



Cold Stress



Protecting Workers from Cold Stress

Cold temperatures and increased wind speed (wind chill) cause heat to leave the body more quickly, putting workers at risk of cold stress. Anyone working in the cold may be at risk, e.g., workers in freezers, outdoor agriculture and construction.

Common Types of Cold Stress

Hypothermia

- Normal body temperature (98.6°F) drops to 95°F or less.
- **Mild Symptoms:** alert but shivering.
- **Moderate to Severe Symptoms:** shivering stops; confusion; slurred speech; heart rate/breathing slow; loss of consciousness; death.

Frostbite

- Body tissues freeze, e.g., hands and feet. Can occur at temperatures above freezing, due to wind chill. May result in amputation.
- **Symptoms:** numbness, reddened skin develops gray/white patches, feels firm/hard, and may blister.

Trench Foot (also known as Immersion Foot)

- Non-freezing injury to the foot, caused by lengthy exposure to wet and cold environment. Can occur at air temperature as high as 60°F, if feet are constantly wet.
- **Symptoms:** redness, swelling, numbness, and blisters.

Risk Factors

- Dressing improperly, wet clothing/skin, and exhaustion.

For Prevention, Your Employer Should:

- Train you on cold stress hazards and prevention.
- Provide engineering controls, e.g., radiant heaters.
- Gradually introduce workers to the cold; monitor workers; schedule breaks in warm areas.

Preparedness

Outdoor work requires proper preparation, especially in severe winter weather conditions. Although OSHA does not have a specific standard that covers working in cold environments, employers have a responsibility to provide workers with employment and a place of employment which are free from recognized hazards, including winter weather related hazards, which are causing or are likely to cause death or serious physical harm to them (**Section 5 (a)(1) of the Occupational Safety and Health Act of 1970**). Employers should, therefore, train workers on the hazards of the job and safety measures to use, such as engineering controls and safe work practices, that will protect workers' safety and health.



- Employers Should:
 - Train Workers
 - Provide Engineering Controls
 - Implement Safe Work Practices
 - Consider Protective Clothing that Provides Warmth
- Dressing Properly for the Cold
- Safety Tips for Workers

https://www.osha.gov/dts/weather/winter_weather/windchill.html