



# Tool Box Talk

## COLD STRESS

January is the height of the cold season and we're not talking about sniffles and sneezes, but the reality of working outdoors in freezing conditions, coupled with wind and driving snow. Working outdoors in winter is often more than uncomfortable. It can be life-threatening if hypothermia sets in.

### **EXPLAIN DANGERS**

It's easy to be deceived by a sunny winter's day, especially when you're working hard. But when you work in cold and wet conditions, you're at risk for serious cold illnesses.

Hypothermia and Frostbite can sneak up on you unexpectedly, especially when you're focused on your job. Hypothermia occurs when the core temperature of your body falls below the normal level. If your body becomes too cold, your vital organs cease to function properly. If unrecognized and untreated in the early stages, hypothermia can cause death.

In extremely cold weather, your extremities such as your ears, feet, fingers and cheeks are prone to frostbite, which occurs when your flesh freezes. Symptoms of frostbite are quite different from hypothermia. The exposed skin will first appear reddish, and then a grayish-white color.

Both hypothermia and frostbite can progress to a medical emergency and therefore require immediate first aid treatment.

Symptoms of hypothermia include shivering, chattering teeth, confusion, slurred speech, lack of coordination and eventually unconsciousness.

### **WIND CHILL**

The wind accelerates heat loss. For example, when the air temperature is -30C:

- With 16km/h wind your skin can freeze in about a minute
- With 48km/h wind your skin can freeze in less than 30 seconds

### **IDENTIFY CONTROLS**

Here's how to control cold stress:

- Wear several layers of clothing rather than one thick layer to capture air as an insulator
- Wear synthetic fabrics next to the skin to "wick" away sweat.
- If conditions require, wear a waterproof or wind-resistant outer layer.
- Wear warm gloves.
- Wear hats and hoods. You may need a balaclava.
- Tight-fitting footwear restricts blood flow. You should be able to wear either one thick or two thin pairs of socks.
- If your clothing gets wet a 2C or less, change into dry clothes immediately and get checked for hypothermia.
- If you get hot while working, open your jacket but keep your hat and gloves on.
- Take warm, high-calorie drinks and food.

