Working in Winter Weather

Working outdoors during the winter months brings on a whole set of challenges that many aren't prepared for. Outdoor construction workers are exposed to many different types of hazards during the winter months; these hazards also come in the form of health risks. In extreme weather temperatures, your body must work harder to maintain its temperature. Heat leaves your body more rapidly during frigid temps, and you need to work hard to maintain a core temperature so you don't face serious health problems.



The most common injuries and illnesses during the winter months include:

Immersion/Trench Foot: This is a non-freezing injury of the foot or feet caused by prolonged exposure to wet and/or cold conditions. It can occur in temperatures as high as 60°F if your feet are consistently wet. Wet feet lose heat faster than dry feet which is why injury occurs.

- *Signs and Symptoms:* Reddening of skin, tingling, pain, swelling, leg cramps, blisters, and numbness.
- *First Aid Steps:* Call 911 immediately and seek medical attention. Remove wet shoes and socks. Get feet as dry as possible. Keep feet elevated and avoid standing or walking on them.

Frostbite: This is the freezing of skin and tissue. Frostbite can cause permanent damage to the body and, in severe cases, amputation. A loss of feeling and color can appear in affected areas, typically the extremities.

- *Signs and Symptoms:* Reddened skin starts to develop gray and white patches. Tingling, aching, loss of feeling, and blisters in the affected areas.
- *First Aid Steps:* Seek medical attention. Protect the affected area by wrapping a loose, dry cloth around it. Do NOT rub the area or apply snow or water to the area. Do NOT try to re-warm the area. If alert, drink warm, sweetened drinks (no alcohol).

Hypothermia: This is when your normal body temperature drops to below 95°F. Exposure to cold temperatures can cause your body to lose heat faster than it can be produced. Prolonged exposure to the cold will use up your body's stored energy.

- *Signs and Symptoms:* Uncontrollable shivering, loss of coordination, confusion, slow heart rate, and slow breathing.
- *First Aid Steps:* Call 911. Move the person to a dry, warm area. Remove any wet clothing and replace with dry clothing. Wrap the entire body in warm layers.

Chilblains: This is a painful inflammation of small blood vessels in your skin that happen in response to the cold air.

- *Signs and Symptoms:* Small, itchy red areas on your skin, hands or feet, possible blistering and swelling, and a burning sensation of the skin.
- *First Aid Steps:* Seek medical attention if the pain is severe. Chilblains typically goes away on its own.

Slips/Trips/Falls: These can occur to any worker who's exposed to outdoor elements. Ice, snow, and other slick conditions make walking and standing difficult. Severe injuries can also occur, such as those to the back and neck, and broken bones.

- *Common Causes:* Icy areas, rolled or wrinkled floor mats, walkways that are prone to thawing and re-freezing, missing handrails and/or railings.
- *First Aid Steps:* Seek medical attention. Stop any bleeding. Immobilize the injured area. Apply ice packs to reduce swelling.

How to prevent winter weather injuries and illnesses:

- Dress warm. Wear a hat, scarf and/or mask to cover your face, mouth, and neck, as well as gloves and several layers to keep you warm. Socks should be thick and made of wool or fleece. Waterproof boots and proper socks will help keep your feet warm and dry.
- Check your outdoor weather gear. Make certain none of your outdoor weather gear has holes or rips in it. One hole can cause frostbite. It's important to make sure you're completely insulated.
- Carry extra sets of clothing and gear. Extra gloves, hats, socks, and clothes are important to carry with you in case you get wet, get a rip or tear, or need an extra layer.
- **Plan ahead.** Check the weather and temperatures ahead of time so you know what to expect.
- Wear proper footwear as it will help with slip, trips, and falls. You can purchase shoe grips to clip on the bottom of your footwear to help protect you while walking on ice and snow.
- Stay healthy and alert. By staying well hydrated, you'll be more alert and less tired. Eating well-balanced meals will help your body stay energized and your body temperature regulated. Keep an eye on co-workers and check in and see how they're handling the cold weather. Take breaks to warm up as needed.

