

## **Winter hazards**

Working in an Ontario winter can be especially challenging. Cold temperatures and slippery conditions can result in lost-time injuries if companies are not prepared to meet the winter elements with appropriate safety plans in place.

### **Cold**

Colder temperatures can have both long and short-term effects on the body. Frostbite, hypothermia, and even potential musculoskeletal disorders resulting from cold temperatures can affect a worker's ability to perform their duties safely.

In cold temperatures, skin that is not properly covered or protected can freeze quickly, resulting in frostbite. The most likely exposed areas are cheeks, ears, nose, hands, and feet. According to the Ontario Ministry of Health, smokers and people with diabetes and other circulatory problems have a higher risk of developing frostbite and should take particular precaution.

Hypothermia is the lowering of the body temperature. If the body temperature drops too low, for too long, hypothermia can cause brain damage or death if not treated in time. Hypothermia requires immediate medical treatment by qualified health professionals.

It is important to assess whether workers are exposed to cold for prolonged periods, have appropriate clothing or have the ability to warm up periodically throughout their shift. This can include layering clothing, access to warm fluids (not alcohol) and portable heaters where appropriate. If workers are working on or near electrical plant, clothing should meet appropriate arc flash requirements.

Colder temperatures can affect blood flow to the hands and handling cold objects can mean that workers may grab equipment more forcefully than necessary. These issues can result in increased forces on the body and increased exposure to machinery vibration, both of which can cause longer-term musculoskeletal injury.

### **Snow and ice**

Winter weather means snow and ice which can make a simple walk through the company parking lot a potentially dangerous activity. Worksites and loading docks in unprotected or undeveloped areas can also be heavily iced and very unsafe.

Slips occur when there is a loss of balance or lack of friction between a person's feet and the walking surface. These types of slips can produce property damage, minor injuries, musculoskeletal disorders and other long-term injuries.

When arriving at a worksite or parking lot, the area should be assessed for potential slip hazards. Shovels and snow and traction control products should be easily accessible. Snow and ice should be cleared or traction control products used in order to prevent slips. Ensure everyone, regardless of their roles, should have appropriate footwear when outdoors in potential slippery conditions.

While snow and ice on the ground can be a potential slip hazard, it can also be an issue overhead. Heavy snow and ice buildup on buildings, large vehicles and unprotected worksites can cause overhead hazards as well as add dangerous amounts of weight to structures. Removal of the snow and ice is ideal if safe to do so, otherwise it is important to post appropriate warning signs around the area.

**Carbon monoxide**

The use of propane heaters and snow removal machines in winter can increase the threat of carbon monoxide poisoning.

Carbon monoxide (CO) is colourless, odourless, and tasteless. It can be generated from propane, gasoline and diesel engines as well as heater exhaust and some welding products.

When using heaters on a worksite, ensure that the heater is in a well ventilated area in order to avoid a buildup of potentially fatal carbon monoxide. A gas detector should be present. Also in situations in which a snow removal machine is being used it is important not to leave the machine running in an enclosed area or if the machine has an enclosure. Whenever using seasonal equipment such as these devices, ensure they are maintained properly and inspected prior to use.

**Hydraulics**

Hydraulic equipment may need additional time to warm up in colder temperatures. Ensure the manufacturer's recommended instructions for maintenance and warm up are followed to prevent damage.

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These are just a few tips to guide you through the winter season. It is important to remember to take the appropriate precautions and include winter weather in safety meetings and job planning. For more health and safety information please visit the IHSA website.