services (VPA)	1
Occupational, Environmental Health and Safety Coordinator (OEHS)	2
Dean/Manager/Supervisor	2
Employees	3
Mesa Safety Committee	3
Students.....	3
CRITICAL TEMPERATURES.....	3
Application	4
Determining Heat Index	4
Heat Index of 80 Degrees F or higher	5
Heat Index Exceeding 95 Degrees F	5
Protective Clothing.....	6
HEAT ILLNESSES AND MEDICAL RESPONSE PROCEDURES	7
Types of Heat Illness and First Aid	7
Personal and Environmental Risk Factors	10
At Risk Employees	11
CONTROL MEASURES.....	11
Acclimatization	11
Fans	11
Work Schedules.....	12
Personal Protective Equipment.....	12
Stationary Assignments.....	12
TRAINING	13
RECORDS	14
APPENDICES	15
APPENDIX A: Illness Prevention Program Checklist	15
APPENDIX B: Worksite Specific Heat Illness Prevention Plan.....	18
APPENDIX C: Heat Safety Poster	20
APPENDIX D: Stages of Heat Illness.....	22

PURPOSE

The San Diego Community College District, recognizing that the health, safety, and well-being of its employees are of paramount importance in the management of the District, affirms its commitment to create and maintain a safe and healthful working environment.

Mesa College's Heat Illness Prevention Program provides guidance to reduce the negative effects of heat on employees whose job classifications involve tasks outdoors or in hot environments.

The human body's physiological processes are designed to work in a very narrow temperature range. During times of elevated heat or humidity, such as those that can occur in San Diego, the human body has a reduced capacity to efficiently remove heat. As the body temperature rises, the body can start to feel negative health effects. If not properly addressed, extreme cases of heat-induced illness can result in death.

This Program outlines methods to avoid heat related illnesses as well as outline the College's responsibility to affected employees in times of elevated temperatures.

REGULATORY CITATIONS

- California Code of Regulations, Title 8, § 3395
- National Institute of Occupational Safety and Health, Occupational Exposure to Heat and Hot Environments

DIVISION OF RESPONSIBILITIES

The District Designee for Mesa College, the Vice President of Administration (VPA), will serve as the Heat Illness Prevention Program facilitator. Each supervisor will implement the program and serve as the Department program coordinator. The supervisors will consult and work with the VPA or Occupational, Environmental Health and Safety Coordinator (OEHS) in order to establish proper implementation of the Program.

To ensure effective implementation of this program, all personnel designated to carry out specific responsibilities are expected to know and understand the procedures outlined in this document and the specific contents of this Hazard Communication Program for their assigned facility.

Vice President of Administrative Services (VPA)

The Vice President of Administrative Services has the authority and responsibility for the implementation and maintenance of this *Program*, including:

1. Developing or adopting the necessary policies and programs to adequately maintain a

- safe and healthful work and learning environment at Mesa College
2. Providing for required equipment and monitoring as specified in this *Program*
 3. Recommending to the Site Safety Committee any additions or changes to the *Heat Illness Prevention Program*
 4. Assisting supervisors in conducting workplace hazard assessments to identify, evaluate, and reduce heat-related hazards
 5. Providing for training to those employees required to abide by this *Program*
 6. Assigning designees to fulfill all aspects of this *Program*.

Occupational, Environmental Health and Safety Coordinator (OEHS)

The OEHS Coordinator is responsible for the oversight and maintenance of this *Program*, including:

1. Reviewing the *Program* annually and updating, as necessary
2. Evaluating the adequacy and consistency of heat illness prevention training
3. Providing technical expertise to the Campus, as requested and required
4. Monitoring Cal/OSHA standards for relevant regulatory changes
5. Monitoring weather forecasts to identify days where the provisions of this *Program* must be implemented.
6. Conducting periodic program audits and inspections to evaluate compliance with all Federal, State, County, District, Facility, and College heat-related regulations and recommendations

Dean/Manager/Supervisor

The Deans/Managers/Supervisors are responsible for implementing and enforcing the provisions of this *Program*, including:

Identifying job classifications that fall under the scope of this Program

1. Identifying locations and work activities, in coordination (if needed) with the OEHS Coordinator, to determine if any fall under the scope of this *Program*
2. Ensure employees have completed Heat Illness Prevention training, which includes recognizing the signs and symptoms of heat illness
3. Developing and implementing administrative controls, whenever possible, to reduce prolonged employee exposure to heat and humidity
4. Ensuring employees are notified when temperatures will trigger the provisions of this *Program*
5. Ensuring that there is a written Heat Illness Prevention Plan that covers each outdoor worksite they are responsible for (see Appendix B)
6. Ensuring departmental compliance with elements of this program
7. Maintaining and stocking appropriate equipment to reduce the impact of heat and humidity as required by this *Program*
8. Properly maintaining potable water sources

9. Ensuring procedures for contacting emergency medical services are in place, and what to do should a heat illness emergency occurs
10. Providing technical expertise to employees
11. Assigning designees to fulfill all aspects of this *Program*.

Employees

Employees are responsible for:

1. Completing all necessary training
2. Complying with all relevant aspects of the *Heat Illness Prevention Program*
3. Identifying tasks that may potentially fall under the scope of this *Program*
4. Monitoring themselves and others for signs and symptoms of heat illness
5. Knowing and understanding how to address heat illnesses
6. Reporting any *Program* deficiencies to their supervisor or the OEHS Coordinator.

Mesa Safety Committee

The Mesa Safety Committee is a participatory governance committee comprised of College administrators, faculty, staff and students drawn from a diverse and representative set of schools and departments. The Safety Committee will:

1. Review compliancy with campus policies and recommend methods to promote compliancy.
2. Periodically review the campus Heat Illness Prevention Program for effectiveness and compliancy.
3. Provide technical support to the departments covered by Heat Illness Prevention Program.
4. Conduct periodic safety reviews.

Students

While students are not specifically covered under the provisions of the regulations due to their non-employee status, students shall be made aware of heat hazards they may encounter during the course of their studies. Blatant disregard for provisions of this Program could result in administrative action.

CRITICAL TEMPERATURES

The *Heat Illness Prevention Standard* (8 CCR 3395) requires employers to take action at two critical temperatures. The temperature determination is based on the heat index which is the combination of temperature and humidity. Many weather web sites or apps will provide the heat index as well as the air temperature. There are also other factors that will change the trigger points for the activation of the requirements of this program

Application

The elements of this *Program* apply to the following activities

1. Outdoor work, exposed to direct sunlight
2. Outdoor work of a hard, physical nature such as digging, chopping, or using hand tools for more than two (2) hours either in direct sunlight or in shaded areas
3. Indoor work near heat-producing equipment, such as boilers, furnaces, or ovens
 - a. For indoor work, supervisors must take temperature readings in the vicinity of the heat producing device prior to employees beginning their tasks and periodically monitor the temperature throughout the shift if conditions or activities change.
 - i. If historical data is available and the equipment or tasks have not been changed in five (5) years, then updated readings are not required.
 - ii. Supervisors shall notify their employees of the estimated temperature ranges they may encounter and the application of the provisions of this Program at the time of their initial assignment.
 - b. Such areas that are subject to heat provisions should be labeled with a heat stress warning sign at the entrance or near the equipment.
4. Tasks that require protective clothing ensembles outdoors or in elevated temperature areas.

Determining Heat Index

1. Before the start of the shift and in the middle of the shift, the Supervisor will determine whether heat illness prevention measures shall be taken if temperatures are forecast to exceed eighty (80) degrees F.
 - a. If the Supervisor or their designee is unavailable, the Department should contact the OEHS Coordinator.
 - b. The results of this determination shall be communicated to all relevant supervisors and employees as soon as possible.
2. The heat index may be found on the National Weather Service website (www.weather.gov) as well as many other websites or apps.
 - a. From the home page, enter the zip code where the outdoor work is to occur.
 - b. In the middle of the results page, there is an entry labeled 'Heat Index'
3. The heat index was developed for shaded conditions with light winds.
 - a. For outdoor employees working in direct sunlight with no shade and no breeze, the supervisor should add fifteen (15) degrees to the calculated heat index temperature
4. The provisions of this section should also take effect during heat waves.
 - a. For this Program, a heat wave occurs when the predicted high temperature

exceeds either of the trigger temperatures and is at least ten (10) degrees F higher than the average over the preceding five (5) days (8 CCR 3395 (g)(1)).

Heat Index of 80 Degrees F or higher

Managers and supervisors must take the following heat illness precautions when the heat index exceeds 80 degrees F (8 CCR 3395 (c) and (d)).

1. Allow access to water and shade during regularly scheduled breaks (at least every two (2) hours).
 - a. As all District facilities are urban. Therefore, the District meets the requirements for access by:
 - i. Being fully landscaped with trees that provide shade
 - ii. Having buildings that provide large areas of shade
 - iii. Having accessible climate controlled buildings which employees can enter at their leisure
 - iv. Having some combination of plumbed water faucets, restroom facilities, and food service that have potable water readily available at all Facilities.
 - b. In the event of plumbing system failure or work in remote areas more than a ten (10) minute walk to any building, supervisors shall arrange for water to be made available at the work activity location.
 - i. Employees may provide their own reusable containers and be allowed to fill them periodically throughout the day.
 - ii. Water must be provided at the beginning of the shift and enough cool, potable, and fresh water to supply each employee with one (1) quart per hour of work at the site.
 1. The entire supply of water need not be present at the beginning of the work as long as the supervisor has made arrangements for the appropriate amount to be supplied as required (8 CCR 3395 (c)).
2. Employees shall be allowed to access water as needed and shade for cool-down rest periods when they feel they require relief from the heat (8 CCR 3395 (d)(3)).
 - a. Employees who request a break shall be monitored for signs and symptoms of heat illness (refer to section V)
 - b. Employee breaks shall be long enough for signs and symptoms to diminish but may be no less than five (5) minutes.

Heat Index Exceeding 95 Degrees F

Managers and supervisors must take the following heat illness precautions when the heat index exceeds 95 degrees F (8 CCR 3395 (e)).

1. When possible, outdoor, high work load, or high-heat tasks should be rescheduled

earlier in the shift or shift start times should be modified to perform work in the cooler part of the day.

2. If flexible scheduling is not possible or practical, then supervisors shall
 - a. Conduct pre-shift meetings to remind employees about high temperature procedures, identifying signs and symptoms of heat illness, heat illness first aid, and emergency medical procedures
 - b. Remind employees throughout the shift to drink small amounts of water, regardless of perception of thirst
 - i. Recommendation is to drink about 4 cups of water per hour during hottest periods of the day.
 - c. Implement a communication system for employees to contact emergency services in case of a heat illness and for the supervisor to periodically check on employees
 - d. Implement a buddy-system for each high heat task.
3. Employees shall take a minimum of a ten (10) minute break every two hours in the shade with access to water (8 CCR 2295 (e)(6)).
 - a. This provision does not replace or extend regularly scheduled meal or rest breaks.
4. Strenuous work tasks and those requiring impermeable chemical protective clothing and full-face respirators should be rescheduled if the heat index exceeds one hundred and five (105) degrees F.
 - a. If the work is critical to maintaining the operations of the District or is an emergency situation, the supervisor shall consult with the OEHS Office for additional precautions.

Protective Clothing

The temperature thresholds for this *Program* are established for employees wearing their 'normal work uniform' consisting of a long-sleeve shirt and long pants. However, in performing some activities, such as working with hazardous materials, painting, or applying pesticides, employees may wear chemical protective clothing, or other types of PPE, which inhibits the body's ability to remove heat via sweating.

1. In instances where employees must wear chemical protective coveralls, air-purifying respirators, or an additional layer of clothing (such as for welding), or other PPE, the action levels stated in this Section shall be reduced by five (5) degrees (e.g., 75 and 90 degrees).
2. When the heat index exceeds seventy-five (75) degrees, employees wearing protective clothing shall be allowed to take no less than a five (5) minute rest break each hour.
 - a. The break shall be in an area where the protective clothing is not required to allow for the garment to be opened, allowing body heat to escape.
 - b. The break shall be in a shaded area.
 - i. If shade is not available in the immediate area, a shade structure shall be provided by the supervisor.
3. When the heat index exceeds ninety (90) degrees, employees wearing protective

clothing shall be allowed to take no less than a ten (10) minute break each hour.

- a. In addition to the provisions noted above, employees should take water or sports drinks during this break to avoid dehydration.

HEAT ILLNESSES AND MEDICAL RESPONSE PROCEDURES

Types of Heat Illness and First Aid

There are several types of heat-related illness. The following sections will explain the symptoms, causes and first aid procedures for each type of heat-related illness. All signs or symptoms of heat illness should be reported to a supervisor immediately. 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.

Heat Stroke

Heat stroke is the most serious heat-related disorder. It occurs when the body becomes unable to control its temperature; the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106 degrees Fahrenheit or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not given.

Heat Stroke Symptoms:

- Hot, dry skin or profuse sweating
- Hallucinations
- Chills
- Throbbing headache
- High body temperature
- Confusion/dizziness
- Slurred speech

Heat Stroke First Aid:

- The employee shall be immediately moved to a cool, shaded place
- The supervisor shall be notified immediately and shall respond to the location to monitor the employee
- ***Emergency medical services shall be contacted as soon as possible by contacting College Police or 911***
- The employee shall be treated for shock by having them lie down and elevate the legs

- The employee shall be given cool, not cold, water or sports drink (i.e. Gatorade, Powerade)
 - Energy drinks (i.e. Monster, Red Bull, Rockstar) do not replenish electrolytes and may make the symptoms worse.
- Cool the individual using methods such as:
 - Loosening or removing clothing
 - Soaking their clothes with water
 - Spraying, sponging, or showering them with water
 - Fanning their body
- Based on a physician's recommendation, the employee will likely need to recover for a couple of days and should be placed on a modified work assignment where the employee is not exposed to heat.

Heat Exhaustion

Heat exhaustion is the body's response to an excessive loss of water and salt, usually through excessive sweating. Workers most prone to heat exhaustion are those that are elderly, have high blood pressure, and those working in a hot environment.

Heat Exhaustion Symptoms:

- Heavy sweating
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea
- Clammy, moist skin
- Pale or flushed complexion
- Muscle cramps
- Slightly elevated body temperature
- Fast and shallow breathing

Heat Exhaustion First Aid:

- The employee shall be immediately moved to a cool, shaded place
- The supervisor shall be notified immediately and shall respond to the location to monitor the employee
- The employee shall be treated for shock by having them lie down and elevate the legs
- The employee shall be given cool, not cold, water or sports drink (i.e. Gatorade, Powerade)
 - Energy drinks (i.e. Monster, Red Bull, Rockstar) do not replenish electrolytes and may make the symptoms worse.
- Cool the individual using methods such as:
 - Loosening or removing clothing
 - Soaking their clothes with water
 - Spraying, sponging, or showering them with water
 - Fanning their body

- If the employee does not feel better within one (1) hour, emergency medical services should be contacted for assistance.
- Encourage individual to drink water or other cool, nonalcoholic and non-caffeinated beverages.
- Based on a physician's recommendation, the employee will likely need to recover for a couple of days and should be placed on a modified work assignment where the employee is not exposed to heat.

Heat Syncope

Heat syncope is a fainting (syncope) episode or dizziness that usually occurs with prolonged standing or sudden rising from a sitting or lying position. Factors that may contribute to heat syncope include dehydration and lack of acclimatization.

Heat Syncope Symptoms:

- Light-headedness
- Dizziness
- Fainting

Heat Syncope First Aid:

- The supervisor shall be notified immediately and shall respond to the location to monitor the employee
- Contact emergency medical services.
- Have individual sit or lie down in a cool, shaded or air conditioned area and allow them to rest.
- Encourage individual to drink water or other cool, nonalcoholic and non-caffeinated beverages.

Heat Cramps

Heat cramps usually affect workers who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture levels. Low salt levels in muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Heat Cramp Symptoms:

- Muscle pain or spasms usually in the abdomen, arms, or legs.

Heat Cramp First Aid:

- Stop all activity, and sit in a shaded and cool place until the signs and symptoms have gone away, but no less than five (5) minutes (8 CCR 3395 (d)(3)).
 - They shall be accompanied by the supervisor or another employee.
 - If the employee recovers, they may resume their activities
- Drink clear juice or an electrolyte sports beverage.
- Do not return to strenuous work for a few hours after the cramps subside because further exertion may lead to heat exhaustion or heat stroke.

- If the signs and symptoms do not decrease after five (5) minutes or get worse, the employee shall be referred to Student Health Services or the District's contracted medical provider.

Heat Rash

Heat rash occurs when sweat ducts become clogged and the sweat can't get to the surface of the skin. Instead, it becomes trapped beneath the skin's surface causing a mild inflammation or rash.

Heat Rash Symptoms:

- Heat rash looks like a red cluster of pimples or small blisters.
- It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creases.

Heat Rash First Aid:

- Work in a cooler, less humid environment when possible.
- Keep the affected area dry.
- Dusting powder may be used to increase comfort.

Personal and Environmental Risk Factors

There are a number of factors that can increase the likelihood of an individual experiencing heat related illness. Often heat illness is a result of a combination of environmental and personal risk factors.

Environmental Risk Factors

Environmental risk factors are working conditions that increase the likelihood of a person experiencing heat related illness. They include:

- Warm temperatures
- High humidity
- Direct exposure to the sun or other heat sources
- Limited air movement

Personal Risk Factors

Personal factors affect how well an individual responds to heat. They include:

- Age, weight, and physical condition
- Degree of acclimatization
- Consumption of water, alcohol, drugs and caffeine
- Use of medications that affect tolerance to heat

Job Related Risk Factors

An individual's job duties may increase the likelihood of experiencing heat related illness, such as:

- Physical exertion and duration
- Protective clothing and protective equipment worn by employees

At Risk Employees

Although Mesa College typically enjoys a mild climate, there are times when temperature and humidity can rise significantly and increase the risk of heat related illness. The following are examples of groups of employees who may be susceptible to these conditions:

- Athletics Staff
- Delivery Personnel
- Emergency Response Personnel
- Events Staff
- Facilities Management Employees
- Groundskeepers
- Food Service and Culinary Staff
- Parking Services Employees
- Police Officers
- Other individuals not listed who work outdoors, or in indoor areas where heat stress is likely to occur (kitchens, boiler rooms, etc.).

CONTROL MEASURES

Controls can be used to prevent or reduce the effects of heat on employees.

Acclimatization

Acclimatization is the gradual exposure to elevated temperatures over a period of time.

1. During heat waves (as defined in Section Determining Heat Index 4.a), supervisors or designees shall institute more frequent daily observations or communications with exposed employees due to the sharp increase in temperature.
2. For new employees starting work in the warm weather months, they shall be closely observed by a supervisor or designee during the first fourteen (14) days while working in elevated temperatures.
3. Older employees, employees who have been on vacation or other leave for more than one (1) week, and employees currently ill or just returning from illness should also be monitored during periods of elevated temperatures.
4. Whenever possible, supervisors should gradually increase the outdoor or heat exposure workload over a period of one (1) to two (2) weeks when temperatures begin to be consistently over seventy-five (75) degrees F.

Fans

In rooms or areas with the potential for heat exposure, area fans can be used to increase air flow and reduce the heat index as long as they do not create or exacerbate other hazards.

Work Schedules

Particularly in instances of anticipated high heat exposures (heat index exceeding 95 degrees F), work should be scheduled early in the day, in the evening, or at night to avoid the maximum daytime temperatures.

1. Employees may be placed on work/rest cycles to reduce the effects of heat.
 - a. A 'rest' cycle does not necessarily imply a contractual break but a time of reduced work intensity.
 - i. The employee is removed from exposure to heat, in complete shade or an air-conditioned space, and has access to water but may perform other light duties while the body recovers in preparation for returning to the hot environment.
 - b. Rest/work cycles shall increase the rest period and decrease the work period as
 - i. Temperature rises
 - ii. Humidity rises
 - iii. Air movement decreases
 - iv. Toward the early afternoon/hottest part of the day
 - v. When protective clothing is worn
 - vi. When the work activity increases in intensity
 - vii. Employees are not recovering adequately from exposure
 1. To monitor recovery, employees shall take their pulse at the wrist for thirty (30) seconds at the beginning of a break and multiply by two (2).
 - a. If the pulse exceeds one hundred ten (110), the next work cycle should be reduced by one third and the rest period shall remain the same.
 - b. At the next rest period, if the measured pulse still exceeds one hundred ten (110) beats per minute, the rest cycle shall be increased by one third.
 - c. This process shall repeat until the rest periods exceed the work periods at which the task shall be rescheduled, if possible.

Personal Protective Equipment

There are several devices which can be used by individuals to reduce their body temperature, such as

1. Cooling vests
2. Ice packs
3. Heat reflective garments
4. Personal fans and misters

Stationary Assignments

In certain instances, employees may not be allowed to leave the location of their activity for rest breaks when one of the trigger temperatures is reached, such as security details or traffic control.

1. In instances where an employee must remain at their location due to the nature of the assignment or for health and safety reasons, a portable shade structure and drinking water shall be provided to them.
 - a. The supervisor shall determine whether the nature of the assignment requires portable shade and water.
 - b. The supervisor shall arrange for water and shade to be provided prior to the first rest or break period.
 - c. If the employee can be relieved to allow for breaks, shade and water do not need to be provided

TRAINING

General Provisions

1. All employees who may work outside or in hot environments shall receive training upon their initial assignment.
 - a. Training shall include (NIOSH)
 - i. Heat stress hazards
 - ii. Predisposing factors- weight, physical condition, health conditions, etc.
 - iii. Signs and symptoms of heat illness
 - iv. Health effects of heat
 - v. First aid and advanced medical notification procedures
 - vi. Proper precautions, including access to water and shade
 - vii. Concept of acclimatization
 - viii. Worker's responsibilities
 - ix. Effects of pharmaceuticals, alcohol, and caffeine on the body's ability to handle heat
 - x. Effects of personal protective equipment
2. In addition to the above, all supervisors whose employees fall under the scope of this program shall be trained in (8 CCR 3395 (h)(2))
 - a. Supervisor's responsibility during times of high heat
 - b. How to respond to employees experiencing heat illness, including when to contact emergency medical services
 - c. How to monitor weather and determine heat index
3. A review of these topics should occur annually before May.
4. Brief reviews should also occur periodically throughout the summer months (May through October).
 - a. Brief, 'tail-gate' ("training) reviews need not be recorded on a training log.
 - b. An example Safety Poster which can be posted and reviewed is available in Appendix C

RECORDS

The appropriate supervisor shall retain copies of training logs for their employees for no less than three (3) years.

APPENDICES

APPENDIX A: Illness Prevention Program Checklist

Mesa College Heat Illness Prevention Program Compliance Checklist

Department/Unit: _____ Supervisor: _____

Completed by: _____ Date: _____

Heat Illness Program Applicability			
Question	Yes	No	Action Required
Do employees perform work outdoors, or in indoor areas where Heat Illness is likely to occur?			If no , stop. Heat Illness Prevention Program not required.
Training			
Have employees received documented Heat Illness Prevention Training?			If no , ensure employees receive Heat Illness Prevention Training
Have supervisors received documented Supervisor Heat Illness Prevention Training?			If no , ensure supervisor receive documented Supervisor Heat Illness Prevention Training
Have employees and supervisors reviewed the Mesa Heat Illness Prevention Program?			If no , direct individuals to review the Mesa Heat Illness Prevention Program.
Water			
Do employees have access to sufficient drinking water? (At least one quart per employee per hour for drinking for the entire shift.)			If no , develop and implement procedures for providing access to sufficient drinking water.
Cool-down Breaks and Shade			
Are employees who take preventative cool-down breaks monitored and asked if they are experiencing symptoms of heat illness, and if so, encouraged to remain in shade until all signs or symptoms of heat illness are abated?			If no , employees shall be encouraged to remain in the shade until any signs or symptoms of heat illness have abated (no less than 5 minutes in addition to the time needed to access the shade).
Do employees have access to shade when temperatures exceed 80F? (Shade means the blockage of direct sunlight. Shade is not considered adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool (e.g. sitting in a hot car). Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions, or discourage its use.)			If no , develop and implement procedures to ensure shade is provided.
Heat Illness Prevention Plan			
Do employees perform outdoor work off-campus, or in other areas not adequately covered by the Mesa Campus Heat Illness Prevention Plan?			If yes , develop Worksite Specific Heat Illness Prevention Plans using the worksheet provided by OEHS.

Have employees covered by the Heat Illness Prevention Plan review it, and been trained on its procedures?			If no , ensure employees review the Heat Illness Prevention Plan and are properly trained on its procedures.
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Work Scheduling and Acclimation			
Question	Yes	No	Action Required
Do supervisors monitor weather conditions, and when possible schedule outdoor work during cooler times of the day to reduce the risk of heat illness?			If no , ensure supervisors monitor weather conditions and scheduling work appropriately.
Are employees given time to acclimate to their environment? (Gradually exposed to regular working conditions for a least four to fourteen days for at least two hours per day in the heat.)			If no , develop procedures to ensure employee(s) are acclimated prior to performing strenuous work in heat.
Are employees closely observed by a supervisor or designee during a heat wave (any day in which the predicted high temperature for the day will be at least 80F and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days)?			If no , develop procedures to closely observe employees during a heat wave.
Are employees who have been newly assigned to a high heat area closely observed by a supervisor or designee for the first 14 days of the employee's employment?			If no , develop procedures to closely observe employees during the first 14 days of their employment.
Emergency Medical Procedures			
If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, are there procedures in place to ensure appropriate first aid or emergency response is provided?			If no , develop first aid and emergency response procedures.
Are there established procedures for ensuring that effective communication by voice, observation, or electronic means is 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 supervisor shall ensure other means of summoning emergency medical services are available.)			If no , develop effective communication procedures.
Are there established 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?			If no , develop procedures.

Are there established procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders? These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.			If no , develop procedures.
Have employees been trained on these procedures?			If no , train employees on Emergency Response Procedures.

High Heat Procedures (only required for agricultural, construction, landscaping and transportation workers when temperatures exceed 95° F)			
Question	Yes		Action Required
Do employees perform agricultural work, construction, landscaping, or transportation and loading/unloading of heavy goods?			If yes , High Heat Procedures must be implemented when temperatures exceed 95° F. If no , High Heat Procedures not required to be implemented but are recommended to be used as needed to ensure employees' safety.
Are pre-shift meetings held 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?			If no , conduct pre-shift meeting as necessary.
Are employees monitored 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.			If no , develop procedures to closely monitor employees when temperatures exceed 95° F.
Are one or more employees on each worksite designated as authorized to call for emergency medical services?			If no , ensure one or more employees are designated as authorized to call for emergency medical services.
Are employees reminded to drink plenty of water throughout the work shift?			If no , ensure employees are reminded to drink plenty of water.
Notes			

APPENDIX B: Worksite Specific Heat Illness Prevention Plan

Mesa Worksite Specific Heat Illness Prevention Plan

Supervisors shall develop and implement a Worksite Specific Heat Illness Prevention Plan for off campus outdoor worksites, and other worksites not adequately covered by the Campus Heat Illness Prevention Plan. Employees covered by this plan shall review it and be trained on its specific procedures prior to commencing outdoor work.

Department/Unit: _____ Supervisor: _____

Worksite Description/Location: _____

Completed by: _____ Date: _____

How will employees be provided access to sufficient drinking water? (At least one quart required per employee per hour)

☐Plumbed water ☐Water cooler ☐Bottled water ☐Other (describe below):

How will employees be provided access to adequate shade when temperatures exceed 80F? Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions. Shade is not considered adequate when heat in the area does not allow the body to cool (e.g. sitting in a hot car).

☐Buildings or other manmade structures ☐Trees ☐Temporary Canopy or Tarp ☐Vehicle with A/C
☐Other (describe below):

Acclimatization Methods and Procedures

All employees shall be closely observed by a supervisor or designee during a heat wave. For purposes of this section only, "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.

Emergency Medical Procedures

How will effective communication by voice, observation, or electronic means 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.)

What are the 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?

What are the procedures for ensuring that in the event of an emergency, clear and precise directions to the worksite will be provided to emergency responders? (Attach maps and other documents as needed.)

Who is the designated person who will ensure that emergency procedures are invoked when appropriate?

High Heat Procedures (only required for agricultural, construction, landscaping and transportation workers when temperatures exceed 95F)

How will supervisors monitor weather conditions and ensure High Heat Procedures are implemented when temperatures meet or exceed 95F?

Who will conduct 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?

How will employees be monitored for alertness and signs or symptoms of heat illness?

☐ Direct supervision ☐ Buddy system ☐ Reliable cell or radio contact ☐ Other, describe below:

Who has designated to call for emergency medical services if needed? Who will call if they are not available?

Who is in charge of reminding employees throughout the work shift to drink plenty of water?

Worksite Specific Heat Illness Prevention Plan Review and Training Documentation (to be completed by

I certify that I have reviewed the above Heat Illness Prevention Plan for my worksite and have received adequate training on its implementation.

Employee Name

Employee Signature

Date

APPENDIX C: Heat Safety Poster



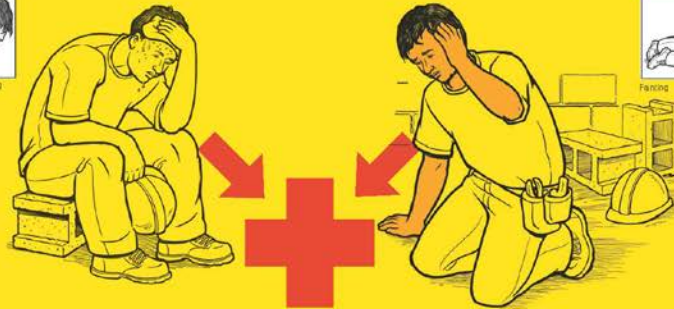
Health effects of heat

Two types of heat illness:

Heat Exhaustion



Heat Stroke



Watch out for early symptoms. You may need medical help.
People react differently — you may have just a few of these symptoms, or most of them.

1



Stay safe and healthy!

WATER. REST. SHADE. *The work can't get done without them.*

Drink water even if you aren't thirsty — every 15 minutes.



Rest in the shade.



Watch out for each other.



Wear hats and light-colored clothing.



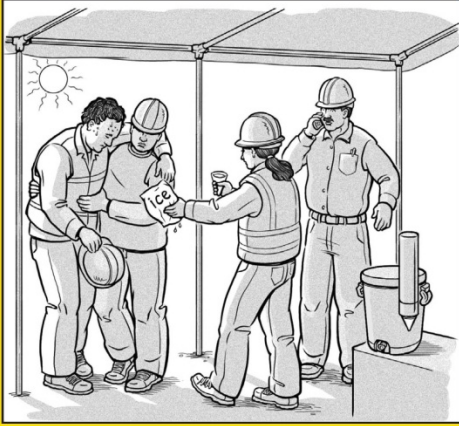
"Easy does it" on your first days of work in the heat. You need to get used to it.
Rest in the shade — at least 5 minutes as needed to cool down.

2



Be prepared for an emergency

Heat kills -- get help right away!

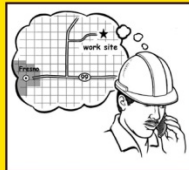


If someone in your crew has symptoms:

- 1) Tell the person who has a radio/phone and can call the supervisor -- you need medical help.
- 2) Start providing first aid while you wait for the ambulance to arrive.
- 3) Move the person to cool off in the shade.
- 4) Little by little, give him water (as long as he is not vomiting).
- 5) Loosen his clothing.
- 6) Help cool him: fan him, put ice packs in groin and underarms, or soak his clothing with cool water.

When you call for help, you need to:

- Be prepared to describe the symptoms.
- Give specific and clear directions to your work site.



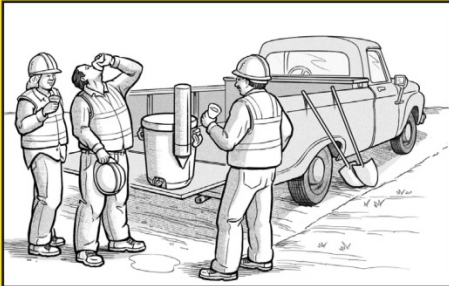
Workers do not pay for ambulances or medical care.

3

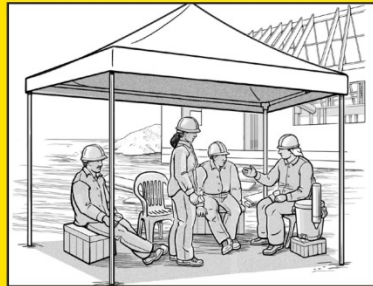


Heat illness can be prevented!

At our work site, we have:



Water



Shade to rest and cool down

We are extra careful when there is a heat wave or temperature goes up. Then we may change our work hours, and we all need more water and rest.





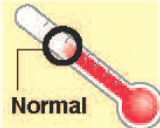


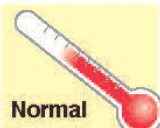
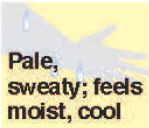
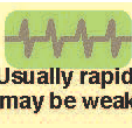
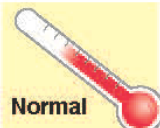

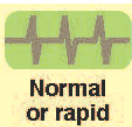
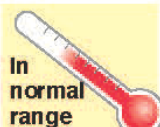

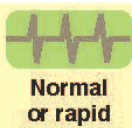



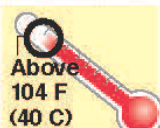
Training and emergency plan

4

APPENDIX D: Stages of Heat Illness

The stages of heat illness

Hyperthermia, or overheating of the body, can be mild and temporary, but in advanced stages, it can be life-threatening. The degrees of severity:

	Skin	Pulse	Body temperature
Heat stress Occurs when hot weather puts strain on the body	 Normal sweating	 Normal	 Normal
Heat fatigue Feeling of weakness caused by high temperature	 Cool, moist	 Weakened	 Normal
Heat syncope <i>"SIN-co-pee"</i> Sudden dizziness after exercising in the heat	 Pale, sweaty; feels moist, cool	 Usually rapid; may be weak	 Normal
Heat cramps Painful spasms of abdomen, arm or leg muscles following exertion	 Usually moist, cool	 Normal or rapid	 In normal range
Heat exhaustion Symptoms warning that body is overheating Person may be thirsty, giddy, weak, uncoordinated, nauseated or sweat copiously	 Cold and clammy	 Normal or rapid	 Usually normal
Heat stroke A life-threatening emergency; person needs immediate medical care; death rate is high after symptoms appear	 Dry and red	 Strong and fast	 Above 104 F (40 C)

Low sodium level may cause cramps, but don't take extra salt without a doctor's advice

Often caused by dehydration or sodium depletion, but don't take salt supplements without medical advice

Perspiration stops; person may faint or stagger, become confused or combative; coma begins if person is not assisted

Source: National Institute on Aging

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