

Heat stress

Initiative

While Minnesota is known for its cold, snowy winters, many people are unaware that hot, humid weather conditions are common during the summer months. These conditions can cause heat-related illness or death, especially in non-acclimated workers.

Description of the hazard

Heat stress may occur throughout the year in some industries, such as foundries, laundries and bakeries, or for only a few days during the summer during almost any work or play activity. Heat stress can result in several illnesses, decreased productivity and – potentially – death.

Eliminating the hazard

The most important factor in preventing heat stress is adequate water intake. Thirst is not an adequate indicator of hydration. When the body becomes dehydrated, it is difficult to rehydrate quickly because the body needs time to absorb water. Therefore, adequate water intake throughout the day is necessary. A person should drink five to seven ounces of cool water every 15 to 20 minutes. Under conditions of profuse sweating, commercial electrolyte replacement drinks may be appropriate.

A person should be aware of the typical symptoms of heat stress and know how to deal with them.

- If muscle spasms occur in the arms, legs or abdomen, drink water and eat salty foods.
- If fatigue, weakness, dizziness, faintness, nausea or headaches occur, move to a cool area and drink plenty of cold water.
- If loss of consciousness, rapid pulse or convulsions occur, call paramedics and start cooling the victim immediately. Remove the person to a cool area, soak them in cool water and use a fan to create air movement.

Heat stress can be a serious condition. To reduce the chances of it occurring, remember to drink plenty of fluids, pay attention to your body's responses and act quickly if you are in stress.

For more information

Employers and employees with questions or concerns can consult Minnesota Rules 5205.0110 Indoor Workroom Ventilation and Temperature, the MNOSHA heat stress booklet at www.dli.mn.gov/OSHA/PDF/heat_stress_guide.pdf or call MNOSHA Compliance at (651) 284-5050 or 1-877-470-6742.