WORKING **IN THE COLD**

Extremely cold or wet weather is a dangerous situation. Effects vary depending on:

> TIME How long you have spent in the cold, both past and present.



TEMPERATURE "Cold" depends on what you're used to. Extreme cold is well below normal for the local area.

Trench Foot

constantly wet.

Symptoms:

- reddening of the skin
- numbness
- leg cramps
 - tingling pain
 - ✤ swelling
 - blisters or ulcers
- * bleeding under the skin

purple, blue, or gray)

Chilblains

Ulcers form when small blood vessels in the skin are damaged. Caused by repeated exposure of skin to temperatures just above freezing to as high as 15.5 °C.

Symptoms:

- redness
- itchina 米
- possible blistering *
- inflammation
- 米

First Aid:

- Avoid scratching.
- Slowly warm the skin.
- - and swelling.

can lead to serious injury, illness and even death

COLD STRESS is a condition that occurs when the body can no longer maintain its normal temperature. The results are serious injuries, including permanent tissue damage or even death.



Chilblains, trench foot and frostbite are serious. Hypothermia is very serious; it can lead to death.

Hypothermia

A condition in which the body uses up its stored energy and can no longer produce heat. Often occurs after prolonged exposure to cold temperature.

Late Symptoms:

no shivering

dilated pupils

slowed breathing and pulse

Ioss of consciousness

blue skin

Early Symptoms:

- shivering
- fatigue
- Ioss of co-ordination
- confusion and disorientation

First Aid:

- * Ask for immediate medical help.
- Move the person into a warm room or shelter.
- Remove wet clothing. 米
- ✤ Warm the center of their body first chest, neck, head, and groin. Use an electric blanket; or skin-to-skin contact under loose, dry layers of blankets, clothing, or towels.
- If conscious, warm beverages may help increase the body temperature. Do not give alcohol.
- Once temperature has increased, keep them dry and wrapped in a warm blanket, including the head and neck.
- ✤ If no pulse, begin CPR.

the nose, ears, cheeks, chin, fingers, or toes.

- reduced blood flow to hands and feet
- aching
- tingling or stinging
- bluish or pale, waxy skin

- Get into a warm room as soon as possible.
- Immerse the affected area in warm (not hot) water, or warm the affected area using body heat.
- Do not walk on frostbitten feet or toes unless absolutely necessary.
- Do not use a heating pad, fireplace, or radiator for warming.
- Do not massage the frostbitten area; doing so may cause more damage.

Frostbite risk increases rapidly when windchill goes below -27 °C.

Frostbite

An injury caused by freezing, which most often affects

Symptoms:

- numbness

First Aid:





High moisture levels make warm clothing less effective. As the moisture evaporates, it takes heat with it and you feel even colder.

WINDCHILL What the **combined** effect of temperature and wind feels like.

An injury of the feet from prolonged time in wet and cold conditions. It can occur at temperatures as high as 15.5°C if the feet are

First Aid:

- Remove shoes/boots and wet socks.
- **Bry** feet.
- Avoid walking on feet, as this may cause tissue damage.

gangrene (foot may turn dark

possible ulceration in severe case

Use corticosteroid creams to relieve itching

* Keep blisters and ulcers clean and covered.





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WORKING IN THE COLD cont.

Preventing Cold Stress

Dress Smart

Cold mostly affects body extremities - hands and feet get less blood flow, as they are further away from the body core (torso):



Wear loose clothing,

worn in layers.

(Tight clothing can

reduce blood flow to

the extremities like

fingers, toes, ear lobes)





Carry extra dry gloves, hat, socks, change of clothes.

Change into dry clothes when necessary.

Work Smart

- * Monitor the weather forecast for extreme changes in temperature, humidity and windchill.
- * Monitor your physical condition as well that of co-workers.
- * Pace your work to avoid excessive sweating.
- * Avoid touching cold metal surfaces with bare skin. Cover metal handles and bars with thermal insulating material.
- * Limit time spent outside (e.g., take breaks indoors)
- * Include chemical hot packs in your first aid kit.
- * Carry a thermos of hot liquid (non-alcoholic) to help warm up your core body temperature.

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Original content developed by:





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THE NEIGHBOURHOOD





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Drive Smart

Prepare for the season:

- * Winter driving training (e.g., how to deal with a skid or getting stuck)
- * Equip all vehicles with snow tires
- * Perform regular maintenance checks (e.g., battery, heating system)
- * Fuel up regularly (don't let the gas level get low, in case you get stuck)

Winter extras inside vehicles:

- * emergency survival kit (candle, matches, blanket, etc.)
- * shovel
- * booster cables (for dead battery)
- * windshield brush/scraper
- * cat litter or sand (for traction if stuck)
- * snacks and water
- * cell phone and charger









Employer's Responsibilities

Protect workers' health and safety with a general health and safety program that covers cold stress and winter driving.

* Train workers and supervisors/managers about the programme, cold stress, symptoms, first aid, etc.

Design or adapt machines and tools to be operated without workers having to remove mittens or gloves.

Add enough insulation material to make it easier to hold onto handles and bars with mittens/gloves (grasp with whole hand instead of grip with just fingers).

* Allow workers time to get used to working in the cold (with protective clothing) before starting a full work-load.

Set up a buddy system.

Provide:

thermometers to track temperature every four hours

- cold stress first aid supplies
- rest periods in a warm area
- heated warming shelters (tents, cabins, rest rooms)
- car emergency kits
- access to warm drinks (not alcohol or caffeine)
 - washroom breaks
- paced work to avoid lots of sweating
- time to change into dry clothes

For more information, Text, WhatsApp or Call:

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