



EMPLOYMENT &  
HUMAN SERVICES

## M E M O R A N D U M

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To: All Staff, Code 2A

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From: Cora Young, Emergency & Safety Coordinator

Subject: Heat Illness Prevention

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As temperatures are expected to reach triple digits today and tomorrow in some areas of the County, please take a few minutes to review the attached Heat Illness Prevention document. Re-familiarize yourself with the symptoms and warning signs associated with heat-related illness. When possible, please remind your clients about the risks of heat-related illness.

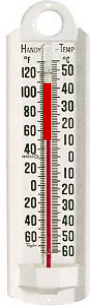
Heat-related illnesses can occur quickly and with little warning; remember to stay hydrated as it is a crucial step in preventing heat-related illness or injury from occurring.



# Heat Illness Prevention

Warm weather brings hot and sunny work days. Be careful not to let a heat-related illness spoil the day. Normally, the body has ways of keeping itself cool, by letting heat escape through the skin, and by evaporating sweat (perspiration). **If the body does not cool properly or does not cool enough, you may suffer a heat-related illness.** Anyone can be susceptible although the very young and very old are at greater risk. Heat-related illnesses can become serious or even deadly if left unattended.

**EXTRA RISK FACTORS:** People who are overweight, physically unfit, suffer from heart conditions, drink too much alcohol, or are not acclimated to the temperature are at greater risk of heat stress and should seek and follow medical advice.



## PREVENT Heat Stress Injuries And Illnesses:

**Dress For The Heat.** Wear lightweight, light-colored clothing. Light colors will reflect away some of the sun's energy. It is also a good idea to wear hats or to use an umbrella. Also wear sunscreen to prevent sunburns. Take extra breaks and care if you wear personal protective gear or clothing.

**Drink Water.** Carry water or juice with you and drink continuously even if you do not feel thirsty. The recommended frequency is 1 cup every 15 minutes. Avoid alcohol and caffeine, which dehydrate the body. If you know you will be working outdoors during the day, start drinking water early. By the time you feel thirsty, you are already beginning to dehydrate.

**Drink Fluids With Salts And Ions.** Commercial sports drinks, such as Gatorade, also replenish your body with needed salts, such as sodium and potassium that you may lose when you sweat. This can help avoid heat cramps.

**Eat Small Meals; Eat More Often.** Avoid high protein foods which increase metabolic heat.

**Avoid Using Salt Tablets Unless Directed To Do So By A Physician.**

**Slow Down.** Avoid strenuous activity. If you must do strenuous activity, do it during the coolest part of the day, which is usually early in the morning.

**Stay Indoors Or Under The Shade When Possible.**

**Take Regular Breaks** when engaged in physical activity on warm days. Take time out to find a cool place – under some shade or in an air-conditioned vehicle. If you recognize that you, or someone else, is showing the signals of a heat-related illness, stop the activity and find a cool place to rest and re-hydrate. **Remember, stay cool!**

**Acclimate.** Build up tolerance to heat and work activity slowly. This usually takes 2 weeks. If you are returning from vacation, remember to buildup heat tolerance slowly.

## WORK TOGETHER:

Recognizing the symptoms of heat stress is very important, particularly since the victim may not realize what is happening. **Watch out for your coworkers.** If you work alone in a hot environment, develop a "[buddy system](#)" so someone will check on you periodically to look for signs of heat stress.

## Special Considerations During Heat Waves:



During unusually hot weather conditions lasting longer than 2 days, the number of heat illnesses usually increases. This is due to several factors, such as progressive dehydration, loss of appetite (and possible salt deficit), and buildup of heat in living and work areas. Make a special effort to prevent heat illness during extended heat spells. Avoid any unnecessary or unusual stressful activity. Get enough sleep and good nutrition to maintain a high level of heat tolerance.

## The Three Stages of Heat-Related Illness:

**Stage 1:** The sign of the first stage of Heat Illness is **heat cramps** in the muscles.

*Heat cramps are muscular pains and spasms due to heavy exertion. They usually involve the abdominal muscles or the legs. Dehydration (loss of water and salt) from heavy sweating causes the cramps.*

**Stage 2:** The next, more serious stage is known as **heat exhaustion**.

*Heat exhaustion is more dangerous than heat cramps. It typically occurs when people exercise heavily or work in a warm, humid place. They lose body fluids through heavy sweating. Fluid loss causes less blood flow to the vital organs, resulting in a form of shock. With heat exhaustion, sweat does not evaporate as it should, possibly because of high humidity or too many layers of clothing. The body does not cool properly. Signals of heat exhaustion include:*

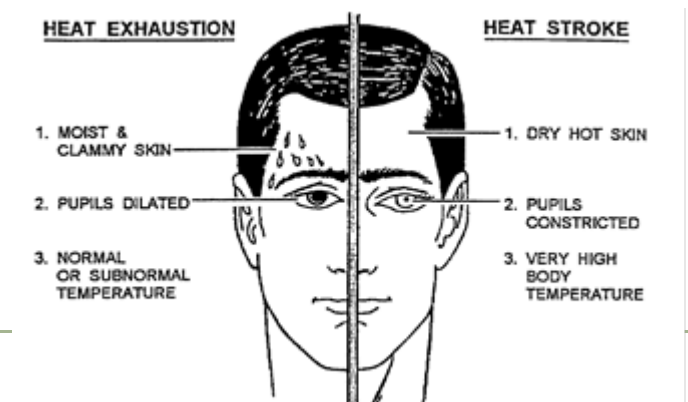


- The skin may or may not feel hot. The body temperature is usually near normal.
- Cool, moist, pale skin. Flushed or red skin.
- Heavy sweating.
- Headache.
- Dizziness and weakness or exhaustion. Nausea or vomiting.

**Stage 3:** The signal of the late stage of a heat-related illness is called **heat stroke**:

*Also known as sunstroke, heat stroke is **life-threatening**. Call 9-1-1. The victim's temperature control system, which produces sweating to cool the body, stops working. The body temperature can rise so high that brain damage and death may result if the body is not cooled quickly. Signals include hot, red and dry skin; changes in consciousness; rapid, weak pulse; and rapid, shallow breathing. Body temperature can be very high--sometimes as high as 105°F. Signs of heat stroke:*

- High body temperature (sometimes as high as 105oF).
- Skin may still be moist or the victim may stop sweating.
- Skin may be red, hot and dry.
- Decreased alertness or complete loss of consciousness.
- Rapid, weak pulse.
- Rapid, shallow breathing.
- Vomiting.



## First Aid for Heat Emergencies



1. Cool the Body
2. Give Fluids
3. Minimize Shock

**For Heat Cramps:** If you are caring for a person who has heat cramps, have him or her stop the activity and rest. If the person is fully awake and alert, have him or her drink small amounts of cool water or a commercial sports drink. Gently stretch the cramped muscle and hold the stretch for about 20 seconds, then gently massage the muscle. Repeat these steps if necessary. If the victim has no other signs of heat-related illness, the person may resume activity after the cramps stop.

**For Heat Exhaustion:** Get the person to a cooler place and have him or her rest in a comfortable position. If the person is fully awake and alert, give a half glass of cool water every 15 minutes. Do not let him or her drink too quickly. Do not give liquids with alcohol or caffeine in them, as they can make conditions worse. Remove or loosen tight clothing and apply cool, wet cloths such as towels or wet sheets. **Call 9-1-1 or the local emergency number if the person refuses water, vomits or loses consciousness.**

**For Heat Stroke:** **Call 9-1-1 or your local EMS number. Heat stroke is a life-threatening situation! Help is needed FAST.** Move the person to a cooler place. Quickly cool the body. Wrap wet sheets around the body and fan it. If you have ice packs or cold, wet towels, wrap them on each of the victim's wrists and ankles, in the armpits and on the neck to cool the large blood vessels. (Do not use rubbing alcohol because it closes the skin's pores and prevents heat loss.) Watch for signs of breathing problems and make sure the airway is clear. Keep the person lying down. Try to keep the person cool.