



## Preventing Heat-Related Illnesses – A Team Approach

Working outdoors in high heat conditions can pose a number of hazards to workers. Even healthy adults can be affected. A coordinated team approach is the best strategy to protect workers from heat-related illnesses and injuries.

### **Managers and Supervisors**

- Monitor the weather forecast and anticipated workload. To the extent possible, plan heaviest work early in the day when temperatures are milder. Gradually acclimatize workers to higher temperatures. Keep a closer watch of new and seasonal employees. Older persons are also more susceptible to heat illnesses.
- Talk to staff frequently about your commitment to protecting them from the dangers of over-exposure to heat and sun. Remind them of your specific expectations on especially hot and humid days. Have a program that integrates increasing levels of safeguards as the Heat Index reaches higher temperatures.
- Provide additional provisions for water, ice, shade, and other safeguards. Rotate personnel in and out of jobs with the highest heat or sun exposures. Train workers on heat illnesses and first aid measures.
- Investigate and evaluate new technologies such as cooling apparel, misters, and similar devices.

### **Employees**

- Monitor the weather forecast. Know what to expect with regards to temperature and humidity.
- Come to work prepared. Eat a lighter than normal breakfast. Consider fruit instead of heavy breakfast sandwiches. Limit coffee and substitute juice and water. Drink water every 15 minutes, even if you are not yet thirsty.
- Dress wisely. Wear a hat and light-colored clothing of a breathable fabric, like cotton.
- Pace yourself. Work at a steady pace. Breaks should include time out of heat and direct sunlight. Find shady locations or use vehicles with air conditioning.
- Be aware that certain medications can affect your ability to effectively regulate body temperature. These include vasoconstrictors, beta blockers, diuretics, antidepressants, and stimulants.
- Monitor yourself for signs of overexposure. Page 2 of this Bulletin discusses the signs of overexposure.

### **Co-workers**

- Keep an eye on your teammates. Watch them for signs of overexposure. If you see something, say something to the worker or the supervisor. In extreme cases, you may have to call 9-1-1.

*This bulletin is intended for general information purposes only. It should not be construed as legal advice or legal opinion regarding any specific or factual situation. Always follow your organization's policies and procedures as presented by your manager or supervisor. For further information regarding this bulletin, contact your Safety Director at 877.398.3046.*

## Signs and Symptoms of Heat Illnesses

**Sunburn** should be avoided because it damages the skin. Although the discomfort is usually minor and healing often occurs in about a week, extensive or severe sunburn can lead to a systemic condition often referred to as sun poisoning which may require medical attention.

- Symptoms of sunburn are well known: the skin becomes red, painful, and hot after sun exposure.
- Possible blistering

Treatment: Cool the skin with water or cold compresses. Do not use butter, vinegar or other home remedies. A topical analgesic may be used AFTER removing all the heat from the affected area. If blisters do form, do not break. Lightly cover them for comfort. Avoid repeated sun exposure.

**Heat cramps** are the first signs of heat-related illnesses. Left untreated, they can lead to heat exhaustion or heat stroke. Muscular spasms occur from dehydration or when the body loses electrolytes during profuse sweating or when inadequate electrolytes are taken into the body. Proper acclimatization is an effective prevention strategy.

- Heat cramps usually begin in the arms, legs or abdomen.

Treatment for heat cramps is to rest in a cool place, drink water or a sports drink, and stretch and gently rub the cramp. Do not massage the cramp. This can break blood vessels.

**Heat exhaustion** is a warning sign and prompt actions can avert a medical emergency.

- Clammy skin; pale, cold, and sweaty
- Weakness or light-headedness. Fainting is possible.
- Fast but weak pulse
- Nausea or possible vomiting

Treatment: Move the patient to a cool place. Lie down or sit in a semi-reclined position. Apply cool compresses, especially to head / neck, and then other parts of the body as possible. Sip water.

Victims should recover after 10-15 minutes of treatment. Consider calling 9-1-1 if conditions persist.

**Heat stroke** is serious medical emergency, and can be life-threatening if not recognized and treated quickly.

- Hot, red, and dry (or only moist) skin
- Elevated body temperature (over 103° F)
- Fast but strong pulse
- Possible semi-consciousness or unconsciousness

Treatment: call 9-1-1. The brain has lost its ability to regulate body temperature. The emergency care of heat stroke is to cool the body as quickly as possible. One of the best methods for cooling the body during a heat emergency is to wrap the patient in cool, wet sheets. Re-wet the sheets often. Do not give anything to drink.

Visit the OSHA website ([www.osha.gov](http://www.osha.gov)) for additional resources. NIOSH is a second excellent resource ([www.cdc.gov/niosh/](http://www.cdc.gov/niosh/)). They have produced a Heat App and a Fast Fact card for employers and employees.