



HEAT-RELATED ILLNESSES BEST PRACTICES

Working outdoors in high heat conditions can pose several 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.



**Drink cool water
even if you are not
thirsty**



**Rest for long
enough to recover
from the heat**



**Take breaks in a
shady or cool area**



**Wear a hat and
dress for the heat**



**Watch out for
each other**



**Verbally check on
workers wearing
face coverings**

Managers and Supervisors

- Monitor the weather forecast and anticipated workload. Plan the most strenuous work for early in the day when temperatures are milder. Gradually acclimatize workers to higher temperatures. Keep a closer watch on 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 exposure. 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 and know what to expect concerning 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 the heat and direct sunlight. Find shady locations or use vehicles with air conditioning.
- Monitor yourself for 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.

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, 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 lightheadedness. 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 the 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.

Heatstroke is a 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 for heatstroke 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.

[OSHA Heat](#) provides resources and information about signs and symptoms, training information, and prevention information. The NIOSH smartphone app is also available for [iPhone](#) and [Android](#) users. The app provides real-time heat index and hourly forecasts specific to your location and occupational safety and health recommendations from OSHA and NIOSH.



MSI Resources to assist in establishing an effective Heat Stress Prevention Program include:

- A [Model Heat Stress Prevention Program](#) that can be tailored to your needs and should be adopted by your Agency.
- There are two MSI NOW classes that should be viewed by employees each year before the summer - [Heat Stress and Heat Stress in Construction Environments](#).
- The [Prevent Heat Illness at Work Infographic](#) can be distributed to employees electronically or can be printed and posted throughout the workplace.