
Cold weather safety

As the warm temperatures begin to drop, we all know that cold weather is right around the corner. This should remind us that we must change our thinking from heat safety to cold safety. Cold weather hazards can be just as dangerous to our employees as the heat, so it is imperative we take the steps to protect them from these hazards. Hazards such as immersion, frostbite and hypothermia are just a few cold stress conditions that are dangerous to our employees. Training employees on these hazardous conditions and the steps to minimize them is key to keeping workers safe.

Whether your employees work outdoors, or indoors in cold environments, training them to protect themselves and others is vital. Consider a training program that includes understanding cold weather conditions, appropriate clothing and signs and symptoms of cold stress.

Understanding winter weather terminology is a good first step in preparing employees to work in the cold.

1. **Wind Chill** is a term used to describe what the air temperature feels like to the human skin due to the combination of cold temperatures and winds blowing on exposed skin.
2. **Wind Chill Warning** is when wind chill temperatures are expected to be hazardous within several minutes of exposure.
3. **Blizzard Warning** is the most severe weather condition and includes blowing and falling snow with winds of 35 miles per hour or more and visibility of $\frac{1}{4}$ mile or less.
4. **Winter Storm Warning** when blizzard conditions, heavy freezing rain or heavy sleet are imminent or occurring.
5. **Winter Weather Advisory** is issued for snow accumulation, freezing rain or drizzle and sleet accumulation. Advisory is a hazardous weather condition issued by the Nation Weather Service (NWS).

Many of these weather conditions (and others) are issued by the NWS, so staying up-to-date allows employees to prepare for the day's work. There are many phone weather apps available, so take the time to find the one that is most beneficial to your workforce. Once you have chosen the right app, be sure employees know how to use it.

The next step in preparing for the cold weather is knowing how to dress. Wearing the appropriate clothing is crucial to comfort, warmth and the ability to perform the job safely. Each job should be evaluated to ensure the correct clothing is being used. The rule of thumb is to start with three layers of clothing: an inner layer of wool, silk or synthetic to keep moisture away from the body, a middle layer made up of wool or a synthetic material to provide insulation when wet, then an outer layer such as a jacket or parka, to protect against wind and rain and allows for ventilation to prevent overheating. Make sure the clothing is loose to allow for circulation. Tight clothing will restrict blood flow, affecting its ability to warm the body, especially the extremities.

Finally, employees should be trained to recognize cold weather stress conditions. Some of these stress conditions include the following.

Immersion Hypothermia

This condition typically occurs when the body or parts of the body are wet. Cold water conducts heat away from the body 25 times faster than air. Signs and symptoms include reddening skin, tingling or pain in the affected area, leg cramps and numbness or blisters.

If an employee suffers from immersion hypothermia, remove wet clothing and dry the area (do not rub). Get medical assistance if needed.

Frostbite

This condition leads to a loss of feeling and color in the affected areas. Commonly affecting extremities such as the nose, ear, cheeks, chin, fingers and toes, it may lead to permanent damage to the body, including amputation in severe cases. A person suffering from frostbite may not realize it is occurring because that body part is numb.

Signs and symptoms include reddened skin that develops into white/gray patches, tingling, aching and loss of feeling. Get the individual into a warm room or shelter, remove any wet clothing and warm them using dry layers of blankets and clothing. Mild frostbite gets better with rewarming. Seek medical attention for anything more serious than mild frostbite.

Hypothermia

It occurs during very cold weather and is one of the most severe conditions of exposure. Symptoms include shivering, exhaustion, confusion, fumbling hands, memory loss, slurred speech and drowsiness. If someone is suffering from hypothermia, get medical attention immediately, move the individual to a warm, dry area and replace any wet clothing.

A comprehensive cold weather safety program is key to a safe workplace. Research the latest treatments for cold weather stress by visiting the Centers for Disease Control (www.cdc.gov) or The Occupational Safety and Health Administration website (www.osha.gov). Once you've developed a program, be sure to train employees on measures to protect themselves and others. Winter is approaching, be sure you and your employees are prepared.

If you need help identifying potential hazards in your workplace, please contact Andy Sawan, Risk Services Specialist at Sedgwick at andrew.sawan@sedgwick.com or 330.819.4728.