

December 2019

Working in extreme cold – a guide for businesses

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

Working in extremely cold environments can put workers' bodies under stress. If their bodies have to work too hard to stay warm this can cause cold-related illness and injuries which can lead to permanent tissue damage and death. Cold-related illness and injuries are especially a risk when working outdoors in cold, windy, or wet weather, or when working in artificially cold environments such as refrigerated areas or cool stores.

Regulations require that you (the PCBU – person conducting a business or undertaking) make sure, so far as is reasonably practicable, that your workers' health and safety is not put at risk while carrying out work in extremely cold environments.

Do a risk assessment

If your work environment often has:

- uncomfortably low temperatures
- cold winds or cold airflow
- exposure to water or dampness.

you will need to consider the risks that working in that environment could have to your workers' health and safety. A suitably qualified workplace health and safety professional can help you do a workplace risk assessment and advise on the most appropriate control measures to put in place.

Use control measures to reduce risks from working in extreme cold

Eliminating what is causing the low temperature is the best option. Where elimination is not possible, consider the following control options:

- replace existing plant with plant 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 warming up, or rotate workers more often where they are exposed to cold conditions
- provide warm shelter away from wind and rain during breaks
- provide specialised protective clothing that protects from cold, wind, and water
- provide drying facilities so wet or damp clothing and PPE can be dried during breaks and between shifts.

See WorkSafe's good practice guidelines [Working safely in extreme temperatures](#) for more information about control measures.

Provide personal protective equipment (PPE) for working in extreme cold

You should provide specialised PPE such as thermal and weather-proof clothing that protects workers from cold, wind, and water.

- Clothing should be layered to maximise insulation and allow workers to add or remove layers to keep comfortable between changing environments.
- Clothing should be made of materials that provide good insulation but are still breathable.

PPE should only be used to provide additional protection after all other reasonably practicable control measures have been put in place first. You cannot make workers pay (in full or part) for the cost of providing PPE.

Monitor workplace conditions

You should monitor the work environment to make sure conditions do not go beyond safe levels. Monitor air temperature, air speed (wind), humidity, water exposure, and the length of time workers are exposed to those conditions. A suitably qualified workplace health and safety professional can help you set up workplace monitoring.

Check your workers' health

Workers have varying levels of tolerance to working in extreme cold. Age, build, personal and medical factors can all affect their tolerance. You should arrange health assessments and monitoring for your workers to make sure they are fit enough for the work, and not suffering any ill-effects during and after doing the work. This needs to be done by a suitably qualified occupational health practitioner.

Engage a professional

For workplace **risk assessments** and **workplace monitoring** a suitably qualified workplace health and safety professional can help you. You can find a list of health and safety professionals here:

- [HASANZ register of verified health and safety professionals](#)
- For occupational hygienists: [New Zealand Occupational Hygienists Society](#)

For worker **health checks** and **health monitoring**, you will need an occupational nurse or occupational physician. You can find a list of occupational health practitioners here:

- Occupational nurses: [New Zealand Occupational Health Nurses' Association](#)
- Occupational physicians:
 - [Australian and New Zealand Society of Occupational Medicine Inc](#)
 - [Australasia Faculty of Occupational and Environment Medicine \(AFOEM\)](#)

Give your workers training and information

You must provide your workers and supervisors with training and information on:

- how to keep themselves safe when working in extremely cold environments
- the signs and symptoms of cold-related illness and injuries
- what to do if they notice or experience any signs or symptoms of cold-related illness or injury in themselves or others.

Engage with your workers

Ask your workers for their ideas and opinions before making decisions relating to their health and safety at work. This includes how to keep safe from harm while working in extremely cold environments. For example: engage with your workers when doing a risk assessment - they may have ideas on what cold-related risks are present and have suggestions for possible control measures. You must also consult with workers when selecting PPE, planning workplace monitoring and health assessments, and delivering training.

More information

For more detailed information on managing the risks from working in extreme cold, see WorkSafe's good practice guidelines [Working safely in extreme temperatures](#)

PUBLISHED: DECEMBER 2019