

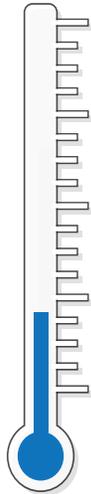
Working & Walking in Cold Weather

There's No Time to Chill When It Comes to Winter Safety

The winter months bring special challenges for workers. Plummeting temperatures increase the risk of cold-related injuries for the millions of workers who spend part or all of their workdays outside. During extreme cold, heat can leave the body more quickly, leading to a variety of cold stress conditions.

Cold stress is caused by a drop in skin temperature, which lowers internal body temperature. Risk factors include wetness/dampness, dressing improperly, and exhaustion. Increased wind speed and below normal temperatures may speed up the cold stress process. Below is a description of the warning signs and symptoms of each type of cold stress:

- **Immersion/Trench Foot:** Wet feet lose heat 25 times faster than dry feet. Trench foot is caused by prolonged exposure to wet and cold conditions and can occur in temperatures as high as 60°F. Reddening skin, tingling, pain, swelling, leg cramps, numbness, and blisters may indicate trench foot.
- **Hypothermia:** When the body uses up its stored energy and can no longer produce heat, hypothermia may occur. Shivering/exhaustion, confusion/fumbling hands, memory loss/slurred speech, and drowsiness are early symptoms.
- **Frostbite:** This is an injury to the body caused by freezing. Redness or pain in the skin may indicate the beginning of frostbite, followed by a white or grayish-yellow skin area, skin that feels unusually firm or waxy, and/or numbness.



Supervisors should ensure heavy work is scheduled during the warmer parts of the day, if possible. Allow employees to take breaks out of the cold. Assign employees to work in pairs to keep an eye on each other and watch for signs of cold stress.

Protect Yourself – Stay Warm and Look Cool

- **Dress appropriately:** Wear several layers of loose clothing for insulation, ensuring that your outer layer is wind and waterproof. Wear a hat; 40% of the body's heat can be lost when the head is left exposed.
- **Protect your skin:** Avoid touching cold metal surfaces with bare skin. Use insulating material on equipment handles when the temperature drops below 30°F.
- **Stay hydrated:** Drink plenty of liquids; avoid caffeine and alcohol. It is easy to become dehydrated in cold weather. Drinking warm, sweet beverages, such as hot chocolate, can help maintain your body temperature.
- **Use the buddy system:** Monitor yourself and your coworkers. Look out for signs of cold stress such as disorientation and slurred speech.

Be Safe on Ice. Walk Like a Penguin.

In 2014, there were 42,480 occupational injuries in the U.S. resulting from same-level falls involving ice, sleet, or snow. 1,720 of these injuries occurred in Illinois and resulted in an average of 10 days away from work.

- **Wear proper footwear:** Insulated and water-resistant boots with rubber treads or a pair of rubber over-shoes with good treads are useful when walking on snow or ice is unavoidable.
- **Slow down:** Take short steps and walk at a slower pace. You will have more time to react to changes in traction.
- Report falls to Risk Management at northwestern.edu/risk/workers-compensation or 847.491.5582.



Do your part: *Slips, Trips, and Falls* training is available at learn.northwestern.edu.
Learn more: For additional information, please review [OSHA's Winter Weather guidelines](#).

Tips for Success When Talking to Your Team

- **Preparation is Key:** Be aware of cold weather advisory days and plan work accordingly. Communicate where drinking fountains and warm areas are located for use during breaks.
- **Stay Positive:** Keep the focus on what can be done to create a safe workplace, instead of focusing on what has gone wrong in the past.
- **Share a Story, Ask for a Story:** Storytelling is a powerful method to convey information. Stories from your employees make the topic even more relatable.

Safety at Home – Don't Let the Frost Bite

Did you know? Those most at risk for hypothermia include elderly people with inadequate food, clothing, or heating; babies sleeping in cold bedrooms; children left unattended; adults under the influence of alcohol; mentally ill individuals; and people who remain outdoors for long periods. Protect yourself and your loved ones from cold-related illness:

- Never put infants under one year to sleep in a cold room. Infants lose body heat more easily than adults and can't make enough body heat by shivering. Provide warm clothing and a blanket and try to maintain a warm indoor temperature.
- Check on elderly friends and neighbors frequently to ensure their homes are adequately heated. Older adults often make less body heat because of a slower metabolism and less physical activity.
- Avoid alcoholic beverages when enduring extreme cold as it negatively affects blood circulation and causes your body to lose heat more rapidly. Eating well-balanced meals will also help you stay warmer.

For Additional Information

Please contact [Gwen Butler](mailto:Gwen.Butler@northwestern.edu), Director of Environmental Health and Safety, at 847.491.4936.