WORKSAFE

Mahi Haumaru Aotearoa



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Working in extreme heat - a guide for businesses

Working in extreme heat can cause serious illness and injury - especially if there is also high humidity or radiant heat.

Working in extremely hot environments can put workers' bodies under stress. If their bodies have to work too hard to stay cool it can cause heat-related illness and injuries. These can be fatal if ignored. Heat-related illness and injuries are a risk especially when working outdoors in summer or in indoor environments with high humidity or radiant heat (such as kitchens, laundries or foundries).

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 extreme heat.

Do a risk assessment

You might need to do a heat risk assessment if:

- workers are uncomfortably hot or sweating while working
- there is high humidity.
- workers are exposed to radiant heat (such as direct sunlight or heat-producing plant)
- workers are working in confined spaces during hot or humid weather
- work is physically demanding.

If any of the above applies, you will need to consider the risks that working in extreme heat 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 heat

Eliminating the source of heat is the best option. If elimination is not possible, consider the following control measures:

- replace heat-producing plant with plant that produces less heat
- move heat producing plant to non-work areas
- insulate heat-producing plant or use heat screens to reduce radiant heat
- cool the air using air-conditioning and install effective ventilation
- remove excess moisture using dehumidifiers
- use mechanical aids to reduce worker effort
- provide protection from the sun if working outdoors
- schedule work for cooler times of the day or year
- rotate workers frequently on tasks
- allow extra rest breaks and provide cool rest facilities away from the heat and sun
- encourage workers to stay hydrated and make cool drinks available at all times.

See WorkSafe's good practice guidelines Working safely in extreme temperatures for more information about control measures

Provide personal protective equipment (PPE) to help protect against the effects of extreme heat

PPE can help protect against the effects of extreme heat in two ways by:

- shielding workers from a hot environment or radiant heat source (such as heat-reflective clothing, face shields, and sunhats).
- providing direct cooling to a worker's body (such as cooling vests).

Sweating is the body's main way of keeping cool. Make sure that, where possible, PPE and uniforms are made from light, breathable materials so workers can sweat freely.

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 exceed safe levels. Monitor air temperature, humidity, air movement/ventilation, 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 heat. 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 hot environments
- the signs and symptoms of heat-related illness and injuries
- what to do if they notice or experience any signs or symptoms of heat-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 extreme heat. For example: engage with your workers when doing a risk assessment – they may have ideas on what heat-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

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