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## Working in extreme cold – a guide for workers

Working in extremely cold environments can cause serious illness and injury – especially if there are also windy or wet conditions.

Working in extremely cold conditions can put your body under stress. If your body has to work too hard to stay warm it can cause cold-related illness and injuries which can result in permanent tissue damage and death.

You are especially at risk if you work outdoors in cold or wet weather, or work in artificially cold environments, like refrigerated areas or cool stores.

The business must make sure, as far as is reasonably practicable, that you are not put at risk while working in extremely cold conditions.

### Things the business can do to keep you safe

The business must engage with you when making decisions about how to reduce the risk of working in extremely cold conditions. See examples below:

- if reasonably practicable, remove the source of cold
- replace existing machinery with machinery that is designed with built-in protection against cold injury
- move work areas to warmer locations and provide shelter from cold draughts, wind and water
- warm the air temperature by improving building insulation and installing heating
- schedule work for warmer times of the day or year
- allow extra breaks for you to warm up, or rotate tasks between workers where there are cold conditions
- provide warm shelter away from wind and rain during breaks
- provide specialised protective clothing that protects you from cold, wind, and water

- provide drying facilities so wet or damp clothing and PPE can be dried during breaks and between shifts
- monitor the work environment to make sure it does not exceed safe levels (such as air temperature or wind chill)
- check you are healthy enough to be working in the cold before you start and while you are working
- provide you with training and instruction on how to keep yourself safe when working in the cold.

### Things you can do to keep yourself safe

The business should make it easy for you to do the following:

- Keep as dry as possible. Take off damp clothing and personal protective equipment (PPE) before breaks and let it dry before putting it back on.
- Drink plenty of fluids but avoid caffeine, energy drinks, and alcohol.
- Tell the business if you have any health conditions or are taking medication that might make you sensitive to extreme cold.
- Wear/use and look after your PPE as instructed by the business.
- Stop work if you think the work environment has become unsafe to continue working in, or you notice signs of cold-related illness or injury in yourself or a workmate. Tell your supervisor.
- Speak up. If you see any ways to improve health and safety, or see someone working in an unsafe way, tell your supervisor or health and safety representative.

## You need to be fit to work in extreme cold

Even if the business has taken all reasonable actions to reduce risk, there may still be some remaining risk. The business may then get a qualified health and safety professional to ask you questions about your health, and ask you to take tests to make sure you are fit and healthy enough. They may also want to monitor your health during and after working in extremely cold conditions to make sure that your health has not been affected.

You have the right to be consulted about health monitoring before it starts. You also have the right to ask any questions and know how any information will be used, stored and how long it will be kept.

## Symptoms and first aid treatment options

The table below lists the symptoms and treatment options for the main types of cold-related illness and injuries. If you notice signs of cold-related illness or injury in yourself or a workmate, stop work and tell your supervisor.

CONDITION	SYMPTOMS	TREATMENT
<b>Chilblains</b>	<ul style="list-style-type: none"><li>- Swelling, redness, itching, tingling and pain on fingers, toes, ears, cheeks or other extremities.</li></ul>	<ul style="list-style-type: none"><li>- Slowly warm the skin.</li><li>- Corticosteroid creams can help ease itching and swelling.</li><li>- Avoid scratching affected areas.</li></ul>
<b>Trenchfoot</b>	<ul style="list-style-type: none"><li>- Tingling, itching and burning feelings in the feet and toes.</li><li>- Swelling of the lower legs.</li><li>- Blisters.</li></ul>	<ul style="list-style-type: none"><li>- Move to a warm area and slowly warm up.</li><li>- Carefully remove wet footwear and socks and cover feet with a sterile dressing.</li><li>- Do not apply direct heat to feet or rub them. Avoid walking.</li><li>- See a doctor or nurse.</li></ul>
<b>Frostnip</b>	<ul style="list-style-type: none"><li>- Skin turns white on ear, nose, fingertips or toes.</li><li>- Skin may feel hard.</li></ul>	<ul style="list-style-type: none"><li>- Move to a warm area and slowly rewarm the affected area.</li></ul>
<b>Frostbite</b>	<ul style="list-style-type: none"><li>- Cold, tingling, stinging or aching in the affected area (usually face and ears, fingers and toes).</li><li>- Numbness.</li><li>- Skin turns red, then purple, then very pale or white.</li><li>- Skin is very cold to the touch.</li><li>- In severe cases the skin will become hard or blister.</li></ul>	<ul style="list-style-type: none"><li>- Move to a warm area and slowly warm up.*</li><li>- Loosen or remove clothing that may be restricting circulation and loosely cover the affected area with a sterile dressing.</li><li>- Do not apply direct heat or rub the affected area.</li><li>- See a doctor or nurse.</li></ul>
<b>Hypothermia</b>	<p>Early signs:</p> <ul style="list-style-type: none"><li>- shivering</li><li>- pale, cold skin</li><li>- fatigue</li><li>- pain or numbness in the hands and feet</li><li>- mild confusion.</li></ul> <p>Later signs:</p> <ul style="list-style-type: none"><li>- violent shivering</li><li>- slurred speech</li><li>- dizziness or increased confusion</li><li>- lack of co-ordination.</li></ul> <p>Advanced signs:</p> <ul style="list-style-type: none"><li>- shivering stops</li><li>- sleepiness</li><li>- slow, shallow breathing and weakened pulse</li><li>- extremely cold skin</li><li>- unconsciousness</li><li>- death.</li></ul>	<p>Call 111 - for immediate medical assistance. Then:</p> <ul style="list-style-type: none"><li>- move to a warm area</li><li>- remove wet clothing</li><li>- warm the center of the body first (neck, chest, abdomen).</li><li>- Place body between blankets - re-warming must happen slowly</li><li>- body-to-body contact can help warm a person gradually</li><li>- do not re-warm too quickly (do not use a hot bath)</li><li>- if conscious, drink warm drinks (but not alcohol, caffeine or energy drinks).</li></ul>

## More information

For more detailed information see: [Working safely in extreme temperatures](#)

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\* Do not warm the affected area if there is a chance of it refreezing. If the area re-freezes tissue damage will be even more severe.