

## San Diego Community College OSHA Standards

## Heat Illness Prevention Program Revision 2 - 11/19/2015

Original: 10/29/15 Rev 1: 11/10/15 Rev 2: 11/19/15

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## PURPOSE

The purpose of the heat illness prevention program is to address illnesses and ailments that can occur when employees are exposed to working in hot temperatures. The program outlines responsibilities for the employees and the District, symptoms associated with different types of heat illnesses, and procedures for working in hot temperatures.

## **AUTHORITY CITATIONS**

CCR, Title 8, § <u>3395</u>

## **RISK FACTORS**

#### **Environmental**

The following are working conditions that can create the possibility of heat illness to occur.

- Air temperature
- Relative humidity
- Radiant heat from the sun and other sources
- Conductive heat sources
- Air movement
- Workload severity and duration
- Protective clothing and personal protective equipment worn by employee

#### **Personal**

The following traits are examples of factors that can cause heat illness.

- Age
- Degree of acclimatization
- Health
- Water consumption
- Alcohol consumption
- Caffeine consumption
- Drug use
- Use of prescription medications that affect water retention or other physiological responses

## ACCESS TO SHADE

Whenever temperatures exceed 85° F, shade is required to be present. One or more areas with shade must be maintained at all times when employees are exposed to temperatures >85° F with at least enough shade to accommodate 25% of the employees on the shift at any time (must have large enough shade so employees do not have to be in physical contact). If the temperature does not exceed 85° F, shade is required to be available upon an employee's request. Additionally, employees are allowed to take a cool-down rest in the shade for a period of no less than 5 minutes when they feel the need to do so.

#### **Provision of Water**

Employees being vulnerable to heat illness shall be provided access to potable drinking water. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking the entire shift. Smaller quantities may be provided to employees if effective procedures for replenishing are in place.

## **HIGH-HEAT PROCEDURES**

When temperatures exceed 95° F, the following procedures shall be practiced.

- Ensuring effective communication by voice, observation, or electronic means (cell phone or radio) is maintained so that employees at the work site can contact a supervisor when necessary
- Observing employees for alertness and signs/symptoms of heat illness
- Reminding employees throughout the work shift to drink plenty of water
- Supervising a new employee for the first 14 days of the employment period if they have not been exposed to similar outdoor work for at least 10 of the past 30 days for ≥4 hours a day

## **TYPES OF HEAT STRESS**

#### Heat Stroke

Heat stroke is a condition when the body becomes unable to control its temperature; the body's temperature rises rapidly, sweating mechanisms fail, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise up to 106° F within 10–15 minutes. Heat stroke can cause death or permanent disability. The following are a list of symptoms associated with heat stroke.

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

#### **Heat Exhaustion**

Heat exhaustion is when the body's response to an excessive loss of water and salt through sweating. Workers are most prone to heat exhaustion are the elderly, employees with high blood pressure, and working in a hot environment. The symptoms of heat exhaustion include the following.

- Heavy sweating
- Extreme weakness or fatigue
- Dizziness, confusion
- Nausea
- Clammy, moist skin



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## Heat Illness Prevention Program Revision 1 - 11/10/2015

Original: 10/29/15 Rev 1: 11/10/15

Pale or flushed complexion

Muscle cramps

- Slightly elevated body temperature
- Fast and shallow breathing

#### **Heat Syncope**

Heat syncope is a fainting episode or dizziness that occurs with prolonged standing or sudden rising from a sitting position. Dehydration and lack of acclimatization are factors that contribute to heat syncope, and the following are related symptoms.

- Light-headedness
- Dizziness
- Fainting

#### **Heat Cramps**

Heat cramps result from sweating during strenuous activity. As an individual sweats more, the body is depleted of salt and moisture levels. Low salt levels in the muscles can cause painful cramps. Hot environments can exacerbate these conditions and cause heat cramps commonly in the abdomen, arms, or legs.

#### <u>Heat Rash</u>

Heat rash is defined as a skin irritation that is caused by excessive sweating during hot and humid weather. Some symptoms of heat rash include having a red cluster or pimples or small blisters on the skin located around the neck, chest, groin, under the breast, and in elbow creases.

\*Above information from CDC

## TRAINING

Before the employee begins work that exposes them to heat illness, the employee and supervisor must be trained in the following.

- <u>Keenan Safe Colleges Heat Illness Prevention</u>
- Environmental and personal risk factors for heat illness
- Additional burden of the heat load on the body caused by exertion, clothing, and personal protective equipment
- Importance of frequent consumption of small quantities of water (4 cups per hour)
- Importance of acclimatization days prior to work in hot environments
- Different types of heat illness and common signs/symptoms
- Reporting immediately to supervisor or District of heat illness on themselves or others
- Procedures for contacting emergency medical services
- Monitoring weather reports to assess hot weather conditions
- Procedures for specifying clear and precise directions to the worksite for emergency medical services

## **APPENDIX A: DEFINITIONS**

<u>Acclimatization</u>: temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to higher temperatures. Acclimatization peaks in most individuals within 4–14 days of regular work for at least 2 hours per day in the heat.

<u>Heat Illness</u>: a serious medical condition resulting from the body's inability to cope with a particular heat load, including heat cramps, heat exhaustion, heat syncope, and heat stroke.

<u>Landscaping</u>: providing landscape care, maintenance services and/or installing trees, shrubs, plants, lawns, or gardens, or providing these services in conjunction with the design/construction of walkways, retaining walls, decks, fences, ponds, and similar structures.

<u>Preventative Recovery Period</u>: a period of time to recover from the heat in order to prevent heat illness <u>Shade</u>: 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.

## **APPENDIX B: HEAT-ILLNESS QUICK FACTS**

#### CONSULTATION



## **Protect Yourself From Heat Illness**

In a one-year investigation of 25 cases of suspected heat-related illnesses, Cal/OSHA found that more than half of the heat illness victims died, and almost one third of them required hospitalization. Heat illness can kill you. During hot weather you must take the simple steps outlined here to protect yourself.

#### WHAT IS HEAT ILLNESS?

Heat illness can be one or more serious medical conditions like heat cramps, fainting, heat exhaustion and heatstroke.

#### WHAT CAUSES HEAT ILLNESS?

Heat illness occurs when your body keeps in more heat than it loses and your temperature rises. You are at greater risk of heat illness when you:

- Are dehydrated. Dehydration is your worst enemy during hot weather.
- Are not used to working in the heat.
- · Are in poor health.
- · Have had heat illness before.

#### WHAT YOU CAN DO TO PREVENT HEAT ILLNESS

Your two best defenses against the heat are:

- Getting out of the sun or finding a cool resting place when you are starting to overheat and need to cool down.
- Drinking cool, fresh water throughout the day (four 8-oz cups per hour) during hot weather. That is how much water your body loses just by sweating.
   Don't wait until you are thirsty to drink.

#### OTHER THINGS YOU CAN DO

- · Tell your supervisor immediately if you think you are getting sick from the heat.
- Know the location(s) of your closest drinking water supplies.
- · Choose water over sodas and other drinks containing caffeine or sugar.
- You are better off avoiding alcohol altogether. The more you drink, even beer, the more dehydrated you will get.
- · Always know who and how to call for help when you start a new work day.
- · Know the symptoms to watch for:
  - » discomfort, excessive sweating, headache, poor concentration, muscle pain, cramping, dizziness, fatigue, irritability, loss of coordination, throwing-up, blurry vision, confusion, lack of sweating, fainting, seizures.
- If you are new to working in the heat, tell your employer. Your employer should have procedures to allow you to adjust during your first two weeks of hot weather work.
- Get your doctor's advice if you know you have risk factors for heat illness, such as:
  - » illnesses like diabetes
  - » taking medications or over-the-counter drugs
  - being on a low salt diet
- Keep track of your coworkers. You all need to watch out for each other. If anyone looks like they are not okay, check them out.
- · After work take a cold bath or shower.

#### **YOUR RIGHTS**

If you are working outdoors, by law, your employer must guarantee you all of the following:

- access to fresh, cool drinking water throughout the day.
- access to shade (all employees) or an equally cool spot (if you are not an agricultural worker) for 5 minutes at a time to rest and cool down.
- training on how to work safely in the heat, including how to call for emergency services if someone is over come by the heat.

For more information call 1-800-963-9424 or go to www.dir.ca.gov/dosh 08-00606







CONSULTATION



## PROTEJASE DE LAS ENFERMEDADES CAUSADAS POR EL CALOR

En la investigación de un año, de 25 casos, en que se sospecha que fueron ocasionados por las enfermedades causadas por el calor, Cal/OSHA encontró que más de la mitad de las víctimas, murieron y casi un tercio de ellas necesitaron hospitalización. Las enfermedades causadas por el calor pueden matarlo. En clima caliente, tome las siguientes precauciones.

#### QUE OCASIONAN LAS ENFERMEDADES CAUSADAS POR EL CALOR?

Las enfermedades causadas por el calor pueden ser condiciones médicas serias tales como calambres por el calor, desmayos, agotamiento por el calor o insolación.

#### QUE SON LAS ENFERMEDADES CAUSADAS POR EL CALOR?

Las enfermedades causadas por el calor ocurren cuando su cuerpo produce y conserva más calor que lo que pierde, elevando su temperatura. Usted está en gran riesgo de sufrir enfermedades causadas por el calor cuando:

- · Se deshidrata. La deshidratación es su peor enemigo durante el clima caliente.
- No está acostumbrado a trabajar en el calor.
- · Se encuentra en condiciones de mala de salud.
- · Anteriormente ha sufrido de enfermedades causadas por el calor.

#### COMO PUEDE PREVENIR ESTAS ENFERMEDADES

Sus dos mejores defensas contra el calor son:

- Buscar un lugar sombreado y fresco para descansar cuando se sienta sobrecalentado y necesite enfriarse.
- En clima caliente,beber agua fresca durante todo el día (cuatro vasos de 8 onzas de agua por hora). Esta es la cantidad de agua que su cuerpo pierde cuando suda. No espere a sentir sed para beber agua.

#### **OTRAS COSAS QUE USTED PUEDE HACER**

- De inmediato informe a su supervisor si usted piensa que se está enfermando a causa del calor.
- · Sepa donde están las provisiones de agua más cercanas a usted.
- Elija agua en lugar de sodas u otras bebidas cafeinadas o azucaradas.
- · Evite tomar bebidas alcohólicas. Cuanto más tome, incluso cerveza, más se deshidratará.
- Cuando empiece un día nuevo de trabajo, siempre sepa a quién y como llamar para pedir auxilio.
- Conozca los síntomas a los que debe estar alerta
  - » Incomodidad, sudor excesivo, dolor de cabeza, falta de concentración, dolor muscular, calambres, mareos, fatiga, irritabilidad, incoordinación, vómito, visión borrosa, confusión, ausencia de sudor, desmayo y convulsiones.
- Si usted no está acostumbrado a trabajar en temperaturas altas, informe a su supervisor. Su
  empleador debe tener procedimientos para permitirle que usted se adapte al calor durante las dos primeras
  semanas de trabajo.
- Consulte a su médico si sabe que tiene cualquier factor de riesgo que cause enfermedades causadas por el calor tales como:
  - » enfermedades como la diabetes,
  - » tomar medicinas de prescripción o "sin prescripción" médica,
  - » una dieta baja en sal
- No pierda de vista a sus compañeros de trabajo. Esté atento si usted o uno de sus compañeros no se siente bien. Si alguno se ve mal, compruebe como está.
- Después del trabajo, tómese un baño o ducha fría.

#### SUS DERECHOS

Si usted trabaja al aire libre, por ley, su empleador debe garantizarle todo lo siguiente:

- acceso a agua fresca de beber durante todo el día.
- Acceso a la sombra (para todos los trabajadores) o a un ambiente igualmente fresco (si usted no es un trabajador agrícola) durante 5 minutos cada vez para descansar y enfriarse.
- Entrenamiento para trabajar de forma segura en el calor incluyendo como llamar a los servicios de emergencia si alguien sucumbe al calor.

For more information call 1-800-963-9424 or go to www.dir.ca.gov/dosh 08-00606S





## **APPENDIX C: CURRENT MEDICAL CONTRACTOR**

#### **Sharp Rees-Stealy Occupational Health Services Facility**

Inform the receptionist if you have had an exposure to blood or other potentially infectious materials and need an appointment immediately.

#### **Work-Related Injury Treatment Authorization**

For treatment authorization and worker's compensation referrals, contact the Risk Management office at 619-388-6953.

## In the event of a

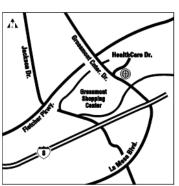
# WORK-RELATED

## Send Employee to the Nearest Sharp Rees-Stealy Occupational Health Services Facility:



## CHULA VISTA

525 Third Ave. Chula Vista, CA 91910 619) 585-4050 Occupational Health Services 8 a.m. to 5 p.m., Mon. to Fri. Urgent Care Center 8 a.m. to 8 p.m., daily



## LA MESA

Grossmont Medical Plaza, Ste. 601 5525 Grossmont Center Dr. La Mesa, CA 91942 (619) 644-6600 Occupational Health Services 8 a.m. to 5 p.m., Mon. to Fri. Urgent Care Center 8 a.m. to 8 p.m., daily



#### DOWNTOWN

300 Fir St. San Diego, CA 92101 (619) 446-1524 Occupational Health Services 8 a.m. to 5 p.m., Mon. to Fri. Urgent Care Center 8 a.m. to 10 p.m., daily (except certain holidays)



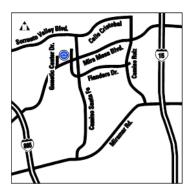
#### **RANCHO BERNARDO**

16950 Via Tazon San Diego, CA 92127 (858) 521-2350 Occupational Health Services 8 a.m. to 5 p.m., Mon. to Fri. Urgent Care Center 8 a.m. to 8 p.m., daily



#### GENESEE

2020 Genesee Ave. San Diego, CA 92123 (858) 616-8400 Occupational Health Services 7 a.m. to 5 p.m., Mon. to Fri. Urgent Care Center No urgent care at this location



#### SORRENTO MESA

10243 Genetic Center Dr. San Diego, CA 92121 (858) 526-6150 **Occupational Health Services** 8 a.m. to 5 p.m., Mon. to Fri. **Urgent Care Center** 8 a.m. to 8 p.m., daily



San Diego Community College District Slip, Trip and Fall Prevention Program 10

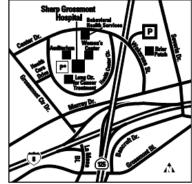
## AFTER-HOURS CARE For a WORK-RELATED INJURY or ILLNESS

## Send Employee to the Nearest Sharp Hospital Emergency Department



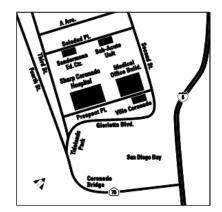
## Sharp Chula Vista Medical Center

751 Medical Center Ct. Chula Vista, CA 91911 (619) 502-5800



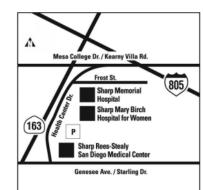
## Sharp Grossmont Hospital

5555 Grossmont Center Dr. La Mesa, CA 91942 (619) 740-6000



#### Sharp Coronado Hospital 250 Prospect Pl.

Coronado, CA 92118 (619) 522-3600



#### Sharp Memorial Hospital 7901 Frost St.

7901 Frost St. San Diego, CA 92123 (858) 939-3400



## **APPENDIX D: SAFETY PROGRAM APPROVAL**

## San Diego City College Safety Program

Reviewed by:		Date:
	Risk Manager	
	-	
Approved by:		Date:
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	City College Vice President, Administrative Services	
Approved by:		Date:
,	City College President	

## San Diego Mesa College Safety Program

Reviewed by:		Date:
	Risk Manager	
Approved by:		Date:
	Mesa College Vice President, Administrative Services	
Approved by:		Date:
	Mesa College President	

## San Diego Miramar College Safety Program

Reviewed by:		Date:
	Risk Manager	
Approved by:		Date:
	Miramar College Vice President, Administrative Services	
Approved by:		Date:
	Miramar College President	

## San Diego Continuing Education Safety Program

Reviewed by:		Date:
	Risk Manager	
Approved by:		Date:
	Continuing Education Vice President, Administrative Services	
Approved by:		Date:
	Continuing Education President	

## **District Service Center Safety Program**

Reviewed by:		Date:
	Risk Manager	
Approved by:		Date:
	Director, Facilities Services	
Approved by:		Date:
	Vice Chancellor, Facilities Management	