



Fatigued?

Or fit for work?

How to tell if your workers are tired enough to make mistakes and how to prevent this happening



Tired workers are more likely to have accidents

Fatigue can be a killer in the forestry industry so you need to protect your workers and your business from it.

Studies show people who have been awake for a long time, and are tired, are as likely to make mistakes as those who have been drinking alcohol.

Early starts, long hours and physically tiring work mean the risk of fatigue among forestry workers is very high. The consequences of mistakes and accidents in our industry can also be very serious.

By law, fatigue is risk that has to be managed. Preferably the chances of it happening needs to be eliminated, and if that's not possible the risks needs to be minimised. (See more about fatigue and the law on page 5.)

That means all forestry businesses must put in place controls to manage fatigue among their workers.

What to watch out for

As well as a lack of sleep, other things can make people fatigued:

- ▶ Working too hard or too long
 - ▶ Doing a boring or repetitive job
 - ▶ Mental health issues, like depression
 - ▶ Changing shifts, or being exposed to noise or vibrating machinery
 - ▶ Not drinking or eating enough
 - ▶ Things at home – like having a new baby or partying late.
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Tell workers about fatigue: Businesses have a legal responsibility to make sure all workers affected by a risk understand how to control it. Make sure your workers know how to do their bit in making sure they're not fatigued.

Help managing fatigue

Here are some things forestry companies, crew managers and crew members can do to manage fatigue at work.

The company:

- ▶ Minimise irregular work rosters as much as possible, including:
 - ▷ No early rounds (e.g. 4:30am starts, and leaving even earlier to get to work)
 - ▷ Weekend work after a five-day working week
 - ▷ Staying out late during the week (to be ready for the next day).
- ▶ Make sure crews know about rest and meal break expectations (see box) and that it's part of the work culture to take them (rather than working through to go home early).
- ▶ Monitor the operation regularly to ensure the crew manager's fatigue management plan (see page 4) is in place and being managed effectively:
 - ▷ review after the first week of implementing the plan
 - ▷ review the crew's fatigue documentation at a monthly safety meeting
 - ▷ review daily meeting notes on a regular basis after the first week
 - ▷ document fatigue discussions you have when you visit crew
- ▶ Give crew [fatigue safety information](#)
- ▶ Educate crews about [nutrition and hydration to prevent fatigue](#):
 - ▷ decide when and how to hold training session(s)
 - ▷ give crews driving fatigue information if they need to travel long distances.

The crew manager:

- ▶ Develop and put in place a fatigue management plan that everyone agrees to (see page 4)
- ▶ Discuss and document the plan every day with everyone
- ▶ Run flexible schedules to give time for enough rest and meal breaks
- ▶ Minimise irregular work rosters as much as possible
- ▶ Monitor fatigue by:
 - ▷ watching and auditing behaviour
 - ▷ taking into consideration what's happening in workers' homes
 - ▷ ask drivers how they feel before they get behind the wheel.

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The crew member:

- ▶ Tell someone about any fatigue or similar issues or worries as soon as you have them
- ▶ Remember you are responsible for yourself and for others so have the courage to speak up if you think someone is fatigued
- ▶ Set up conditions at home so you get as much sleep as possible
- ▶ Tell your crew manager about any health issues that affect your ability to be safe
- ▶ Get involved in the planning of the fatigue management plan, help put it in place and offer to help review it.

Rest breaks

Workers must be allowed enough time between work shifts to rest properly, as well as having a [reasonable chance to rest and refresh during their work day](#). This includes the legal entitlement (under the Employment Relations Act) for paid rest breaks.

It's good practice for a business to set clear expectations around rest breaks and their importance in managing fatigue.

While there are no specific rules for how long, or when, rest and meal breaks should be, they need to be long enough and frequent enough for a worker to rest, eat and drink, and take care of personal matters.

Rest breaks are especially important when the work is physically and/or mentally demanding, or the environment is challenging, such as when working on steep terrain or in very hot or cold weather.

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Still fatigued?

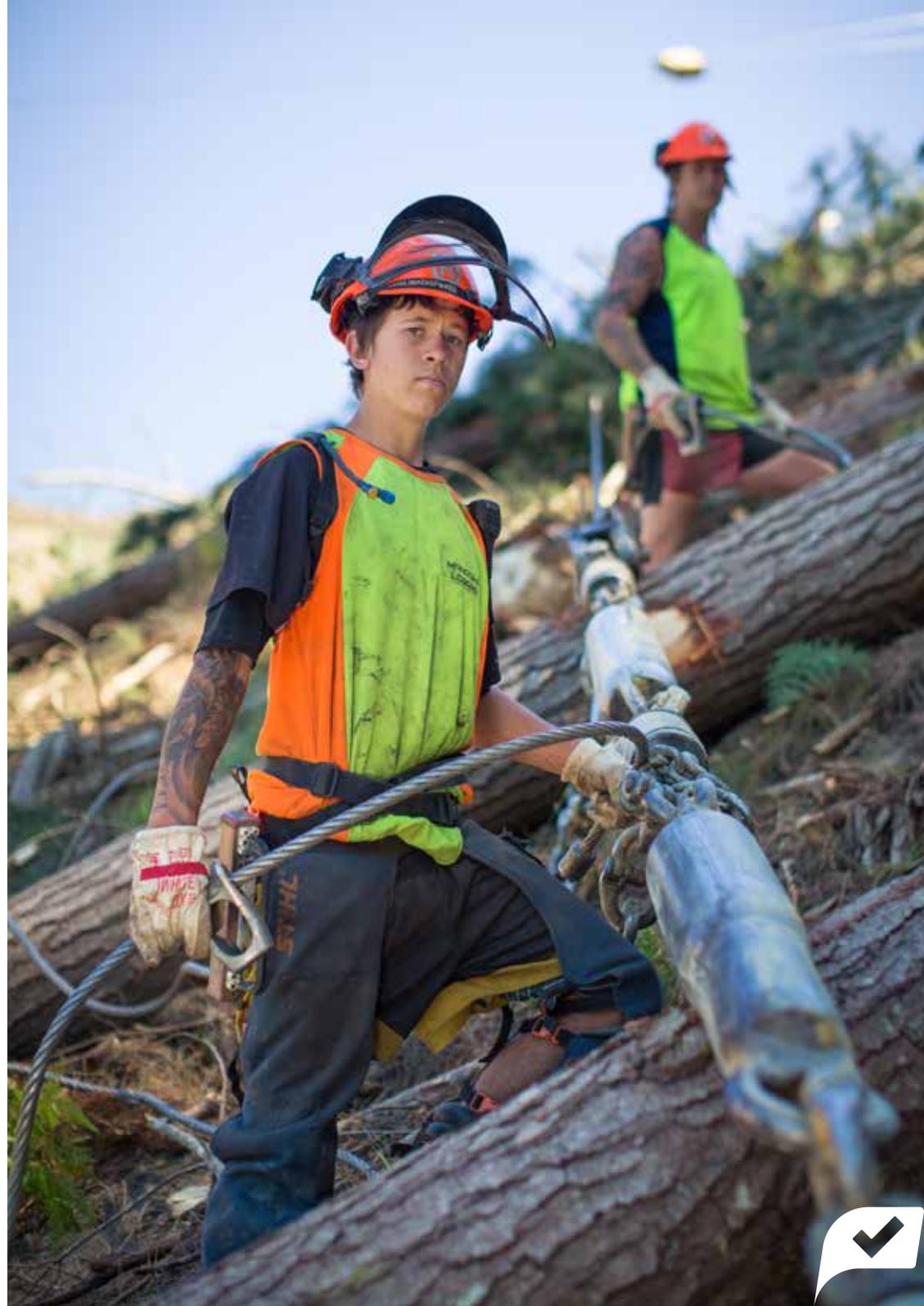
If all these controls aren't working and people are still becoming fatigued:

- ▶ ask other people or businesses how they deal with fatigue
- ▶ ask an expert.

Also, make sure any controls decided on don't create new risks (e.g. resting workers means crews become too small or short staffed to work safely).



Watch the clock: Take extra care before 6am and between 1pm to 3pm. This is when people naturally feel sleepy and the risk of accidents caused by fatigue rises.



Fatigue risks and controls

RISK

- ▶ Working 13 hours or greater, including travel to and from the worksite.
- ▶ Having to travel more than 1.5 hours from the worksite to home.
- ▶ Alternating early or late shifts.
- ▶ Pushing meal and rest break guidelines.
- ▶ Behaviour or attitude changes during the day.
- ▶ Clearly showing and/or feeling signs of mental fatigue.

CONTROL

- ▶ Have a documented plan to get home safe, which may include:
 - ▷ having a designated driver and another passenger who is awake and monitoring the driver, and who can swap driving if necessary
 - ▷ having designated swap-over points in the driving and make sure they are used
 - ▷ having drivers take a 30-minute rest break before driving, which can be taken in a vehicle in transit
 - ▷ always following meal and rest break guidelines
 - ▷ looking for alternatives to travel – consider accommodation closer to the site.

RISK

- ▶ Working 10 hours or more, including travel to and from the worksite.
- ▶ Having to travel one hour or more from the worksite to home.
- ▶ Having a busier day than usual.
- ▶ Pushing meal and rest break guidelines.
- ▶ Seeing behaviour or attitude changes during the day.
- ▶ Clearly showing and/or feeling signs of mental fatigue.

CONTROL

- ▶ Have a documented plan to get home safe, which may include:
 - ▷ having a designated driver and another passenger who is awake and monitoring the driver, and who can swap driving if necessary
 - ▷ always following meal and rest break guidelines.

RISK

- ▶ Normal work start and finish times.
- ▶ Travel distance is less than one hour from the worksite to home.
- ▶ Normal work conditions on any given day.
- ▶ Correct meal and rest breaks.
- ▶ No signs or feelings of mental fatigue.

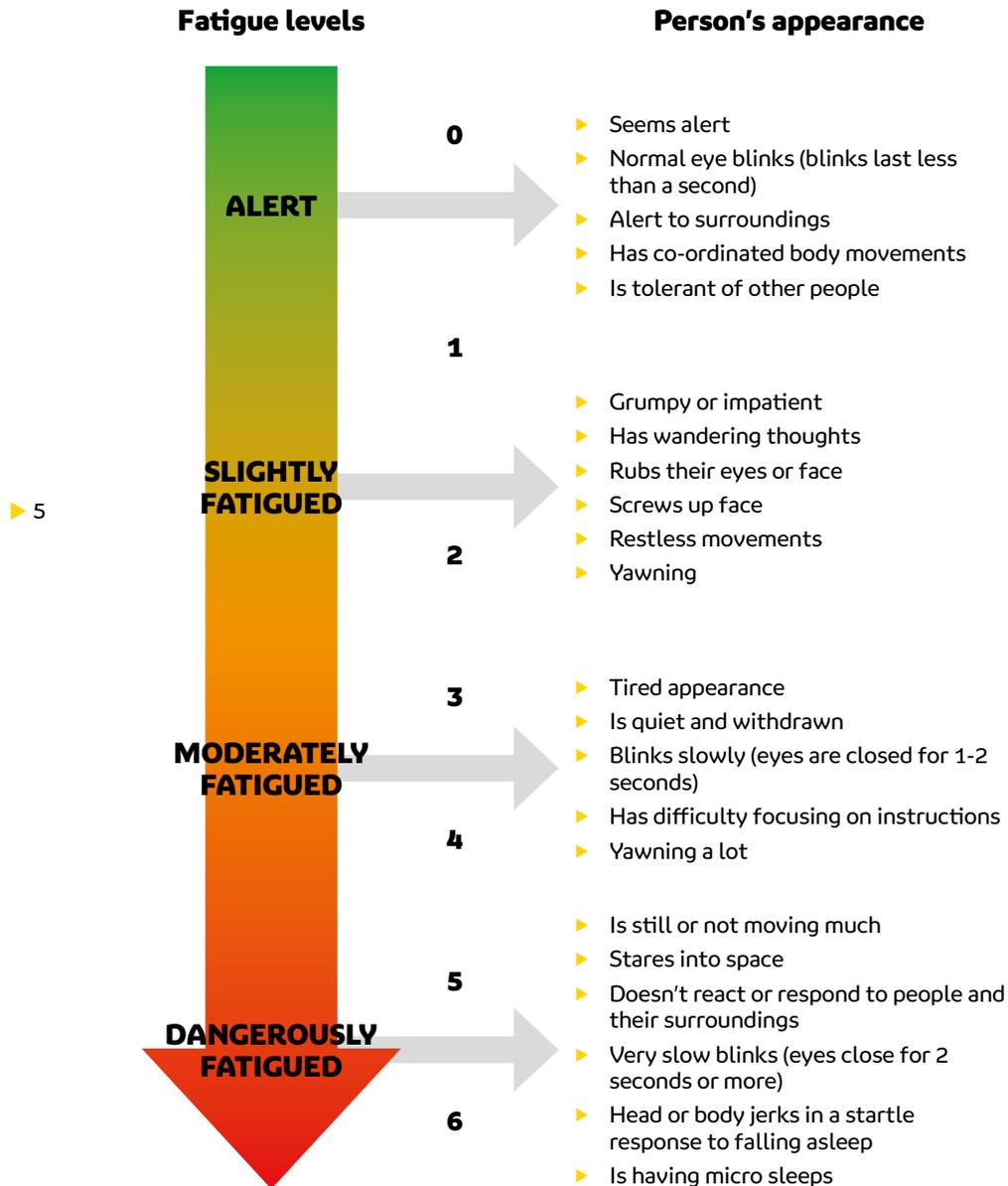
CONTROL

- ▶ Self-monitor throughout the work day and while driving to and from the worksite.
- ▶ Always being aware of the risk and signs of fatigue.
- ▶ Pull over if you're driving and feel tired or need a rest.

Fatigue management plan

LEVELS OF RISK	SUGGESTED ACTIONS
GREEN	<ul style="list-style-type: none"> ▶ Continue to monitor situation. ▶ Remind employees about fatigue and alertness management strategies (such as keeping talking to others, getting exercise, having cold air on face). ▶ Rotate tasks so people don't get complacent, to increase job satisfaction and to give workers in Orange or Red Zones a break. ▶ Give short breaks when needed.
AMBER	<p>As above, plus</p> <ul style="list-style-type: none"> ▶ Increase supervision and monitoring. ▶ Change jobs or rotate them into the Green Zone after set periods of time. ▶ Have employees work together (if possible) to keep each other alert and watch each other for signs of fatigue. ▶ Stop them doing safety-sensitive work. ▶ Keep an eye on them during the rest of the shift.
RED	<ul style="list-style-type: none"> ▶ Crew members must not work at this level. ▶ Do something immediately to reduce their risk – stop them working or rotate them into a Green Zone task. ▶ Send them home (give them a ride if you don't think they can drive safely). ▶ Fill out an incident report if you need to. ▶ Review what happened to work out what caused this level of fatigue risk and what you need to do to stop it happening again.

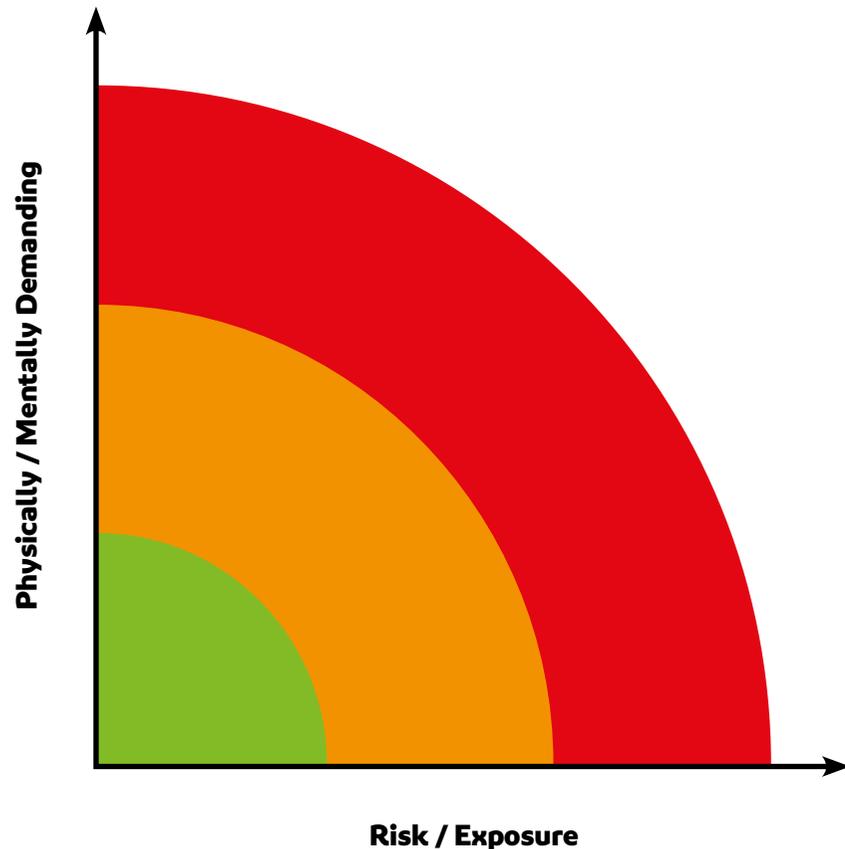
Signs of fatigue



Signs of fatigue while driving:

- ▶ You can't remember driving the last few kilometres
- ▶ You have trouble keeping your head up
- ▶ Your vehicle drifts across lanes or onto the road shoulder
- ▶ You're doing big steering corrections – driving jerkily
- ▶ You forget to dip the vehicle's lights for oncoming traffic.

Examples of tasks in each zone



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Green Zone – Risk of fatigue is low in this zone

Examples of Green Zone jobs include:

- ▶ pole man unhooking
- ▶ operators with low to moderate pressures from production and their work zone
- ▶ quality control with little saw work in a low production situation.

Orange Zone – Risk of fatigue is at medium to high levels in this zone

Examples of Orange Zone jobs include:

- ▶ waratah operators in high production situations
- ▶ operators doing mentally draining tasks
- ▶ tree falling in moderate to steep terrain with easy to hard bush
- ▶ breaker outs in moderate to steep slopes with medium to long retreat distances.

Red Zone – The risk of fatigue is at dangerous levels in this zone

Example of Red Zone jobs include working continually:

- ▶ tree falling in steep terrain with difficult bush
- ▶ breaking out in steep country with long retreat distances.

More about fatigue and the law

Under the Health and Safety at Work Act 2015, fatigue is a workplace risk that must be managed like any other risk.

That means a businesses must:

- ▶ **eliminate** the risk of fatigue as far as **reasonably practicable**
- ▶ if it can't be eliminated, it must be **minimised** as far as reasonably practicable.

To find what's reasonably practicable a business must look at:

- ▶ how **likely** it is the hazard or risk (such as fatigue) will happen
- ▶ the **degree of harm** – how badly someone could be hurt by it
- ▶ what the person involved **knows** or **ought reasonably to know** about the hazard or risk, and the controls
- ▶ what controls are **available** and **suitable**.

And after considering all that, the business must take into account:

- ▶ the **cost** of the controls
- ▶ whether the costs far outweigh the benefits.

For more information on workplace safety see:

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- ▶ **Safetree** – www.safetree.nz, including:
 - ▷ [Fatigue safety card](#)
 - ▷ Tailgate meeting forms for [cable crew](#) and [ground-based crew](#)
- ▶ **Forest Owners Association** – www.nzfoa.org.nz
- ▶ **Forestry Industry Contractors Association** – www.fica.org.nz
- ▶ **New Zealand Farm Forestry Association** – www.nzffa.org.nz
- ▶ **ACC** – www.acc.co.nz
- ▶ **Council of Trade Unions** – www.union.org.nz
- ▶ **WorkSafe NZ** – www.worksafe.govt.nz



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