

Working in extreme outdoor conditions

Take action to protect workers from the risks associated with working in extreme outdoor conditions.

Managing the risks of working in extreme outdoor conditions

This section offers advice on how to manage the risks associated with working in extreme outdoor conditions included in advice below.

At times, workers might be operating in extreme outdoors conditions. Examples include:

- emergency responders such as police, ambulance or fire
- responding to utility outages during extreme weather events
- de-icing roads in winter
- responding to road or transport-related emergencies during storms
- debris or waste collection or clean-up resulting from flooding or earthquake
- doing road maintenance in remote or exposed locations
- managing or monitoring road closures due to unsafe driving conditions.

Examples of extreme conditions include:

- heavy rain, sleet or hail, lightning
- snow or ice
- low visibility (fog, smog, smoke)
- flooding, inundation, erosion
- high winds
- natural disasters such as volcanic eruption, fire, and tsunami
- remote or exposed locations.

Workers may also have to work in extreme temperatures that can be a risk to their health. For more information on working in extreme temperatures, see:

- [Working safely in extreme temperatures](#)
- [Managing risks](#)
- [Reasonably practicable](#)

What could go wrong when working in extreme conditions?

Working in these conditions creates direct risks to worker safety. For example:

- workers could get cut off from emergency services or facilities
- workers may be at an increased risk of being involved in a vehicle/driving-related incident (particularly where driving conditions are poor)
- workers could be injured by flooding, rock falls, falling trees, slips, trips, and falls and downed power lines.

In addition, working in these conditions can create additional mental stress for workers. For example:

- when responding to an extreme situation (such as flooding) workers' own families may also be affected or at risk by the same event – causing them additional stress
- working in these conditions is usually unplanned and urgent in nature, which can make workers feel additional pressure.

Workers may be at greater risk of suffering from fatigue if they are responding to an emergency situation outside their normal hours of work. For more information, see [Fatigue](#)

Control measures for working in extreme conditions

While it generally is not possible to eliminate the above examples of extreme conditions, you can take steps to minimise exposure to these conditions and manage the risks that these conditions may create.

Follow the advice of local authorities

Keep up to date with the official advice from local civil defence and emergency management agencies, as well as New Zealand Police.

Get condition reports

Get regular and accurate condition reports and keep an eye on MetService for the latest weather updates. If the work is not essential, reschedule it for when conditions are better.

Even for essential work, workers should not be permitted to work until the business or organisation has been able to manage the risks to a reasonably practicable level.

Make sure workers are trained for the conditions

Make sure workers are trained in safe work practices for essential work in extreme conditions. This should include training in:

- when to use control measures such as monitoring devices, guards, safety nets, warning signals (such as lights and horns), warning signs, working in a buddy system
- when to stop work. Make sure workers have the knowledge, experience, and authority to stop work if they believe conditions have become unsafe to work in
- what additional steps to take to make sure workers are visible to road users when visibility is low
- driving in winter conditions (such as snow, ice, and heavy rain). If relevant, make sure all vehicles are equipped with winter emergency safety equipment.

Make sure workers have the right equipment for the conditions

Make sure workers have the right tools and machinery available. Make sure tools and machinery can still operate safely in extreme conditions.

Personal protective equipment (PPE) – make sure workers have appropriate weather-proof, warm PPE appropriate for the activity. For more information, see [Personal protective equipment \(PPE\)](#)

Have a check-in system

Make sure there is a system so you always know where your workers are.

This may be a system where workers regularly check-in with their manager or designated representative to confirm they are safe and to update their location (if carrying out mobile works). How this is done will depend on what communication channels are available.

For example:

- mobile phone calls or SMS/text messages
- RT communication
- satellite phones
- GPS tracking on vehicles
- personal locator beacons or emergency position-indicating beacons.

Check-in systems are particularly important for lone workers working in both extreme and normal conditions.

Extreme conditions emergency plan

Have an extreme conditions emergency plan. Make sure workers know what to do if conditions become unsafe or if an emergency arises. This is particularly important for work in remote locations. Where relevant, plans should include the following:

- what to do when usual communication channels are not available (for example, satellite phones)
- the location of first aid equipment and details of nearest medical assistance, including the response time or distance
- the location of self-rescue equipment
- onsite rescue procedures
- site evacuation procedures
- how you will coordinate with other services (such as police, fire, and ambulance services)
- alternative route plans if the planned route is cut off.
- rest times. Schedule additional rest times (in sheltered locations). Working in extreme conditions can increase fatigue and stress risks for workers. Providing additional break times may help workers cope with working in the extreme conditions.

Working in reduced visibility conditions

Extreme conditions may mean road users have reduced visibility. This can affect stopping distances and increase the risk of workers being hit by road users.

While working at night is not considered an 'extreme working condition', workers should be provided with enough light to be seen clearly by road users and others at night and in times of low visibility.

Workers should also have enough task lighting to safely perform the work task.

Working in high winds

High winds can create safety risks to workers.

Examples of risks include:

- injuries from strong wind gusts unexpectedly moving objects
- injuries from dust or debris in the air
- damage to skin, especially in cold conditions (wind burn)
- injuries from broken tree branches or uprooted trees
- getting blown off height-access equipment (such as elevated work platforms or ladders).

Control measures for working in high wind conditions

Examples of control measures for working in high winds include:

- stopping work when it becomes dangerous due to high winds. For example, do not use cranes when it is unsafe to do so
- not working at height when high winds are forecasted. If working at height cannot be avoided, workers should be wearing fall protection and be secured properly
- being aware of structures or objects that can suddenly move. Secure signage and consider helmets to protect workers' heads
- be aware of risks associated with working in and around high vehicles such as transport trucks, buses, and vehicles towing trailers. Strong gusts of wind can topple these vehicles
- securing loose items by using weights, ropes, chains, or stakes
- securing latches, doors, windows, scaffolding, and ladders
- avoiding carrying or lifting large objects. If it cannot be avoided, make sure workers have additional support or assistance. Large objects can act as a sail in high winds
- using buildings or vehicles to help block the wind
- wearing safety glasses or goggles when appropriate.

A kit could include:

- snow chains for tyres
- a bag of sand (or kitty litter)
- a tow rope or winch
- traction mats
- a snow shovel, snow brush, and ice scraper
- jumper pack/leads
- warning devices such as flares or emergency lights
- extra windscreen wiper fluid appropriate for sub-freezing temperatures
- a roll of paper towels
- a torch and a portable flashing light (and extra batteries)
- a blanket
- extra clothing, including hat and wind-proof pants, and warm footwear
- a first aid kit
- snack bars or other 'emergency' food and water
- road maps (especially important if mobile data becomes unavailable).

Workers should be trained in how to use the contents of a winter driving kit safely, and when it would be appropriate to do so. For example:

- how to use jumper cables
- when and how to put on tyre chains
- how to top up de-icing fluid.

Winter driving kits

Workers that are operating in extreme winter conditions, especially in remote locations, should have a winter driving kit.

A winter driving kit includes:

- items they might need to drive safely in extreme winter conditions and
- equipment to keep warm and safe if they are cut off from returning home or to the depot.