

Cold Temperatures Make Routine Work Tasks Hazardous

Here in Connecticut, we're caught in the grips of one of the coldest winters on record. As a rule, the precautions you would take to protect yourself and your family are clear and well known. However, there is a little-known piece of information provided by the weather services that can have a significant impact on what you do to protect yourself from a dangerous condition...wind chill.

What is wind chill and what does it mean?

Wind chill is the temperature it "feels like" outside and is based on the rate of heat loss from exposed skin caused by the effects of wind and cold. As the wind increases, the body is cooled at a faster rate causing the skin temperature to drop. As a result conditions such as frostbite can occur within minutes. Unprotected skin and body parts can leave you vulnerable to this injury. Wind chill does not impact inanimate objects like car radiators and exposed water pipes, because these objects cannot cool below the actual air temperature.

What is frostbite?

Frostbite is an injury to the body caused by freezing body tissue. The most susceptible parts of the body are the extremities such as fingers, toes, ear lobes, or the tip of the nose. Symptoms include a loss of feeling in the extremity and a white or pale appearance. Medical attention is needed immediately for frostbite. The area should be SLOWLY re-warmed.

Prolonged exposure to low wind chill conditions may also lead to hypothermia. This is an extremely dangerous medical condition/injury. Hypothermia is abnormally low body temperature (below 95 degrees Fahrenheit). Warning signs include uncontrolled shivering, memory loss, disorientation, incoherence, slurred speech, drowsiness, and apparent exhaustion. Again, medical attention is needed immediately. If it is not available, begin warming the body SLOWLY.

Why is this important at work?

Even routine tasks such as emptying the trash, retrieving parts or tooling stored outdoors, or driving a powered industrial vehicle outside present a risk when wind chill plays a part.

Things you should do to protect yourself from dangerous cold conditions at home and at work include –

- Avoid working alone in low temperature conditions.
- Wherever possible, move projects or tasks that would take you outdoors inside.
- Wear layers of loose-fitting, lightweight, warm clothing. Trapped air between the layers will insulate you. Outer garments should be tightly woven, water repellent, and hooded.
- Wear a hat, because 40% of your body heat can be lost from your head.
- Cover your mouth to protect your lungs from extreme cold.
- Mittens, snug at the wrist, are better than gloves.
- Try to stay dry and out of the wind.
- Stay alert. Don't take for granted that 'ordinary' operations are unaffected by low temperature conditions. The effects of wind chill can occur rapidly.