

# Protecting Workers From Heat Illness Meeting Kit



## FACTORS THAT INCREASE RISK TO WORKERS

- High temperature and humidity
- Direct sun exposure (with no shade)
- Indoor exposure to other sources of radiant heat (ovens, furnaces)
- Limited air movement (no breeze)
- Low fluid consumption
- Physical exertion
- Heavy personal protective clothing and equipment
- Poor physical condition or health problems
- Some medications, for example, different kinds of blood pressure pills or antihistamines
- Pregnancy

## HEAT RELATED ILLNESSES AND SYMPTOMS FOR WORKERS

**Heat Cramps:** Heat cramps are the mildest form of heat injury and consist of painful muscle cramps and spasms that occur during or after intense labor in high heat.

**Symptoms:** Painful cramps, especially in the legs; flushed, moist skin

**Heat Exhaustion:** Heat exhaustion is more severe than heat cramps and results from a loss of water and salt in the body. Heat exhaustion occurs when the body is unable to cool itself properly and, if left untreated, can progress to heat stroke.

**Symptoms:** Muscle cramps; pale, moist skin; fever; nausea; vomiting; anxiety; weakness; fatigue; headache; diarrhea

**Heat Stroke:** Heat stroke, the most severe form of heat illness, occurs when the body's heat-regulating system is overwhelmed by excessive heat. It is a life-threatening emergency and requires immediate medical attention.

**Symptoms:** Warm, dry skin; high fever, usually over 104° F (or 40° C); Rapid heart rate; Loss of appetite; Nausea; Vomiting; Headache; Fatigue; Confusion; Agitation; Lethargy; Stupor; Seizures, coma, and death are possible

## PREVENT HEAT RELATED ILLNESS

The best way to avoid heat cramps, heat exhaustion, and heat stroke is to be **proactive**. Start by acclimating employees to increased heat by providing increased break and lighter workloads for about four days to prepare employees' bodies for upcoming heat.

## PROTECT WORKERS WITH A HEAT ILLNESS PREVENTION PLAN

Does your company have a heat illness prevention program in place?

- Train workers and supervisors about the hazards leading to heat illness and ways to prevent them.
- Train workers to recognize symptoms in themselves and others.
- Train and encourage workers to immediately report symptoms in themselves and others.
- If you have someone who is new to the job or who has been away for more than a week, gradually increase the workload

or allow more frequent breaks the first week.

- Provide workers with plenty of cool water in convenient, visible locations close to the work area.
- Remind workers to frequently drink small amounts of water before they become thirsty to maintain good hydration. Simply telling them to drink plenty of fluids is not sufficient. During moderate activity, in moderately hot conditions, workers should drink about 1 cup every 15 to 20 minutes.
- Workers should eat regular meals and snacks as they provide enough salt and electrolytes to replace those lost through sweating as long as enough water is consumed.
- Set up a buddy system if possible; if not, check routinely (several times an hour) to make sure workers are making use of water and shade and not experiencing heat-related symptoms.
- Make workers aware that it is harmful to drink extreme amounts of water. Workers should generally not drink more than 12 quarts (48 cups) in a 24 hour period.
- Reduce the physical demands of the job. If heavy job tasks cannot be avoided, change work/rest cycles.
- Schedule frequent rest periods with water breaks in shaded or air-conditioned recovery areas.
- Monitor weather reports daily and reschedule jobs with high heat exposure to cooler times of the day.

## **EMPLOYEE RECOMMENDATIONS**

- Drink water or other liquids frequently enough to never become thirsty (about 1 cup every 15–20 minutes).
- Eat during lunch and other rest breaks. Food helps replace lost electrolytes.
- Wear light-colored, loose-fitting, breathable clothing such as cotton.
- Wear a wide-brimmed hat when possible.
- Take breaks in the shade or a cool area when possible.
- Be aware that protective clothing or personal protective equipment may increase the risk of heat stress.

# FINAL WORD

Establishing a coherent Heat Illness Prevention Program is the first step in recognizing and addressing issues of heat-related illness in the workplace.