# Winter Work Wear: Avoid A Chilly Surprise With The Right Work Wear


## Safety Talk

*An experienced cable layer working in sub-zero weather took warm-up breaks throughout the day and did not sense cold or frostbite in his hands or fingers. Upon returning to his hotel, he removed his boots and discovered a discolored toe; later he was diagnosed with frostbite. The worker had chosen his own boots and socks for the day after using them in a prior job. Although permitted under the organization's policies at the time of the incident, all sides recognized different boots and socks were needed for the weather.*

**WHAT'S AT STAKE**
Do you know which clothes and protective equipment to wear in cold temperatures? This is important if you perform your job outdoors, or in any kind of low temperature environment such as food-storage freezers or meat-packing plants. You're also at special risk in cold conditions if you're an older person or have circulatory problems.

Today we'll review what cold temperature dangers exist and what clothes and protective equipment can protect you in cold temperatures.

**WHAT'S THE DANGER**
Your body partially protects you from cold by shivering. This generates internal heat and constricts the blood vessels to prevent heat loss.  But you need to protect your body from low temperatures by wearing the right clothing and protective equipment. Otherwise, you're at risk of contracting conditions like the following:

**Frostbite:** Freezing of the skin and underlying tissues. Frostbite begins with your skin becoming red, cold, and numb, then progresses to it pale and firm. Complications of frostbite include permanent nerve damage and infections that can permanently destroy skin.

**Hypothermia:** A condition where your body temperature drops below normal levels, leading first to feelings of exhaustion and drowsiness and eventually to organ failure, coma, and death.

**Trench Foot (also called Immersion Foot):** Occurs when feet and toes are exposed to wet conditions and can lead to skin tissue damage such as blisters, open sores and gangrene.

The main purpose of clothing and protective gear designed for cold temperatures is to insulate your body and keep out moisture and wind – the main enemies of insulation.

**HOW TO PROTECT YOURSELF**

A key place to start is with your hands and feet. These parts of your body are the furthest distance from the center of your body's warmth, and when you're working, they tend to contact cold surfaces more frequently than other parts of your body.

Hands and fingers can be kept warm with quality insulated gloves or mittens. Leather gloves with a cotton, wool, or pile-fleece liner are good, although they retain less heat when wet. Gloves made of "breathable" water-resistant synthetic fabric with wool or cotton liners are more effective.

Alternatively, while gloves allow finger movement, mittens conserve heat better. Some jobs can be completed with "first finger" mittens for more dexterity – the thumb and forefinger are covered with a conventional glove while the remaining three fingers are enclosed together.

To keep your feet from getting cold, insulated, waterproof footwear is essential, as are the right socks. Wear socks made of wool or similar synthetic materials to help to keep your feet dry and warm. You can also insert felt liners into your boots to combat the cold. These can be removed and allowed to dry.

You should also have extra socks available in the event your socks become wet – if your feet feel warm but your socks are wet, you're still at significant risk for frostbite and trench foot.

The best way to dress your body warmly and to keep dampness out is to wear layers of clothes:

- The layer closest to your skin should absorb moisture or sweat, moving it away from your body.  Clothing made from silk, synthetic, or wool material is ideal.
- A middle layer helps insulate your body and skin from wet conditions on the outside. Wool is a good middle layer because it can absorb 20 times its weight in moisture and still stay warm. Synthetic materials like polypropylene also work well.
- Be sure to wear a windproof, waterproof outer garment if you are outside – ideally one that has some ventilation. Wear a hood when working in wet weather to keep moisture from leaking down the collar.
- Be sure clothing is loose-fitting. Tight-fitting clothes can restrict warm blood flow, which can multiply the effects of cold temperatures.

Finally, don't forget to protect your face and head from the cold. Your head loses heat quicker than any other body part. Wear a lined hard hat if safety headwear is required, or an appropriate waterproof, windproof, insulated hat in other circumstances. Cover all facial skin with a mask – even if you have facial hair – and use goggles to protect your eyes if needed.

The organization may provide some or all of the appropriate clothing. If you're unsure what clothing you're responsible for or what the organization will supply, speak with your supervisor before starting any work in cold temperatures!

**FINAL WORD**

*Avoid a chilly surprise – use the right work wear in cold temperatures. If you need guidance selecting the right work wear, don't take a guess – speak with your supervisor and get it right together!*