



BIE SAFETY ADVISOR

Are Your Employees Ready for the Summer Heat?

During the summer months, construction companies across New York State get the majority of their work done. This is one of the most dangerous times of the year to be outside, with workers exposed to hot environmental conditions. The sun beating down, the humidity and/or dry warm air surrounding work crews, and the reflection of sun and heat off surfaces like blacktop and equipment all combine to have the potential to cause heat illness in exposed employees.

Outdoor operations conducted in hot weather and direct sun, such as farm work, construction, oil and gas well operations, asbestos removal, landscaping, emergency response operations, and hazardous waste site activities, also increase the risk of heat-related illness in exposed workers.

According to OSHA, in 2014 alone, **2,630** workers suffered from heat illness and **18** died from heat stroke and related causes on the job. **Heat illnesses and deaths are preventable.** As a result, [OSHA](#) introduced the nationwide [Heat Illness Prevention Campaign](#). This campaign aims to raise awareness and teach workers and employees about the dangers of working in hot weather, as well as to provide valuable resources to address heat concerns.

Did you know working in full sunlight can increase heat index values by 15 degrees Fahrenheit?

According to OSHA, the industries most affected by heat illness are construction, trade, transportation and utilities, agriculture, building and grounds maintenance. However, any worker exposed to hot and humid conditions is at risk of heat illness, especially those doing heavy work tasks or wearing bulky protective gear.

Heat Illness Can Be Prevented - Employers should establish a complete program that includes providing plenty of water, rest, and shade. Employers should educate workers on preventing heat illness. Workloads should be gradually increased for a week or more to acclimatize workers to the heat, and work schedules should be modified, as needed. Employers should also have a plan in place for emergencies and train workers to spot the

symptoms of heat-related illnesses. In addition, one of the most important things employees can do is prepare themselves the day/night before with proper hydration, so they can perform at a high-level the following day.

OSHA provides some basic guidelines for preventing heat-related illness:

- Drink water every 15 minutes, even if you are not thirsty
- Rest in the shade to cool down
- Wear a hat and light-colored clothing, if possible
- Learn the signs of heat illness and what to do in case of emergency
- Keep an eye on fellow workers
- Build a tolerance to the heat by slowly increasing your workload.



**WATER.
REST.
SHADE.**

*The work can't get done
without them.*

For more information and materials to prevent heat related illness, visit:

<https://www.osha.gov/SLTC/heatstress/prevention.html>

OSHA also has a free mobile app called the [Heat Safety Tool](#) that can help identify and prevent heat illness to those in the field. The app helps workers to calculate the heat index, risk levels and protective measures.

https://www.osha.gov/SLTC/heatillness/heat_index/heat_app.html



Recognizing Heat Related Hazards

Outdoor operations conducted in hot weather and direct sun, such as farm work, construction, oil and gas well operations, asbestos removal, landscaping, emergency response operations, and hazardous waste site activities increase the risk of heat-related illness in exposed workers.

In general, the human body cools itself by producing sweat. Sweat evaporating from the skin keeps the body cool. Higher humidity, limited air movement, and wearing protective equipment can reduce evaporation. Less evaporation means less cooling. Frequent intake of liquids is necessary to prevent dehydration through loss of sweat. Plenty of cool (50°F-60°F) water or other cool liquids (except beverages with alcohol or high caffeine levels) should be available. Drink small amounts frequently for example, one cup every 20 minutes.

Health and safety problems caused by excessive heat are called heat stress. These range from heat cramps to heat exhaustion to the most serious state, heat stroke.

- **HEAT CRAMPS** are a warning sign the body has lost too much salt through sweating. The cramps affect working muscles, such as legs, arms, and abdomen. Heat cramps may also occur when a person is resting.
- **HEAT EXHAUSTION** is a warning that the body's heat control mechanism has become overworked. Symptoms are exhaustion, dizziness and/or nausea, pale and clammy skin, rapid-pulse and low blood pressure. Heat exhaustion may lead to heat stroke if symptoms are ignored.
- **HEAT STROKE** can be fatal. This happens when the heat loss mechanism of the body just shuts down. The person stops sweating and the body temperature goes up. The heart pounds, and the skin is hot and red. A person suffering from heat stroke needs immediate emergency medical attention.

The best way to treat heat related illness is to prevent it:

- Drink water early and often. The body loses water through perspiration, and you need to replace it frequently.
- Experts recommend that you avoid using **alcoholic beverages, coffee, tea or other beverages with caffeine as a fluid replacement**. These types of drinks cause you to lose even more water and salt. *The best defense is to drink plain water early and often.*
- Use fans to create air movement throughout your work area.
- When possible, take approved / frequent rest breaks. Immediately move to a cooler area if you feel dizzy or become nauseated. Report this to your foreman. Keep an eye on coworkers.
- Dress in light colors. Choose fabrics that let moisture and heat escape. Dress in layers so you can peel off outerwear as needed as the day progresses.

Watch for signs of heat stress in yourself and your fellow workers. Most of the time, a construction worker may not realize what is happening to them until heat related illness strikes.

If signs of heat sickness do occur, call 911, help the victim to cool off by removing them to a cool place, fanning them or soaking them with a cloth that has been dipped in cool water. Give them sips of water to drink **ONLY** if they are conscious.

Drink water often

Rest in the shade

Report heat symptoms early

Know what to do in an emergency

WATER REST SHADE.
The work can't get done without them.

