

## COLD WEATHER

As temperatures dip during the winter months, workers face the occupational hazard of exposure to the cold. Workers need to be especially mindful of the weather, its effects on the body, and how to keep warm and safe during these days.

There are 4 conditions that lead to cold-related stress injuries. Prepare yourself against these conditions:

- Low temperatures
- High/cool winds
- Dampness
- Cold water
- Common Cold-Related Stress Injuries
- Trench Foot

## Other Hazards

In addition to cold stress, there are other winter weather-related hazards that workers may be exposed to when performing tasks.

- Winter Driving
- Work Zone Traffic Safety
- Stranded in a Vehicle
- Shoveling Snow
- Using Powered Equipment like Snow Blowers
- Clearing Snow from Roofs and Working at Heights
- Preventing Slips on Snow and Ice
- Repairing Downed or Damaged Power Lines
- Working Near Downed or Damaged Power Lines
- Removing Downed Trees



**Trench foot** is a non-freezing injury of the feet caused by prolonged exposure to wet and cold conditions. Wet feet lose heat 25-times faster than dry feet. If feet are constantly wet, trench foot can occur in temperatures as high as 60°F. Symptoms include,

- Reddening skin
- Tingling or Pain
- Swelling
- Leg cramps
- Numbness
- Blisters

**Frostbite** is caused by the freezing of the skin and tissues. Frostbite can cause permanent damage to the body. Severe cases may require amputation. The risk of frostbite is increased in people with reduced blood circulation and among people who are not dressed properly for extremely cold temperatures. Frostbite can occur without hypothermia. Symptoms include,

- Tingling in affected body parts
- Numbness
- Changes in skin color
- Subsiding pain as the condition worsens
- Blisters may form in affected areas

**Hypothermia** affects the victim's brain, making it difficult to know if it's happening to yourself, and you may not be able to do anything about it. Look out for the following symptoms for yourself and from your colleagues:

- Uncontrollable shivering
- Slow heartbeat and weakened pulse
- Severe shaking
- Stiff muscles
- Slurred speech
- Memory lapses
- Drowsiness
- Lowered body temperature that leads to,
  - Cool skin
  - Slow and irregular breathing
  - Exhaustion
  - Inability to think clearly
  - Difficulty moving well

For any cold-related stress injury, get immediate medical attention.

*It's beginning  
to look a little  
cold outside!*

## Risk Factors

Major risk factors for cold-related stress include the following:

- Wearing inadequate or wet clothing increases the effects of cold on the body
- Taking certain drugs or medications such as alcohol, nicotine, caffeine, and medication; they inhibit the body's response to the cold and impair judgment
- Having a cold or certain disease, such as diabetes, heart, vascular, and thyroid problems, may make a person more susceptible to the winter elements.
- Becoming exhausted or immobilized, especially due to injury or entrapment, may speed up the effects of cold weather.

## Preventing cold-related disorders

Wearing the right types of clothing can help in fighting the elements. You should wear at least three layers of clothing such as the following:

- An outer layer to break the wind and allow some ventilation.
- A middle layer of wool or synthetic fabric to absorb sweat and retain insulation in a damp environment
- Inner layers of cotton or synthetic weave to allow for proper ventilation.

In addition, you should do the following:

- Pay special attention to protecting feet, hands, face, and head. Up to 40 percent of body heat can be lost when the head is exposed
- Wear insulated footwear to protect against cold and dampness
- Keep a change of clothing available in case work garments become wet