

Bethlehem Area School District *Heat Related Injury and Illness Prevention*

Workers who are exposed to extreme heat or work in hot environments may be at risk of heat stress. Exposure to extreme heat can result in occupational illnesses and injuries. Heat stress can result in heat stroke, heat exhaustion, heat cramps, or heat rashes. Heat can also increase the risk of injuries in workers as it may result in sweaty palms, fogged-up safety glasses, and dizziness. Burns may also occur as a result of accidental contact with hot surfaces or steam.

Workers at risk of heat stress include outdoor workers and workers in hot environments such as firefighters, bakery workers, farmers, construction workers, miners, boiler room workers, factory workers, and others. Workers at greater risk of heat stress include those who are 65 years of age or older, are overweight, have heart disease or high blood pressure, or take medications that may be affected by extreme heat. It is, however, important to remember that no matter your health, and regardless of where you live, extreme heat can tax the body beyond its ability to cool.

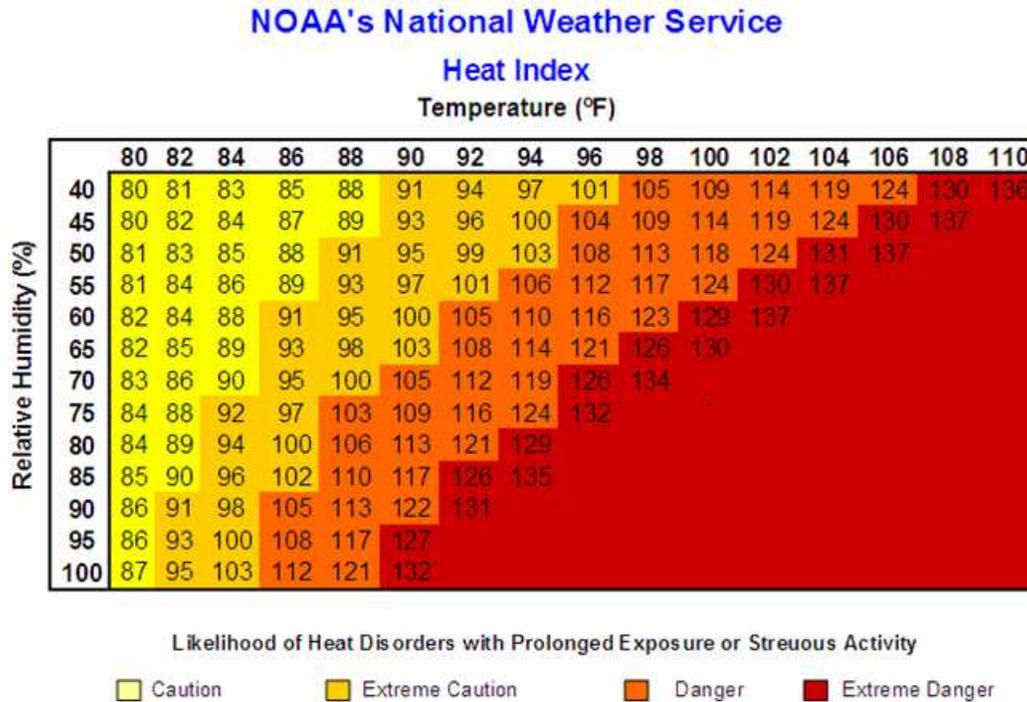
Prevention of heat stress in workers is important. Employers should provide training to workers so they understand what heat stress is, how it affects their health and safety, and how it can be prevented.

Workers can suffer heat-related injuries, illnesses, and even death when the body's temperature control system is overloaded. Normally, the body cools itself by sweating, but under some conditions, just sweating is not enough. When a person's body temperature rises rapidly, their vital organs are threatened. In a typical year, about 175 Americans succumb to heat. Heat kills more people each year in the United States than tornadoes, floods, hurricane, or lightning.

The following are some tips for employers to protect their workers during extreme heat:

- Check on workers frequently
- Avoid too much sunshine
- Wear loose-fitting, lightweight, light-colored clothing
- Take frequent breaks if working outdoors
- Eat small meals and eat more often
- Schedule maintenance and repair jobs in hot areas for cooler months
- Schedule hot jobs for the cooler part of the day; postpone outdoor tasks or schedule work for the early morning
- Reduce the physical demands of workers, avoid strenuous activity, and encourage workers to slow down
- Use relief workers or assign extra workers for physically demanding jobs
- Provide cool water or liquids to workers
- Avoid drinks with caffeine, alcohol, or large amounts of sugar
- Provide rest periods with water breaks
- Provide cool areas for use during break periods
- Monitor workers who are at risk of heat stress

The National Weather Service has developed the heat index to measure how hot it really feels when the effect of humidity is considered. When the temperature and/or the heat index are expected to be 100 degrees, a heat advisory is issued. A heat warning is issued for temperature and/or heat index of 110 degrees or more.



The best defense against heat-related injury and illness is prevention. Staying cool and making simple changes in fluid intake, activities, and clothing during hot, humid weather can help the body cope with the heat.

Factors Leading to Heat Stress

High temperature and humidity; direct sun or heat; limited air movement; physical exertion; poor physical condition; some medicines; and inadequate tolerance for hot workplaces.

Symptoms of Heat Exhaustion

- Headaches, dizziness, lightheadedness or fainting
- Weakness and moist skin
- Mood changes such as irritability or confusion
- Upset stomach or vomiting

Symptoms of Heat Stroke

- Dry, hot skin with no sweating
- Mental confusion or losing consciousness
- Seizures or convulsions

Preventing Heat Stress

- Know signs/symptoms of heat-related illnesses; monitor yourself and coworkers
- Block out direct sun or other heat sources
- Use cooling fans/air-conditioning; rest regularly
- Drink lots of water; about one cup every 15 minutes
- Wear lightweight, light colored, loose-fitting clothes
- Avoid alcohol, caffeinated drinks, or heavy meals

What to Do for Heat-Related Illness

- Call 911, or local emergency number, at once
- While waiting for help to arrive:
 - Move the worker to a cool, shaded area
 - Loosen or remove heavy clothing
 - Provide cool drinking water
 - Fan and mist the person with water

Sources: www.weather.gov
Department of Health and Human Services
Centers for Disease Control and Prevention
Occupational Safety and Health Administration