



Cold Stress



Topic: Cold Stress

Winter months bring colder temperatures and the potential for snow storms, which increases your risk for cold stress and injuries caused by winter weather. Everyone will tolerate cold temperatures differently so it is important to be aware of early signs and symptoms of cold stress so preventative measures are taken to minimize the likelihood of injury.

Frostbite occurs when skin and tissues freeze. It can cause permanent damage to body tissue and in some cases, it can lead to amputation. Workers who have reduced blood circulation and people who are not dressed properly for extremely cold temperatures are the most at risk. **Symptoms: numbness, reddened skin develops gray/white patches, skin feels firm/hard, and may blister**

Hypothermia occurs when the normal body temperature (98.6°F) drops to less than 95°F. Hypothermia is most likely at very cold temperatures but it can occur at cooler temperatures (above 40 °F), if a person becomes chilled from rain, sweat or submersion in cold water. **Mild Symptoms: alert but shivering. Moderate to Severe Symptoms: shivering stops, slurred speech, heart rate/breathing slows, loss of consciousness, death**

Prevention:

- **Acclimation:** is the adaption of an individual's ability to tolerate cold temperature. A person becomes acclimated when they purposefully expose themselves to cold temperatures for a couple hours a day, increasing their time spent outside each day over one week.
- **Hydration:** drink warm sweetened liquids.
- **Dress:** layers of loose-fitting, insulated clothes such as an insulated jacket, gloves, hat (waterproof, if necessary) and insulated and waterproof boots. Layering clothing provides better insulation.
- **Wet Conditions:** wet clothing in cold-related conditions with prolonged exposure can lead to injuries such as trench foot, frostbite, and hypothermia. Layers should be removed if you begin to sweat while performing strenuous tasks in cold environments. Wet clothing should be changed when working in cold environments.
- **Work Planning:** if possible, schedule outdoor work during the warmer part of the day. Take breaks in warm areas.

First Aid:

If you or someone you are working with begins exhibiting signs of cold stress, move into a warm room or shelter. Wet clothes should be removed and loose, dry blankets, clothing or towels should be placed on the person. Notify your supervisor immediately. If symptoms do not improve, worsen, or symptoms of hypothermia are observed, call 911 immediately.