

Telephone: 760.872.2908 Fax: 760.872.4319 risk@inyocounty.us

### INYO COUNTY HEAT ILLNESS PREVENTION PLAN

It gets really hot in Inyo County, and we want our employees and volunteers to be safe. This document, in full compliance with T8 CCR 3395, contains the County's long-established and effective Heat Illness Prevention Plan. To improve awareness, sharing, and review, the below text was moved from our IIPP to this separate document. A copy of this document must be available onsite to employees who are assigned to work in outside temperatures exceeding 80 degrees. This document was reviewed by the Safety Committee on 6/24/2020.

#### **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.
- 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.
- 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.
- 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 medication 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: Blockage of direct sunlight. 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. 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.

### **ACCLIMATION**

The ability to acclimatize to high temperatures varies among workers. Generally, individuals in good physical condition acclimatize more rapidly than those in poor condition. 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. Acclimatization is fully achieved



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in most people within 4 to 14 days of regular work involving at least 2 hours per day in the heat. 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.

# **PROVISION OF WATER**

The County will provide access to fresh and suitably cool potable drinking water for employees at no charge. The water shall be located as close as practicable to the areas where employees are working. When environmental risk factors for heat illness exist, water shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift (one gallon every four hours). Employees may begin the shift 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. The frequent drinking of water shall be encouraged. Employees are also encouraged to begin drinking water prior to work.

# **ACCESS TO SHADE AND PREVENTATIVE COOL-DOWN**

Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times. An individual employee who takes a preventative cool-down rest: (A) shall be monitored and asked if he or she is experiencing symptoms of heat illness; (B) shall be encouraged to remain in the shade; and (C) 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. Examples of shade areas are offices or shop buildings or vehicles with air conditioning. When working in remote areas where shade is not readily available, supervisors shall ensure that vehicles with operative air conditioners are available at the remote worksite or an alternative device (canopy, umbrella) is available at the remote worksite.

Shade, either natural or artificial, will be present when the temperature exceeds 80 degrees Fahrenheit. The amount of shade present shall be at least enough to accommodate the employees on recovery or rest periods so they can sit in a normal posture fully in the shade without having to be in physical contact with each other. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain onsite.



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#### **HIGH HEAT PROCEDURES**

When the temperature equals or exceeds 95 degrees Fahrenheit (95°F), the following procedures, to the extent practicable, will be followed:

- Effective communication by voice, observation, or electronic means will be maintained so that employees at the work site can contact a supervisor when necessary. This may be accomplished by: (1) the supervisor or designee observing 20 or fewer employees; or (2) mandatory buddy system, or (3) regular communication by radio, cell phone or other means with sole employee; or (4) other effective means of observation;
- Supervisors or designee will remind employees throughout the work shift to drink plenty of water;
- 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.

# **HIGH HEAT SYMPTOMS AND FIRST AID**

# **Heat Cramps:**

- Symptoms: Painful muscle spasms, usually in leg and abdominal muscles; heavy sweating.
- First Aid: Get the victim to a cooler location. Lightly stretch and gently massage affected muscles to relieve spasms. Give sips of drinks with electrolytes, such as juice or a sports drink, or up to a half glass of cool water every 15 minutes (do not give liquids with caffeine or alcohol). Discontinue liquids if victim is nauseated.

### Heat Syncope:

- Symptoms: Faintness, dizziness, headache, increased pulse rate, restlessness, nausea, vomiting, brief loss of consciousness.
- First Aid: Get the victim to lie down in the shade or cool area, elevate the feet, drink fluids, and refrain from vigorous activities.

### **Heat Exhaustion**

- Symptoms: Heavy sweating, but skin may be cool, pale or flushed. Weak pulse. Normal body temperature is possible, but temperature will likely rise. Fainting or dizziness, nausea, vomiting, exhaustion and headaches are possible.
- First Aid: Get victim to lie down in a cool place. Loosen or remove clothing. Cool the person
  with a cool water spray or, apply cool, wet clothes on the neck, armpit and groin area. Fan
  or move victim to air-conditioned place. Give sips of drinks containing electrolytes, such as
  juice or a sports drink, or water if victim is conscious. Be sure water is consumed slowly. .
  Discontinue water if victim is nauseated. Seek immediate medical attention if vomiting
  occurs.



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#### **Heat Stroke**

- Symptoms: High body temperature (105+); hot, red, dry skin; rapid, weak pulse; and rapid shallow breathing, confusion, passing out, dizziness and seizures. Victim will probably not sweat unless victim was sweating from recent strenuous activity.
- First Aid: Call 911 or emergency medical services immediately or immediately get the victim
  to a hospital. Delay can be fatal. Move victim to a cooler environment. Remove clothing. Try
  a cool bath, sponging, or wet sheet to reduce body temperature. Watch for breathing
  problems.

# **EMERGENCY RESPONSE PROCEDURES**

Emergency medical services will be provided as quickly as possible if an employee suffers heat illness. If employees cannot reach emergency medical services directly (because cell phone coverage is inadequate, for example) the supervisor must designate a person who can immediately contact emergency services on behalf of the employees. The employees must be able to reach this person quickly (such as by radio) to request that emergency services be summoned. The supervisor or designee must give clear and precise directions to the work site for emergency responders.

- 1. 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.
- 2. 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), the emergency response procedure shall be implemented.
- 3. 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.
- 4. Supervisors or designee are responsible for making sure emergency medical services have been contacted and, if necessary, transporting the employee to a place where they can be reached by emergency medical services.

# **TRAINING**

Training is provided annually in person or via our online learning system in the following topics to all supervisory and non-supervisory employees who have exposure to environmental risk factors for heat illness:

- Environmental and personal risk factors for heat illness;
- The County's policy for dealing with heat illness;
- The importance of frequent consumption of small quantities or water, up to 4 cups per hour under extreme conditions of work and heat;



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- The importance of acclimatization;
- The different types of heat illness and the common signs and symptoms of heat illness;
- The importance of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves or in co-workers;
- The procedures for responding to symptoms of possible heat illness;
- Procedures for contacting emergency medical services and if necessary for transporting employees to a point where they can be reached by emergency medical services;
- How to provide clear and precise directions to the worksite.

Training materials on Heat Illness are available on the IIPP website at <a href="www.inyocounty.us/iipp">www.inyocounty.us/iipp</a>.

In addition to the training set forth above, supervisors who are assigned to the supervision of employees working in the heat shall be trained regarding the procedures necessary to implement the heat illness policy and the procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness including emergency response procedures. Copies of this Heat Illness Prevention Plan shall be available at worksites.

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