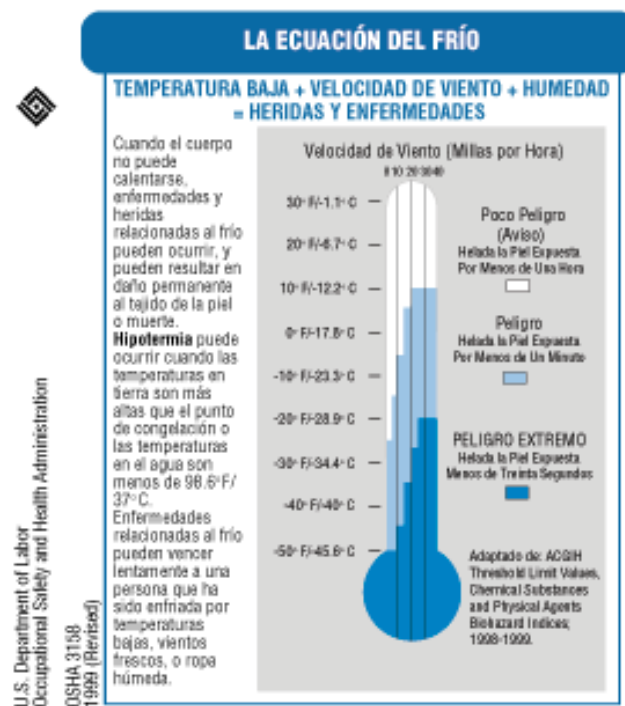
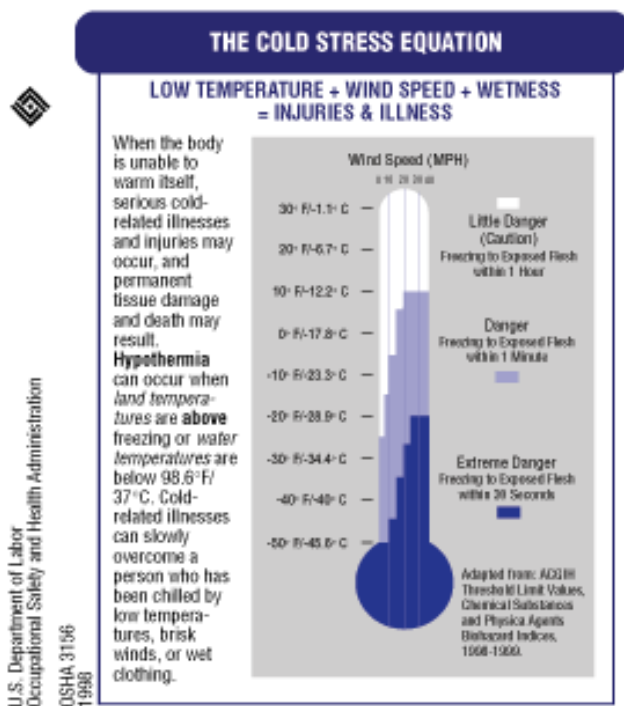


Safety Scene

Avoiding Cold Weather Calamities by Molly E. Butz

'Tis the season for cold, winter weather in some parts of the country. What should employees do to protect themselves from the effects of adverse temperatures?

Along with the everyday precautions that should be taken in a component manufacturing plant, cold and winter weather bring an additional occupational hazard to employees who work outdoors—cold stress. Like heat stress, cold stress occurs because outside weather conditions affect the body's natural ability to regulate body temperature, in this case, causing cold-related illnesses and injuries. Cold exposure can make working outdoors uncomfortable, and if not managed properly, unsafe. The two most dangerous conditions that can result from cold weather exposure are frostbite and hypothermia.



Frostbite is the freezing of surface and deep layers of skin and tissue in the face, ears, fingers and toes. The symptoms of frostbite include: pain, burning, numbness, tingling, skin that turns hard and white, skin that starts to peel or blister, skin that starts to itch or becomes firm, shiny and grayish-yellow. To treat a frostbite victim, he/she should seek medical attention as soon as possible. In the meantime, move the victim to a warm, dry place and remove any wet or constrictive clothing. Warm (not hot), moist compresses should be placed on the affected areas. Be careful not to rub the affected areas as that can lead to greater tissue damage.

Hypothermia is a more severe response to cold exposure and occurs when the normal body temperature (98.6°F) drops to or below 95°F. Symptoms of hypothermia include: cold sensation, goose bumps, confusion, numbness, intense shivering, sluggishness, drowsiness, muscle stiffness, slurred speech, trouble seeing, cool bluish skin or unconsciousness. Hypothermia is a very serious condition and warrants contacting emergency medical help immediately. Similar to frostbite treatment, a hypothermia victim should be moved to a warm, dry area and any wet clothing should be replaced with dry clothing, or you can wrap the victim in blankets. If they are alert, have

the person drink warm, sweet liquids, avoiding caffeine, and move their arms and legs to create muscle heat. If movement isn't possible, or if the victim is unconscious, place warm water bottles or hot packs in their arm pits, groin, neck and head areas.

You can help avoid these and other cold weather conditions with the following preventative measures (excerpted from OSHA's Cold Stress Card):

- Recognize the environmental and workplace conditions that lead to potential cold-induced illnesses and injuries.
- Learn the signs and symptoms of cold-induced illnesses/injuries and what to do to help the worker.
- Train the workforce about cold-induced illnesses and injuries.
- Select proper clothing for cold, wet, and windy conditions. Layer clothing to adjust to changing environmental temperatures. Wear a hat and gloves, in addition to underwear that will keep water away from the skin (polypropylene).
- Take frequent short breaks in warm dry shelters to allow the body to warm up.
- Avoid exhaustion or fatigue because energy is needed to keep muscles warm.
- Use the buddy system (work in pairs).
- Drink warm, sweet beverages (sugar water, sports drinks). Avoid drinks with caffeine (coffee, tea or hot chocolate).
- Eat warm, high-calorie foods like hot pasta dishes.

In addition, less serious injuries, such as pulled or strained muscles, can be avoided by including a short five minute warm up before each shift. Muscles tighten and contract in the cold, which can lead to injury if they are not properly warmed up before physical activity outdoors in cold conditions.

Visit OSHA's web site for an English (www.osha.gov/Publications/osha3156.pdf) or Spanish (www.osha.gov/Publications/osha3158.pdf) version of the Cold Stress Card.

To pose a question for this column or to learn more about WTCA's Operation Safety Program, contact WTCA Staff at 608/274-4849, email wtca@woodtruss.com, or view the Operation Safety demonstration online at www.wtcatko.com.

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