



**Pittsburg
Unified School District
Health and Safety**

IIPP

**INJURY AND ILLNESS
PREVENTION PROGRAM**

**HEAT ILLNESS
PREVENTION PROGRAM**

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HEAT ILLNESS PREVENTION PROGRAM

MISSION

It is the policy of Pittsburg Unified School District (the District) to protect the health and safety of employees, students, guests, and the environment. This goal can be met through the development of a comprehensive and effective environmental health and safety plan known as the Injury and Illness Prevention Program (IIPP) that endeavors to eliminate unsafe conditions and minimize the impact of hazardous situations. Such a program can benefit the District and community by reducing illness and injury to students and personnel, preventing property damage, and preserving the environment. The District will make every reasonable effort to promote, create, and maintain a safe and healthful environment. This can only be realized by adherence to basic safety principles, sound management practices, and compliance with applicable federal, state, and local codes, laws, and standards.

SECTION I INTRODUCTION AND POLICY

The Injury and Illness Prevention Program (IIPP) Administrator is Dorothy Epps, Assistant Superintendent of Human Resources.

The Heat Illness Prevention Program Administrator is Marianne Solis, the Director of Maintenance, Operations and Transportation.

The Heat Illness Prevention Program Administrator has the authority and the responsibility for implementing and maintaining this program for the Pittsburg Unified School District.

Employees working in outdoor places of employment or in other areas at 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.

It is the policy of Pittsburg Unified School District (the District) that any employee who works outdoors in the heat and all individuals who supervise these employees must comply with the procedures in this program and in the Injury and Illness Prevention Program.

SECTION II AUTHORITY

Title 8 of the California Code of Regulations, Section 3395.

SECTION III SCOPE

This program applies to employees and supervisors working in outdoor places of employment during those times when the environmental risk factors for heat illness are present.

SECTION IV DEFINITIONS

Heat illness: 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. See the appendix for specific information on the forms of heat illness.

Personal risk factors for heat illness: 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: 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 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 turned on.

SECTION V ACCOUNTABILITY

Pittsburg Unified School District Administration

- 1) Prepare and maintain a written program which complies with the requirements of Cal/OSHA Title 8, 3395.
- 2) Provide 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. Training should be provided annually as a refresher prior to the start of the summer season.

Administrators, Directors, Managers, and Supervisors

- 1) Identify all employees who are required to work outdoors where potential heat illness could occur and identify the supervisor of the employees.
- 2) Assure that adequate water and shade are available at a job site when the environmental risk factors for heat illness are present.
- 3) Ensure that all affected employees have received proper training on heat illness prevention.
- 4) Ensure that the requirements in this program are followed.

- 5) Contact appropriate emergency medical services in the event medical assistance is required. Administrator will direct emergency medical services to the work site.

Affected Employees

- 1) Comply with the provisions of the Heat Illness Prevention Program, as described in this document and in the training sessions they attend.
- 2) Ensure they have drinking water available at all times when the environmental risk factors for heat illness are present.
- 3) Ensure they have access to a shaded area to prevent or recover from heat related symptoms.
- 4) Report heat related illness symptoms to your supervisor or to Company Nurse (888) 375-9779.
- 5) Look for the signs and symptoms of heat stress on your co-workers.

SECTION VI PROCEDURES

Procedures for Provision of Water

- 1) Drinking water containers (of five (5) gallons each) are available for all employees using a District utility vehicle, so that an ample supply of water is available at the start of the shift. Water and ice will be available for refill at the Maintenance, Operations and Transportation (MOT) office as well. All workers whether working individually or in smaller crews, will have access to drinking water either at school sites or on utility vehicles.
- 2) Disposable cups will be made available to workers in the MOT office and can be obtained with the water containers are signed out at the beginning of the shift or during water/ice replenishment.
- 3) As part of the Effective Replenishment Procedures, water containers can be refilled with cool water and ice when the Utility Vehicles return to the MOT yard for lunch, at school sites or by calling the MOT yard on the radio.
- 4) Water containers mounted on utility vehicles will be as close as possible to the workers (given the working conditions and layout of the worksite), to encourage the frequent drinking of water.

Procedures for Access to Shade

- 1) When shade from a nearby site is not readily available or accessible, shade structures will be opened and placed as close as practical to the employees, when the temperature equals or exceeds 85 degrees Fahrenheit. When the temperature is below 85 degrees Fahrenheit, access to shade will be provided promptly, when requested by an employee. Note: The interior of a vehicle may not be used to provide shade unless the vehicle is air-conditioned and the air conditioner is on.

Procedures for Monitoring the Weather

- 1) The supervisor will be trained and instructed to check in advance the extended weather forecast. Weather forecasts can be checked with the aid of the internet (<http://www.nws.noaa.gov/>), or by calling the National Weather Service phone number: 831-656-1725 (#1) or by checking the Weather Channel TV Network. The work schedule will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected. This type of advance planning should take place all summer long.

Handling a Heat Wave

- 1) During a heat wave or heat spike, and before starting work, tailgate meetings will be held, to review the District Heat Illness Prevention Program procedures, the weather forecast and emergency response. In addition, if schedule modifications are not possible, employees will be provided with an increased number of water and rest breaks and will be observed closely for signs and symptoms of heat illness.
- 2) Each employee will be assigned a “buddy” to be on the lookout for signs and symptoms of heat illness and to ensure that emergency procedures are initiated when someone displays possible signs or symptoms of heat illness.

High Heat Procedures

High Heat Procedures are additional preventive measures that the District will use when the temperature equals or exceeds 95 degrees Fahrenheit.

- 1) Frequent communication will be maintained with employees working by themselves or in smaller groups (keep tabs on them via phone or two-way radio), to be on the lookout for possible symptoms of heat illness.
- 2) Employees will be reminded throughout the work shift to drink plenty of water.

Procedures for Acclimatization

Acclimatization is the temporary and gradual physiological change in the body that occurs when the environmentally induced heat load to which the body is accustomed is significantly and suddenly exceeded by sudden environmental changes. In more common terms, the body needs time to adapt when temperatures rise suddenly, and an employee risks heat illness by not taking it easy when a heat wave strikes or when starting a new job that exposes the employee to heat to which the employee’s body hasn’t yet adjusted.

- 1) The weather will be monitored daily. The supervisor will be on the lookout for sudden heat wave(s), or increases in temperatures to which employees haven't been exposed to for several weeks or longer.
- 2) The supervisor will be extra-vigilant with new employees and stay alert to the presence of heat related symptoms.

Procedures for Emergency Response

- 1) All supervisors will carry cell phones or other means of communication, to ensure that emergency medical services can be called. Checks will be made to ensure that these electronic devices are functional prior to each shift.
- 2) When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep the stricken employee cool and comfortable once emergency service responders have been called (to reduce the progression to more serious illness).
- 3) During a heat wave or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any signs or symptoms they are experiencing.
- 4) Employees and supervisors training will include every detail of these written emergency procedures.

Procedures for Handling a Sick Employee

- 1) Emergency service providers will be called immediately if an employee displays signs or symptoms of heat illness (loss of consciousness, incoherent speech, convulsions, red and hot face), does not look OK or does not get better after drinking cool water and resting in the shade. While the ambulance is in route, first aid will be initiated (cool the worker: place the worker in the shade, remove excess layers of clothing, place ice pack in the armpits and join area and fan the victim). Do not let a sick worker leave the site!

Procedures for Employee and Supervisory Training

Training will be provided for employees working on job tasks where environmental risk factors for heat illness are present, and training will be provided for their respective supervisors. Training will include the District's written prevention procedures and refresher training will be provided annually.

- 1) **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:
 - a. Environmental and personal risk factors for heat illness.

- b. Procedures for identifying, evaluating, and controlling exposures to the environmental and personal risk factors for heat illness.
 - c. 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.
 - d. Importance of acclimatization.
 - e. Different types, signs, and symptoms of heat illness.
 - f. Importance of immediately reporting symptoms or signs of heat illness in themselves or in coworkers to their supervisor.
 - g. Procedures for responding to symptoms of possible heat illness, including how emergency medical services will be contacted and provided, should they become necessary.
 - h. Procedures for contacting emergency medical services.
- 2) **Supervisors and Affected Employees** - Supervisors shall receive training on the following topics prior to being assigned to supervise outdoor employees:
- a. Information as detailed above in employee training requirements.
 - b. Training will include the District's written procedures and the steps supervisors will follow when employees' exhibit symptoms consistent with heat illness.
 - c. Supervisors will be trained on how to track the weather at the job site (by monitoring predicted temperature highs and periodically using a thermometer). Supervisors will be instructed on, how weather information will be used to modify work schedules and/or to increase number of water and rest breaks or cease work early if necessary.

SECTION VII RECORDS

All training records prepared in association with the Heat Illness Prevention Program will be maintained by Maintenance, Operations and Transportation Department or the Human Resources Department.

SECTION VIII ADDITIONAL REFERENCES

- 1) University of California, Berkeley <http://are.berkeley.edu/heat/references.html>
- 2) Cal/OES
<http://www.oes.ca.gov/Operational/OESHome.nsf/ALL/AAO7COCO5.1F70991882572F3005C15CF?>
- 3) Cal/OSHA <http://www.dir.ca.gov/dosh/heatillnessinfo.html>

APPENDIX I

HEAT STRESS FACT SHEET

High temperatures and humidity stress the body's ability to cool itself, and heat illness becomes a special concern during hot weather. There are three major forms of heat illnesses: **heat cramps**, **heat exhaustion**, and **heat stroke**, with heat stroke being a life threatening condition.

Heat Cramps: Heat cramps are muscle spasms which usually affect the arms, legs, or stomach. Frequently they don't occur until sometime later after work, at night, or when relaxing. Heat cramps are caused by heavy sweating, especially when water is replaced by drinking, but not salt or potassium. Although heat cramps can be quite painful, they usually don't result in permanent damage. To prevent them, drink electrolyte solutions such as Gatorade during the day and try eating more fruits like bananas.

Heat Exhaustion: Heat exhaustion is more serious than heat cramps. It occurs when the body's internal air conditioning system is overworked, but hasn't completely shut down. In heat exhaustion, the surface blood vessels and capillaries, which originally enlarged to cool the blood, collapse from loss of body fluids and necessary minerals. This happens when you don't drink enough fluids to replace what you're sweating away.

The symptoms of heat exhaustion include: headache, heavy sweating, intense thirst, dizziness, fatigue, loss of coordination, nausea, impaired judgment, loss of appetite, hyperventilation, tingling in hands or feet, anxiety, cool moist skin, weak and rapid pulse (120-200), and low to normal blood pressure.

Somebody suffering these symptoms should be moved to a cool location such as a shaded area or air-conditioned building. Have them lie down with their feet slightly elevated. Loosen their clothing, apply cool, wet cloths or fan them. Have them drink water or electrolyte drinks. Try to cool them down, and have them checked by medical personnel. Victims of heat exhaustion should avoid strenuous activity for at least a day, and they should continue to drink water to replace lost body fluids.

Heat Stroke: Heat stroke is a life threatening illness with a high death rate. It occurs when the body has depleted its supply of water and salt, and the victim's body temperature rises to deadly levels. A heat stroke victim may first suffer heat cramps and/or the heat exhaustion before progressing into the heat stroke stage, but this is not always the case. It should be noted that, on the job, heat stroke is sometimes mistaken for heart attack. It is therefore very important to be able to recognize the signs and symptoms of heat stroke - and to check for them anytime an employee collapses while working in a hot environment.