

Heat Illness Prevention Plan



California State University, Chico

Department of Environmental Health and Safety

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1.0

PURPOSE

The purpose of Heat Illness Prevention Plan is to meet the requirements set forth in California Code of Regulations, Title 8, and also to serve as a supplement to California State University, Chico's Injury and Illness Prevention Program (IIPP). This information is intended and must be used in conjunction with the IIPP. The Heat Illness Prevention Guide establishes procedures and provides information which is necessary to ensure that members of the University Community are knowledgeable in the prevention and recognition of heat stress to ensure their own safety and the safety of others.

2.0

HEAT ILLNESS PREVENTION

Heat related illnesses are avoidable if the employees are trained and the right actions are taken before, during, and after working in either indoor or outdoor hot conditions. High temperatures and humidity can stress the body's ability to cool itself making heat illness a big concern during hot weather months. Every employee whose job duties require them to work in the outdoors during summer months, are exposed to elevated heat conditions and therefore are susceptible to heat illness. The three major forms of heat illnesses are: **heat cramps**, **heat exhaustion**, and **heat stroke**. Heat stroke can be a life threatening condition. This document will outline those actions as well as describing the three major forms of heat illness, how to recognize them, and what actions to take to provide first aid before medical care is provided.

2.1 Heat Cramps

Description:

Heat cramps are the most common type of heat related injury and probably have been experienced by nearly everyone at one time or another. Heat cramps are muscle spasms which usually affect the arms, legs, or stomach. Frequently they do not occur until sometime later after work, at night, or when relaxing. Heat cramps are caused by heavy sweating, especially when water is not replaced quickly enough. Although heat cramps can be quite painful, they usually don't result in permanent damage.

Prevention/First Aid:

Drink electrolyte solutions such as Gatorade or plenty of water during the day and try eating more fruits such as bananas to help keep your body hydrated during hot weather. Call University Police at 9-911 or contact your supervisor immediately if the person becomes ill.

2.2 Heat Exhaustion

Description:

Heat exhaustion is more serious than heat cramps. It occurs when the body's internal temperature regulating system is overworked, but has not 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 do not drink enough fluids to replace what you are sweating away.

Symptoms 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.

Prevention/First Aid:

The employee 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. Call University Police at 9-911 if the person becomes non-responsive, refuses water, vomits, or loses consciousness

2.3 Heat Stroke

Description:

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 core body temperature rises to deadly levels. A heat stroke victim may first suffer heat cramps and/or 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 a 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.

Symptoms Include:

A high body temperature (103 degrees F); a distinct absence of sweating (usually); hot red or flushed dry skin; rapid pulse; difficulty breathing; constricted pupils; any/all the signs or symptoms of heat exhaustion such as dizziness, headache, nausea, vomiting, or confusion, and possibly more severe systems including; bizarre behavior; and high blood pressure. Advance symptoms may be seizure or convulsions, collapse, loss of consciousness, and a body temperature of over 108 degrees F.

Prevention/First Aid:

It is vital to lower a heat stroke victim's body temperature. Quick actions can mean the difference between life and death. Pour water on them, fan them, or apply cold packs. Call University Police at 9-911 to get the person medical aid as soon as possible.

3.0 PRECAUTIONS TO PREVENT HEAT ILLNESSES

Condition yourself for working in hot environments. Start slowly then build up to more physical work. Allow your body to adjust over a few days (acclimatization).

Drink plenty of liquids. Hydration is a continuous process. Don't wait until you're thirsty! By then, there's a good chance that you're already on your way to being dehydrated. Electrolyte drinks are good for replacing both water and minerals lost through sweating. Never drink alcohol, and avoid caffeinated beverages like coffee and soda as these liquids can have the opposite effect and can actually increase the level of dehydration.

Take frequent breaks, especially if you notice you're getting a headache or you start feeling overheated.

Assure that adequate water and shade are available at the job site before work is to begin.

Wear lightweight, light colored clothing when working out in the sun.

Immediately report all unsafe conditions and/or concerns to your supervisor or area manager without delay.

For additional information on Heat Illness Prevention, contact your supervisor or the Department of Environmental Health and Safety at extension 5126.