## IMPERIAL COUNTY BEHAVIORAL HEALTH SERVICES

# HEAT ILLNESS PREVENTION PLAN

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### Imperial County Behavioral Health Services Heat Illness Prevention Plan

#### I. Policy

It is the policy of Imperial County Behavioral Health Services to assure personal safety and heat illness safeguards for all employees in the workplace to prevent heat related illness. The purpose of the Heat Illness Prevention Plan is intended to educate employees on the dangers of working in the heat and reduce heat related illness through training, communication, and effective emergency response. As well as to comply with Cal/OSHA's Heat Illness Prevention Standards.

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

#### II. Authority

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

#### III. Scope

This Heat Illness Prevention Plan and emergency regulations apply to any and all indoor and outdoor places of employment, at the times when environmental risk factors for heat illness are present.

The primary focus of the Heat Illness Prevention Plan is to prevent heat related illness from occurring, through education and proper work practices. The plan identifies the signs and symptoms of heat illness, prevention, and effective emergency response.

#### IV. Definitions

**Acclimatization:** 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 at least two hours per day in the heat.

**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.

**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.

**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. 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. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use.

#### V. Accountability

#### Directors, Managers, Supervisors, and Unit Leaders

- A. Will identify all employees who are required to work outdoors where potential heat illness could occur and identify the supervisor of the employees.
- B. Take steps to mitigate any personal risk factors that may exist prior to working in a regulated hot environment.
- C. Assure that adequate water and shade are available at a job site when the environmental risk factors for heat illness are present.
- D. Ensure that employees do not conduct out of office home visits, operations, etc. during high temperature peak hours except under exigent circumstances.
- E. Ensure that all employees have received proper training on heat illness prevention and distribute the Heat Illness Prevention Plan to all staff members.
- F. Contact Police to request emergency medical services in the event medical assistance is required. Police will direct emergency medical services to the work site.
- G. Ensure that the requirements in this program are followed.

#### **Employees**

- A. Will comply with the provisions of the Heat Illness Prevention Plan, as described in this document and in the training sessions they attend.
- B. Ensure they have drinking water available at all times when the environmental risk factors for heat illness are present.
- C. Ensure to have access to a shaded area to prevent or recover from heat related symptoms.
- D. Look for and report heat related illness signs and symptoms in themselves and others to the Supervisor or Manager.

#### VI. Prevention

#### **Monitoring for Heat Illness Factors**

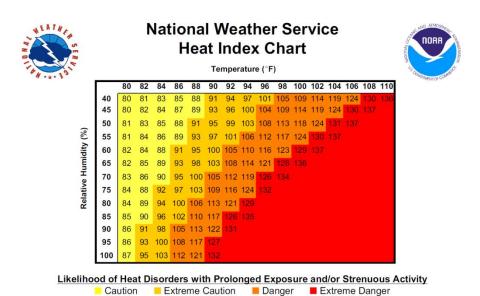
Monitor and report the signs and symptoms listed on the previous page to improve early detection and action. The following factors are to be monitored to prevent heat illness injuries:

1. Environmental Risk Factors: For heat illness include 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, and protective clothing and personal protective equipment worn by employees.

- 2. Personal Risk Factors: Factors for heat illness include age, degree of acclimatization, general health, water consumption, and use of medications, caffeine, or alcohol, which can affect the body's water retention or other physical response to heat.
- 3. Work Conditions: Supervisors must evaluate work conditions before allowing employees to conduct out of office home visits, operations, etc., in hot conditions. Typically, temperatures above 80 degrees Fahrenheit, especially with heavy physical work activities, would represent conditions where there is a risk of heat illness. Other factors, such as high humidity or work activities that restrict the body's ability to cool itself, such as protective clothing, could result in a risk of heat illness at lower temperatures.
- 4. NWS has developed the Heat Index below to use as a tool to identify temperature compositions and be able to take proper precautions and measures with temperature change. Heat index system combines both air temperature and relative humidity into a single value that indicates the apparent temperature in degrees Fahrenheit, or how hot the weather will feel when relative humidity is factored in with the actual air temperature. The higher the heat index, the hotter the weather will feel, and the greater the risk that employees who conduct work outdoors will experience heat-related illness as the heat index rises.

The Heat Index Chart below will identify the Heat Index temperature. As an example, if the air temperature is 96 degrees Fahrenheit and the relative humidity is 65%, the heat index (how hot it feels) is 121 degrees Fahrenheit.



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#### **Water Provisions**

ICBHS will assure employees have access to potable, fresh, pure, suitably cool drinking water and encouraged to frequently consume small amounts of water throughout the day. If plumbed potable water is not readily accessible, ICBHS will provide portable water containers or bottled water in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. The shift may begin with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour.

#### Shade

Employees suffering from heat related illnesses or in need of a recovery period from the heat must be provided with access to an area with shade that is either open to the air or provided with ventilation or cooling for a period of no less than five minutes. Access to shade must be permitted at all times. The shade shall be located as close as practicable to the areas where employees are working.

An individual employee who takes a preventative cool-down rest shall be monitored and asked if he or she is experiencing symptoms of heat illness; shall be encouraged to remain in the shade; and shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.

#### **Working Outdoors Time Frame**

- 1. During the summer months, staff will be encouraged to conduct out of office home visits between 8:00 a.m. 11:00 a.m. to ensure heat illness is prevented in high temperature weather.
- 2. Staff will be encouraged to conduct home visits in pairs, if possible, to ensure possible heat illness warning signs are detected and alleviated in a timely manner.
- 3. Staff will be encouraged to take enough drinking water during home visits to ensure proper hydration.
- 4. Conduct staff 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.

#### **Cal-Osha Tips on Heat Illness Prevention**

- 1. Appropriate Clothing: Wear lightweight, light-colored, loose-fitting clothing.
- 2. Hydrate: Begin hydrating at the beginning of the day and continue to hydrate through the day (work shift). To properly hydrate you must drink plenty of clear non caffeine and or sugared fluids: Drink more fluids, regardless of how active you are. Don't wait until you're thirsty to drink.
- 3. If you're not accustomed to working or exercising in a hot environment, start slowly and pick up the pace gradually. If exertion in the heat makes your heart pound and leaves you gasping for breath, STOP all activity. Get into a cool area or into the shade, and rest, especially if you become lightheaded, confused, weak, or faint.

4. Stay Informed - Know the Signs: Learn the signs and symptoms of a heat related illness and the first aid steps necessary to aid a person showing signs or symptoms of a heat injury or illness.

#### VII. Heat Illness Identification

Heat Illness is 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.

As per Cal/OSHA's Heat Illness Prevention Standard, California Code of Regulations Title 8 Section 3395, all employees shall be closely observed by a Supervisor or designee during a heat wave. "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. When temperatures reach 95 degrees or above, the employer shall ensure that the employee takes a minimum ten-minute preventative cool-down rest period every two hours.

Occupational Safety and Health Administration identifies the types of heat illness, symptoms, and first aid measures as follows:

	Symptoms	First Aid <sup>1</sup>
Heat stroke	<ul> <li>Confusion</li> <li>Fainting</li> <li>Seizures</li> <li>Excessive sweating or red, hot, dry skin</li> <li>Very high body temperature</li> </ul>	Call 911  While waiting for help:  Place worker in shady, cool area Loosen clothing, remove outer clothing Fan air on worker; cold packs in armpits  Wet worker with cool water; apply ice packs, cool compresses, or ice if available Provide fluids (preferably water) as soon as possible Stay with worker until help arrives
Heat exhaustion	<ul> <li>Cool, moist skin</li> <li>Heavy sweating</li> <li>Headache</li> <li>Nausea or vomiting</li> <li>Dizziness</li> <li>Light headedness</li> <li>Weakness</li> <li>Thirst</li> <li>Irritability</li> <li>Fast heart beat</li> </ul>	Have worker sit or lie down in a cool, shady area     Give worker plenty of water or other cool beverages to drink     Cool worker with cold compresses/ice packs     Take to clinic or emergency room for medical evaluation or treatment if signs or symptoms worsen or do not improve within 60 minutes.     Do not return to work that day
Heat cramps	<ul> <li>Muscle spasms</li> <li>Pain</li> <li>Usually in abdomen, arms, or legs</li> </ul>	<ul> <li>Have worker rest in shady, cool area</li> <li>Worker should drink water or other cool beverages</li> <li>Wait a few hours before allowing worker to return to strenuous work</li> <li>Have worker seek medical attention if cramps don't go away</li> </ul>
Heat rash	<ul> <li>Clusters of red bumps on skin</li> <li>Often appears on neck, upper chest, folds of skin</li> </ul>	•

#### VIII. Emergency Response

All employees shall be 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 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days. Proper response measures are as follows:

- 1. Make sure medical services are available and that workers know what to do if a fellow worker has signs and symptoms of heat-related illness. Be prepared to provide first aid for any heat-related illness and call emergency services (i.e., call 911) if a worker shows signs and symptoms of heat stroke.
- 2. Be able to provide clear and precise directions to the worksite.
- 3. Immediately respond to symptoms of possible heat-related illness move the worker into the shade, loosen the clothing, wet and fan the skin, place ice-packs in the armpits and on the neck. Give the worker something to drink. Call emergency services if the worker loses consciousness or appears confused or uncoordinated. Have someone stay with an ill worker.
- 4. Ensure that emergency procedures are used whenever appropriate.
- 5. Develop a plan to reschedule or terminate work if conditions become too risky.

#### IX. Training

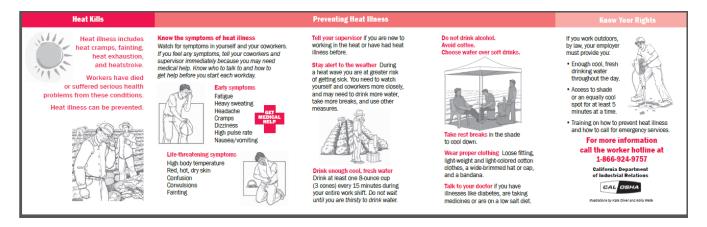
The ICBHS Staff Development Unit shall ensure that a training roster is maintained which notes the date, time, and the name and title of the ICBHS employees' attending the training.

Effective training will be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness. All employees shall receive training on the following:

- 1. Environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
- 2. Different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness.
- 3. Procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.
- 4. importance of frequent consumption of small quantities of water, 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. The concept, importance, and methods of acclimatization.
- 6. Employer's procedures for ensuring that, in the event of emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

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7. Provide employees with material to reference (i.e. pocket brochure, see below).



#### **Supervisory Training**

Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness effective training on the following topics shall be provided to the supervisor:

- A. The procedures to implement the applicable provisions in Heat Illness Prevention Plan.
- B. The procedures to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures.
- C. How to monitor weather reports and how to respond to hot weather advisories.

#### X. Records

All training records prepared in association with the Heat Illness Prevention Plan will be maintained by OSHA Compliance Coordinator or designee.

Injury & Illness Records

Under Cal/OSHA recordkeeping requirements, ICBHS shall keep a record of serious work-related injuries and illnesses and as well as comply with the County of Imperial's requirements of reporting on-the-job injury and/or illness. The following forms shall be utilized in the recordkeeping and reporting of all work-related injury and/or illnesses:

- Supervisor's Accident Investigation Report
- Employee's Claim for Workers' Compensation Benefits
- Employer's Report of Occupational Injury or Illness