

# Heat Stress

Did you know that an increase in body temperature of just a few degrees could affect your mental functioning? An increase of a few more degrees can result in serious injury or death. Heat may also be the underlying cause of a workplace accident, a fall, or a heart attack.

Heat stress is a buildup of body heat generated either internally (by muscle use) or externally (by the environment) that affects your body's natural cooling system. Without proper precautions, this heat buildup can develop into heat exhaustion or heat stroke, a potentially fatal condition. As the internal heat increases, the worker's body temperature and heart rate rise and the body becomes overwhelmed. When it comes to heat illness - prevention is key.

## Tips for Workers

Do not expect to tolerate the heat right away. It can take up to two weeks for a person to build up a tolerance for working in hot conditions. Adapt your work and pace to the temperature and how you feel.

Take breaks. A simple but potentially life-saving practice, taking a break to cool off in the shade helps prevent your body from overheating. Try for shade or take breaks in an air-conditioned building or vehicle. If you don't have a shady or cool place, reduce your physical efforts.

Keep cool. Stay out of the sun as much as possible. If your job includes some physically demanding tasks, try to save those for the early morning or late afternoon hours when the sun is less intense. Wear lightweight clothing. The risk of heat illness can be greater if you wear certain types of personal protective equipment. If necessary, consider also wearing a cooling vest to help keep your body temperature down.

Stay hydrated. This is essential. As a general guideline, drink one cup of water every 15 to 20 minutes.

Avoid alcohol and drugs. The effects of heat illness may be worse if you ingest drugs or alcohol. If you are on medication, read the label or talk to your doctor to understand how it might cause your body to react to the sun and heat.

Recognize the symptoms of heat stress in yourself and your co-workers. These symptoms include rash, cramping, fainting, excessive sweating, headache and dizziness. You may not see or feel the effects so always use the buddy system to monitor one another.

## First Aid

The warning signs of **heat exhaustion** include heavy sweating, moist, clammy skin, dizziness, nausea, vomiting, headache, muscle cramps, extreme weakness or tiredness, fainting, and pale or flushed complexion.

Anyone with these symptoms should be moved to a cool place to rest. Remove or loosen excess clothing (hard hat, boots, shirt, coveralls, etc.) and cool the victim with cold packs or wet cloths such as towels or sheets. If they are conscious, give them half a cup of cold water to drink every fifteen minutes.

**Heat stroke** is one of the most serious types of heat illness. Unless the victim receives quick and appropriate treatment, they can die as a result of heart failure, kidney failure or brain damage caused by excess body heat.

Warning signs may vary but may include red, dry, hot skin (no sweating), a very high body temperature (above 41°C), dizziness or confusion, breathlessness and complete or partial loss of consciousness. Any person with signs or symptoms of heat stroke is in danger and needs to be hospitalized. **Get immediate medical help.** Meanwhile, move the victim to a cool place. Remove heavy clothing, and apply ice packs or cold, wet cloths to the neck, armpits, wrists and ankles and vigorously fan the body to increase cooling and reduce body temperature.

Heat illness is a serious but easily preventable health risk by following these basic rules.

Source: CCOHS