

Heat Stress

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What Is Heat Stress?

Heat stress occurs when a combination of hot, humid conditions and physical activity strains, and perhaps overcomes, the body's natural cooling system. It can cause symptoms ranging from cramps and fainting to serious heat exhaustion or even heat stroke. Heat stroke is a form of heat stress that can kill quickly.

Environmental factors that affect heat stress include air temperature, humidity, air movement and sources of radiant heat such as working in the sun or near large, hot objects. Work task factors that affect heat stress are the physical demands of the job and the frequency and length of breaks.

Heat stress can happen in many workplaces. Furnaces, bakeries, smelters, foundries and heavy equipment inside workplaces are significant sources of heat. For outdoor workers, direct sunlight is the main source of heat. In mines, heat from surrounding rock and nearby equipment contribute to heat exposure. Humidity in workplaces also contributes to heat stress.

Symptoms of heat stress can include:

- excessive sweating
- headache
- rashes
- cramping
- dizziness, and
- fainting.

What Can Workers Do To Protect Themselves?

Some things workers can do to protect themselves from heat stress include:

- Drink lots of fluids to replace perspiration. Try to drink a cup of water about every 20 minutes
- Avoid working in direct sunlight (to reduce heat gain and risk of sunburn)
- Reduce the pace of work
- Increase the number of breaks and take breaks in cool or shaded areas
- Schedule heavy work for cooler periods
- Wear light-coloured and/or light-weight clothing
- Reduce the physical demands of work by using aides, e.g. hoists, etc.

What Can Employers Do To Protect Workers?

Employers have a duty under the Occupational Health and Safety Act (OHSA) to take every precaution reasonable in the circumstances to protect workers. This includes developing hot environment policies and procedures to protect workers in hot environments due to hot processes or hot weather.

Some things employers can do to protect workers from heat stress include:

- Reduce the temperature and humidity through air cooling
- Provide air-conditioned rest areas
- Increase the frequency and length of rest breaks
- Schedule strenuous jobs for cooler times of the day
- Provide cool drinking water near workers and remind them to drink a cup of water about every 20 minutes
- Assign additional workers or slow down the pace of work
- Train workers to recognize the signs and symptoms of heat stress and start a “buddy system” since people are not likely to notice their own symptoms.

For more detailed information on heat stress, consult the ministry's [heat stress webpage](#) and the [Heat Stress Guideline](#).

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