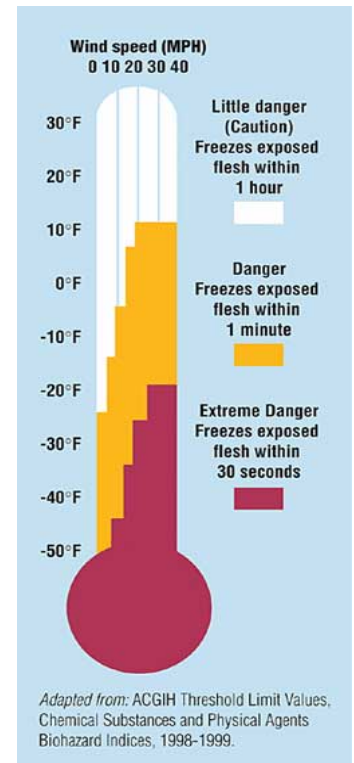


Prolonged exposure to freezing temperatures can result in injuries such as frostbite and hypothermia. Cold weather takes away body heat. Too much heat loss can cause the inner body temperature to fall to dangerously low levels causing hypothermia and even death. About 700 deaths a year are attributed to hypothermia alone, which results when the body's core temperature drops below 95° F.

In addition:

- Exposed body parts may freeze in extreme cold weather (e.g. frostbite).
- Cold weather can aggravate existing medical conditions such as arthritis.
- Cold weather affects dexterity, mental skills, and coordination.
- Prolonged exposure to even moderately cold weather can cause injuries.
- Cold weather increases the risk of musculoskeletal injuries such as back strain.
- *Wearing the proper clothes* may be the most significant precaution to reducing cold stress. Wearing appropriate clothes for cold weather involves using three layers of clothing. Also use layering to protect the head, hands, and feet.
- *Drink plenty of fluids*, preferably warm, sweet beverages. Thirst is suppressed in a cold environment and dehydration may occur when fluid intake is reduced.
- *Increase caloric intake* when working in cold environments. Workers in cold environments expend more heat and so require 10-15 percent more calories.
- *A Work Warm-Up Schedule* should be used to provide periodic times for warm-up breaks. Additional breaks should be provided as the wind velocity increases and/or the temperature drops.
- *Avoid taking certain drugs* such as alcohol, nicotine, caffeine, and medication that inhibit the body's response to cold or impairs judgment.
- *Avoid the cold* if you are becoming exhausted or fatigued. Energy is needed to keep muscles warm.
- *Shield work areas from drafty or windy conditions*. Provide a heated shelter for workers with prolonged exposure to equivalent wind-chill temperatures of 20° Fahrenheit or less.
- *Select the warmest hours of the day* when braving the cold. Minimize activities that reduce circulation.
- *Educate employees* on symptoms of cold-related stresses: heavy shivering, uncomfortable coldness, severe fatigue, drowsiness, and/or euphoria.
- *Use the buddy system*. Work in pairs so partners can monitor one another and obtain help quickly.



The impact of cold weather on the health and productivity of employees is often underestimated. Injuries due to cold stress can develop slowly and unobtrusively. The symptoms may go undetected until a worker's health or life is in danger. These tips can help employers and employees to protect themselves and coworkers,

*This lesson plan is intended for general information purposes only. It should not be construed as legal advice or legal opinion regarding any specific or factual situation. Always follow your organization's policies and procedures as presented by your manager or supervisor. For further information regarding this bulletin, please contact your Safety Director at 877.398.3046.*