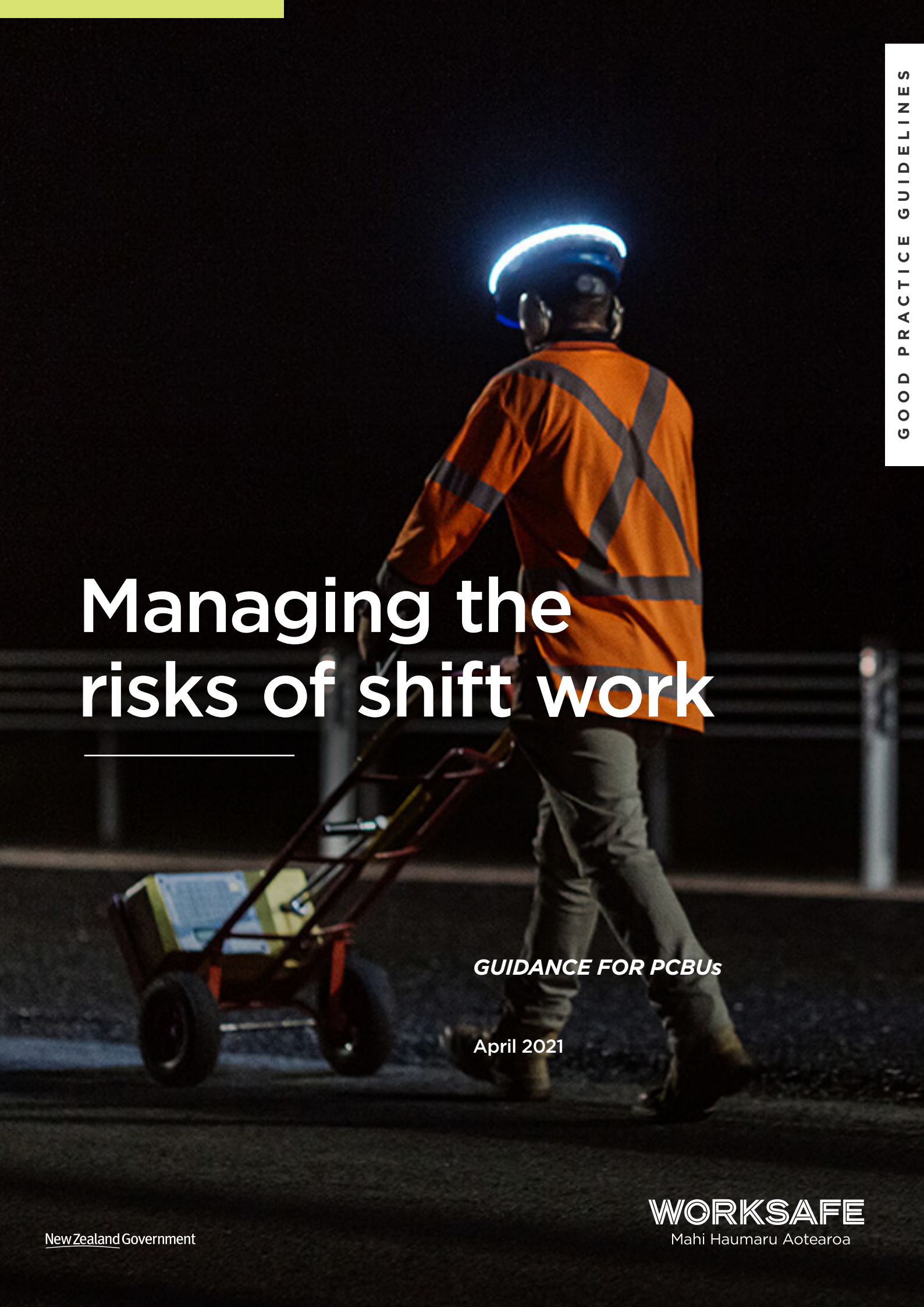
GOOD PRACTICE GUIDELINES



Managing the risks of shift work

GUIDANCE FOR PCBUs

April 2021

New Zealand Government

WORKSAFE
Mahi Haumaru Aotearoa

The aim of this guidance is to support persons conducting a business or undertaking (PCBUs) in managing risks from shift work.

ACKNOWLEDGEMENTS

WorkSafe would like to acknowledge and thank the stakeholders who have contributed to the development of this guidance. We thank and acknowledge the Sleep/Wake Research Centre at Massey University, Wellington for their assistance in the development of this guidance. We also thank Safe Work Australia and the Health and Safety Executive (HSE, UK), upon whose work parts of this guidance have been based.

Managing the risks of shift work

KEY POINTS

- Shift work includes any type of work that requires a worker to be awake when they would normally be asleep.
- Shift work can cause health and safety risks.
- Processes should be put in place to effectively manage the risks from shift work.
- Smart rostering is one tool that can be used to manage the risks from shift work, but other tools are also needed.
- Engage with workers when identifying risks from shift work, and working out how to manage them.

WORKSAFE
Mahi Haumaru Aotearoa

CONTENTS

appendices

figures

tables

1.0 Introduction

IN THIS SECTION:

This guidance outlines the health and safety risks of shift work, and how these can be managed.

1.1 Who is this guidance for?

The purpose of this guidance is to support people to manage the risks of shift work. This guidance is intended for persons conducting a business or undertaking (PCBUs), although many different audiences (such as workers, supervisors, managers, Health and Safety Representatives (HSRs), and unions may find the information useful.

You have a duty under the Health and Safety at Work Act (2015) (HSWA) to ensure, so far as is reasonably practicable, the health and safety of your workers, and any other workers who are influenced or directed by the business.

Workers also have a duty to take reasonable care of their own health and safety. This means that both you and workers should work together to deal with the risks of shift work, including mental and physical fatigue.

For more information on HSWA duties, see Appendix 1 of this guidance.

2.0
What is shift work?

IN THIS SECTION:

Shift work is any type of work that requires a worker to be awake when they would normally be asleep.

2.1 What is shift work?

Shift work is any type of work that requires a worker to be awake when they would normally be asleep. Shift work might involve:

- permanent, rotating, changeable, non-standard, irregular, or unpredictable work hours
- early starts
- late finishes
- night work.

Long hours that span the traditional work day can also be shift work, when they include early starts and/or late finishes that require a worker to be awake when they would normally be asleep.

2.2 Why manage shift work?

Shift work causes fatigue. Fatigue is a physiological state where someone is unable to mentally and physically function at their best. Fatigue is caused by four main things: missing out on sleep, being awake for too long, working and sleeping in the wrong parts of the circadian body clock cycle, and workload (physical and mental).

For more information on fatigue, see Appendix 7 of this guidance.

Together, shift work and fatigue can contribute to:

- poorer mental and physical health
- lower level of functioning
- increased likelihood of incidents or injuries
- increased turnover and sick leave absences.

Poorer mental and physical health

Shift work increases the likelihood of developing several physical health problems.

In the short term, shift work can lead to:

- gastrointestinal problems, such as indigestion, abdominal pain, and constipation
- increased chances of catching colds and flus
- shortened and/or poorer quality sleep.

In the long-term, shift work can increase the likelihood of:

- gastrointestinal problems, such as peptic ulcers
- sleep problems, such as insomnia
- becoming obese
- developing colorectal, lung and breast cancer
- developing cardiovascular disease, including hypertension and coronary heart disease
- developing type 2 diabetes
- having a stroke
- early death.

Shift work may also increase the likelihood of mental health problems such as depression and psychological distress.

Lower level of functioning

The fatigue that results from shift work can severely affect workers' ability to work safely and effectively. Fatigue leads to:

- lower level of overall performance, including slower reaction speeds, making more mistakes, larger decreases in performance across continuous work, and unstable performance
- slower information processing
- poorer short-term and working memory
- poorer decision making
- reduced ability to solve problems
- increased irritability, mood swings, and inappropriate responses in challenging situations
- less effective communication.

Increased likelihood of incidents and injuries

Shift work can increase the likelihood of incidents and injuries at work, including when driving for work, and during the commute to and from work.

The incident rate is higher during evening and night shifts (compared with morning shifts). The likelihood of having a car crash increases when drivers are sleepy, driving at night, or have had less than seven hours sleep in 24 hours. 'Drowsy driving' is more likely for shift workers who drive at night, and those who have early morning starts.

The incident rate goes up as the hours at work increase.

Increased turnover and sick leave absence

The relationships between shift work and turnover/sick leave depend on many factors, including work patterns, culture and environment. However, consistently working for more than 40 hours per week, regularly having short recovery periods between shifts, and/or regularly working more than two consecutive night shifts, can lead to increased sick leave.

3.0
Risk management

IN THIS SECTION:

Put robust fatigue risk management processes in place to support initiatives to identify, assess, and manage risks from shift work, as well as monitor control measures.

It is important to understand the effects of shift work on people. This will help you in assessing the risks of shift work and putting control measures in place to manage them.

Figure 1 shows the links between shift work, sleep, long periods of wake, the circadian body clock and fatigue. Shift work often means peoples' sleeping patterns are disrupted, which leads to the worker becoming fatigued. High and low workload can lead to fatigue if a person is working at less than ideal times in the circadian body clock cycle or experiencing sleep loss. These things all contribute to fatigue.

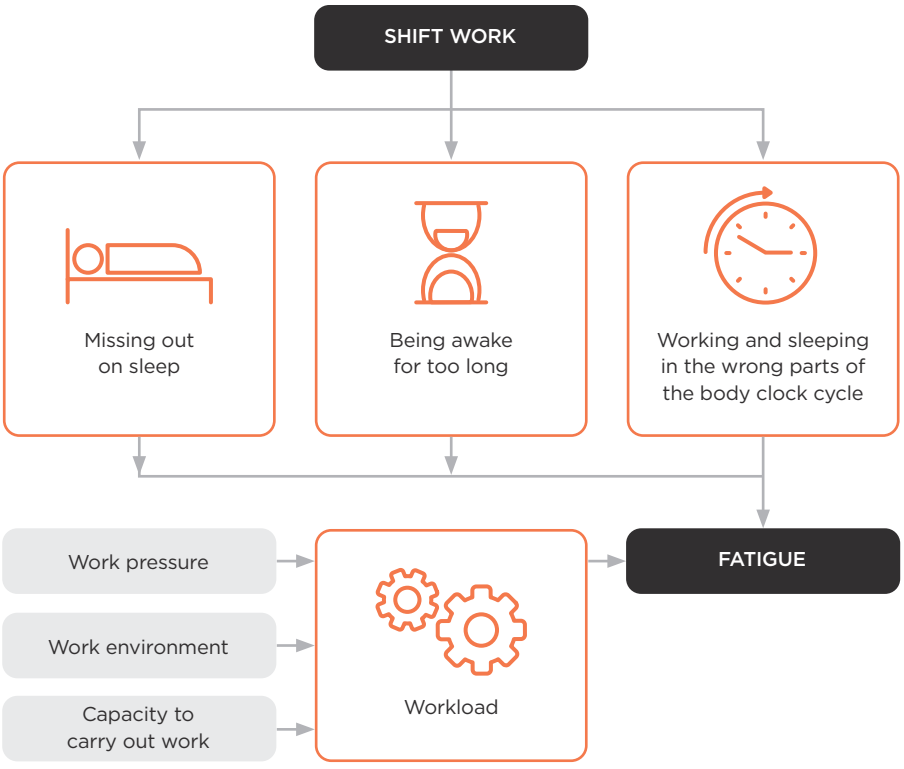


FIGURE 1: Link between shift work and fatigue[1]

[1] Sleep/Wake Research Centre, School of Health Sciences, College of Health, Massey University.

For more information on sleep loss (missing out on sleep), extended wakefulness (being awake for too long), circadian disruption (working and sleeping in the wrong parts of the circadian body clock cycle), and the role of workload, see Appendix 7 of this guidance.

3.1 Put the right processes in place

To manage the risks of shift work, put robust fatigue risk management processes in place. These processes should support initiatives to identify, assess, and manage the risks of shift work, as well as monitor control measures to check that they are working. These processes should be a continuous loop of activity, as shown below.

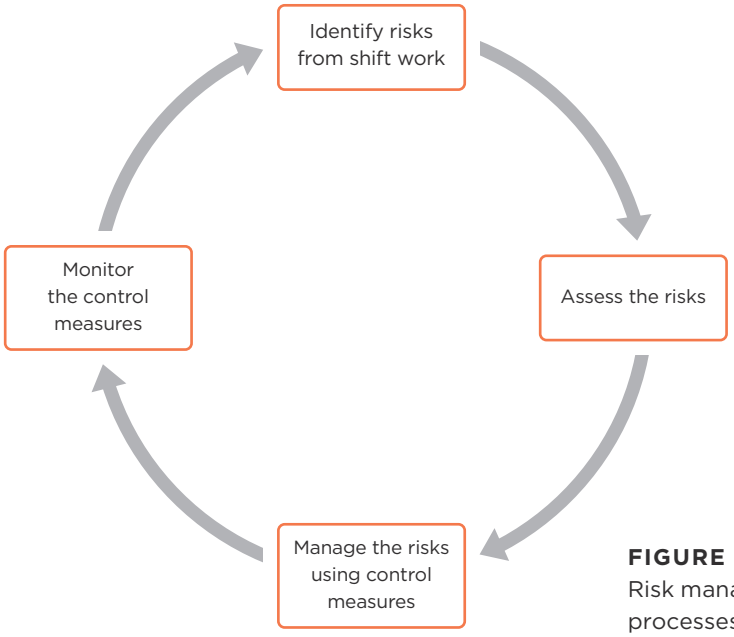


FIGURE 2: Risk management processes

Engagement with workers and their representatives

You must engage with your workers and enable them to participate in improving health and safety. People who carry out the work usually have the best insight into the risks present in their workplace.

One way you could engage with workers (if reasonably practicable for your circumstances) is by creating a working group that includes workers and their representatives. Examples of these group members could be union members and delegates, HSRs, supervisors, managers, and experts on shift work. Involve the working group on an ongoing basis when creating and rolling out fatigue risk management processes.

For more information on worker engagement, participation and representation, see Appendix 4 of this guidance, or our guidance on the WorkSafe website: worksafe.govt.nz

Management commitment

Establish management commitment before putting fatigue risk management processes in place. By confirming this commitment from the start, you can make sure there is enough resourcing, chains of responsibility are in place, and there is championship for shift work management within the business. It also ensures that there is clear support for initiatives to manage the risks of shift work.

3.2 Identify and assess risks

You must ensure, so far as is reasonably practicable,[2] the health and safety of workers, and that other people are not put at risk by work. If it is not reasonably practicable to eliminate the risks of shift work, you must minimise those risks, so far as is reasonably practicable.

Table 1 below provides some suggestions about identifying and assessing risks:

Use data sources	To identify the risks of shift work, consider a range of information. Use data sources to identify risks and monitor the effectiveness of control measures. Examples of sources of information that you could use include: – the work patterns (including when actual hours differ from rostered hours) – reports of fatigue, incidents and near misses – overtime records – incidents of sick leave or other absenteeism, and staff turnover – increases/decreases in performance and productivity – other assessment tools and techniques, including validated questionnaires and staff surveys. Look for patterns among different sources of information, and use the insights to minimise risk.
Consider the particular risks that come with shift work	Carry out a thorough risk assessment. Consider all the risks, and how likely it is that workers could be harmed. There are some risks listed in the 'Smart Rostering' section of this guidance. For information on how to carry out a risk assessment, see Appendix 5 of this guidance. Gather and evaluate information about current shift work arrangements, using the sources of information above. Use the expertise of workers to identify and assess risks. Think about: – who might be exposed to risks – what the potential consequences of exposure to risks are – how likely the consequences are.
Work out who might be harmed by shift work	Work out who is most vulnerable to the risks of shift work. While all workers who carry out shift work are at risk, certain groups are more likely to be harmed. These people could include: – younger or older workers – pregnant workers and new parents – workers with chronic illnesses or pre-existing health conditions made worse by shift work – workers taking time-dependent medication – non-permanent, casual workers who are not accustomed to your business's shift schedules – workers who might already be fatigued – workers carrying out safety-critical or dangerous work – workers who, following a standard day's work, have remained on call through the subsequent night or weekend.

TABLE 1: Identify and assess risks

There is a fatigue identification tool in Appendix 6 of this guidance, which you may find useful when considering risks. For more information on identifying and assessing risks, see our guidance: worksafe.govt.nz

3.3 Minimise risks

When minimising risks, the kinds of control measures will depend on:

- the risks of the work
- the work culture and environment
- the type and structure of your business, and
- the people carrying out the work.

[2] See Appendix 2 of this guidance for an explanation of 'reasonably practicable', or our guidance: worksafe.govt.nz

Apply smart rostering and shift work design

One important tool you can use to manage risks is smart rostering and design of the shift work. The shift roster has a big impact on how workers are affected by their work and working hours. However, smart rostering/shift work design, by itself, will not prevent fatigue and other shift work-related risks. Other control measures are also needed to effectively manage risks.

There are many different work schedules, and each one carries its own risks. **There is no perfect schedule**.

Figure 3 below outlines the things you should take into account when designing rosters and shift work. The key points for each aspect, as well as suggested actions you could take, are detailed in the tables below.

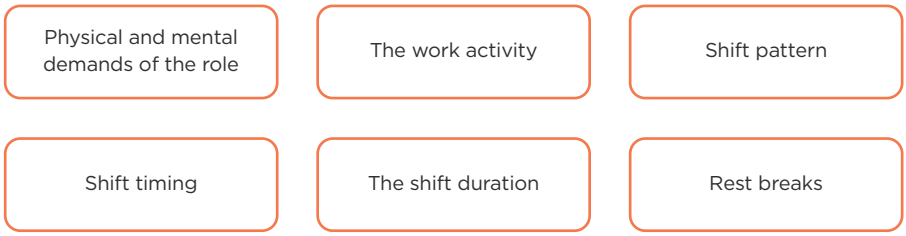


FIGURE 3: Considerations in roster design

THINK ABOUT THE PHYSICAL AND MENTAL DEMANDS OF THE ROLE

KEY POINTS	SUGGESTED ACTIONS
Workers with a balanced workload will be more efficient, effective and less fatigued than those who are overloaded or underloaded. Concentration and productivity may decline towards the end of a shift, after lunch, and overnight, with the lowest level of functioning usually experienced between 3–5am. You must provide shift workers with appropriate amenities such as kitchen facilities, rest areas and first aid facilities. See our guidance for more information on these workplace requirements: worksafe.govt.nz You must make sure lighting levels are appropriate for the type of work being carried out. There should be enough light for night shift workers to work safely, as well as to arrive at and leave work safely.	Plan an appropriate workload with workers, taking into account the length and timing of the shift. Add more break times if long shifts cannot be modified. Schedule demanding work for times when workers are most alert and least likely to be fatigued. Avoid scheduling dangerous work during the night, in the early hours of the morning and towards the end of a shift, where reasonably practicable. Add more workers for demanding work, or if this isn't reasonably practicable, schedule shorter shifts. Rotate workers through different work stations regularly, if reasonably practicable. Not only does this help to reduce fatigue, it helps to improve workers' skills and knowledge in different areas. Think about the physical nature of the work, repetitive activity, cognitive demands, isolated workers, environmental factors and training/competency. Monitor the temperature of the work area to make sure that it is at an appropriate level for the type of work being carried out, or make sure workers can control the temperature of the work area themselves. For more information on thermal comfort at work, see our guidance: worksafe.govt.nz Be aware of physical factors that can contribute to fatigue, such as noise and vibration. Ensure that workers have access to telephones or alarm systems, and consider installing security cameras or hiring security staff.

TABLE 2: Physical and mental demands of the role

THINK ABOUT THE WORK ACTIVITY

KEY POINTS	SUGGESTED ACTIONS
Rotating sedentary mental tasks with physical tasks can help temporarily reduce the effects of fatigue during a shift.	Schedule a variety of tasks into the shift plan, where reasonably practicable. Allow workers to have some choice over their work activities and the order in which they are carried out. Rotate a variety of work activities to reduce the likelihood of workers being continuously exposed to high or low workload tasks, which can lead to them becoming fatigued.

TABLE 3: The work activity

THINK ABOUT SHIFT PATTERN

TYPE OF SHIFT	KEY POINTS	SUGGESTED ACTIONS
Permanent shifts	People who permanently work shifts at night and in the early morning are more likely to experience fatigue and other negative outcomes. Some workers may prefer regular permanent shifts, while others may prefer rotating shifts. Fixed shifts can mean that there is limited contact between different shift teams.	Avoid scheduling permanent night shifts if reasonably practicable. Ensure workers are correctly trained to work permanent night shifts, or early shifts. Offer workers the choice between permanent and rotating shifts, if reasonably practicable. Make sure there is enough supervision of shifts to facilitate clear and accurate communication between workers, particularly at shift handover time.
Rotating shifts	Rotating shifts reduces the number of consecutive night shifts. Rotating shifts may mean that night work is shared between all workers. Workers may find it harder to move from one shift schedule to the next when it is constantly changing. Workers may find it easier to shift from one schedule to the next when rotation of shifts is slow and forward (for example, when work progresses from morning to afternoon to night in a clockwise direction), but the circadian body clock still has to re-adjust with every change of shift type, and on days off. Faster rotation of shifts (every two to three days) means that opportunities for night-time sleep may come around faster. How long workers need to recover from shift work depends on the sleep debt built up during consecutive shifts.	Roster shifts to be forward-rotating where reasonably practicable. Make sure there is enough rest time between shifts. This rest time needs to allow for enough sleep, commuting and domestic activities. Appendix 7 of this guidance has information about how much sleep is enough. Include some weekends in recovery sleep opportunities.

TABLE 4: Shift pattern

THINK ABOUT SHIFT TIMING

TIMING OF SHIFT	KEY POINTS	SUGGESTED ACTIONS
Night	Night shifts are extremely disruptive. They cause sleep loss, lighter sleep during the day, and mean that people are working at less functional times in their circadian body clock cycle. They can increase the likelihood of error, accident, injury, and poor health and wellbeing. Night shifts can significantly disrupt workers' family and social lives. Time-on-task fatigue can build up faster during the night, meaning that demanding tasks will increase the likelihood of fatigue. Night work can result in limited training opportunities for workers. Night work can result in reduced communication between night shift workers and other workers. You must provide training and information about the risks of shift work to night workers. No matter the time of day work is carried out, you must provide and maintain facilities for workers.	Avoid scheduling permanent night shifts, where reasonably practicable. Consider the safety risks of working night shifts. Consider the likelihood that a worker will be fatigued, as well as the risks of fatigued workers doing different tasks throughout the night. If workers find it hard to cope with night work, try to find alternatives for them. If reasonably practicable, transport workers to and from work, or provide a place to sleep at work during breaks or before driving home. Ensure there is enough supervision for workers during particularly risky times, such as periods of low alertness (this can occur throughout the night-time hours and peaks in the early hours of the morning). See our guidance for more information on training and supervision: worksafe.govt.nz Avoid scheduling overtime for night shift workers by providing relief staff to cover absentees, illness, increased workloads and emergencies. Monitor and record instances of shift-swapping. It should be avoided, but if it is used, you should review workers' scheduled work and rest periods before agreeing to shift swaps, so that night shift workers do not work excessive hours.
Early morning starts	Early morning starts can cut night time sleep short. This increases the likelihood of fatigue and other negative outcomes. Remember that workers may be commuting to work at less functional times of their internal body clock. Workers may find it difficult to go to sleep earlier than their usual bedtime in anticipation of an early starting shift. This is when the mind is naturally alert.	If not essential for business needs, try to avoid shift starts before 7am. When deciding on start times for early shifts, consider commute times for workers. Workers with early starts need to be trained in the risks of their work patterns, including reduced sleep.
Afternoon starts	Afternoon starts are better than working at night or in the early morning. Afternoon starts can reduce family and social contact. Afternoon starts with late finishes can also cut night time sleep short, as a worker may not be able to sleep in the following morning.	Schedule afternoon starts rather than night or early morning starts. Make work start and finish times predictable.
Daytime shifts	Daytime shifts are the best type of work. They do not disrupt the internal body clock, or reduce contact with family and friends.	Schedule daytime shifts rather than night or early morning shifts, where reasonably practicable.

TABLE 5: Shift timing

THINK ABOUT SHIFT DURATION

DURATION OF SHIFT	KEY POINTS	SUGGESTED ACTIONS
8–11 hour shifts	Shifts up to 8 hours in length are considered to provide more time for rest (including sleep), commuting, and domestic and daily activities that are important for health and functioning. The likelihood of fatigue increases if workers take on second jobs or overtime on their days off. The likelihood of fatigue is increased in any shift longer than 8 hours.	Schedule shifts no longer than 8 hours when the work is monotonous, mentally or physically demanding, or isolated.
12 hour shifts	12 hour shifts can increase the likelihood fatigue, depending on the type and duration of work being carried out. The likelihood of fatigue when working 12 hour shifts is further increased when they occur during or overlap with night-time hours. Consecutive 12 hour shifts can result in the build-up of a sleep debt. Vulnerable workers, such as older people or new parents, may have an increased likelihood of fatigue when working a shift of 12 hours of more. 12 hour shifts can increase the likelihood of fatigue if workers take on overtime or second jobs in their free time. As fewer shift teams are needed for 12 hour shifts than 8 hour shifts, it may be more difficult to arrange cover for illness, holidays and training.	**The below points apply to any shift longer than 8 hours.** Avoid shifts longer than 8 hours when the work is monotonous, mentally or physically demanding, or isolated. Encourage workers to take frequent and regular breaks to minimise the likelihood of fatigue. Provide suitable and safe facilities where workers can take naps when they choose, particularly before travelling home after a long shift. See the below section *Workplace napping* for more information on safe workplace napping. Allow enough rest time between shifts, taking commute times and availability of public transport into account. Limit 12 hour night shifts to two to three consecutive nights. Arrange shorter shifts for vulnerable workers if necessary. Avoid overrun of shifts, and discourage overtime. Monitor and control shift swapping. Make adequate arrangements to cover absentees.
Shifts longer than 12 hours	The longer the shift, the more the likelihood of fatigue will increase. Alertness and performance will deteriorate significantly over a shift longer than 12 hours.	Avoid scheduling shifts of more than 12 hours. Carefully monitor overtime and unplanned shift extensions.
Flexibility in shift length	Flexible start and finish times are popular among workers with commitments outside of work. However, scheduling may be more complex, and will require careful planning and engagement with workers, to ensure risks are managed and monitored.	Consider if variable shift lengths, or flexible start and finish times, could work.
Split shifts	Split shifts can lengthen a working day, and can increase the likelihood of fatigue if the rest break between shifts is too short. Split shifts that include early starts and late finishes shorten the opportunity for night time sleep, which increases the likelihood of fatigue. Workers may not be able to sleep during the day in the rest break between shifts.	Avoid split shifts if reasonably practicable. If you have to schedule split shifts, make sure the break between periods of work is long enough to allow for sleep and that adequate facilities for sleep are provided. Provide the same or similar facilities and opportunities for all workers.

TABLE 6: Shift duration

THINK ABOUT REST BREAKS/DAYS

DURATION OF SHIFT	KEY POINTS	SUGGESTED ACTIONS
Rest breaks within shifts	Frequent short breaks can reduce fatigue, improve productivity and may reduce the likelihood of errors and accidents. It is better for workers to take their breaks away from their work stations. The frequency and length of breaks needed will depend on the type of work, and where the worker's circadian body clock is at, at the time of work. You must provide rest facilities for workers to take their breaks, including facilities where workers can prepare food. See our guidance for more information on what facilities you must provide: worksafe.govt.nz There are minimum legal break requirements that must be adhered to. For more information, see: Employment New Zealand	Encourage workers to take frequent and regular breaks to minimise the likelihood of fatigue. Allow workers to choose when they take their breaks if reasonably practicable. Monitor their fatigue levels. Encourage workers to take their breaks away from their work stations. Make sure that the time it takes for a worker to reach the break area/toilets/facilities is not included in the rest time – this should be added on.
Rest breaks between consecutive shifts	The likelihood of fatigue is increased when the breaks between shifts are too short. The timing of breaks between shifts are important. This determines the likelihood of obtaining enough, good quality sleep during a break.	Give workers enough time in their rest breaks between shifts to recover from their shift, commute, eat well, sleep, and participate in social/domestic activities.
Rest days	Rest days are opportunities for unrestricted sleep. A person usually achieves unrestricted night-time sleep when they go to bed and rise when they choose, and when the sleep period occurs at night. This is the key point to understand when it comes to considering the number of days needed for recovery between a series of consecutive shifts. Too many consecutive work days can increase the likelihood of fatigue, ill-health, errors and accidents. Sleep loss and fatigue can build up if there are too many consecutive night shifts or early morning starts or late finishes. Fatigue occurs when a sleep debt builds. The best amount of consecutive shifts depends on several things, such as the shift pattern, the workload and the work environment. Very long periods away from work could cause a lack of communication between workers. Rest days are best when they allow the worker to recover from a work schedule, and to take part in social/domestic activities. It is ideal if some weekends are included in rest days. The number of rest days needed for recovery after a series of consecutive shifts depends mostly on the sleep debt that has built up.	In general, set a limit of five to seven consecutive working days for standard shifts. When planning rosters, consider how many rest days (and opportunities for unrestricted sleep) will be required after shifts to allow workers to fully recover from fatigue. Consider regular refresher training if work is complex. This is so that communication has lapsed between shifts, workers will have a chance to become familiar with tasks again. When switching from day to night shifts or vice versa, allow workers a minimum of two nights of full unrestricted sleep so they can recover from the effects of the previous work schedule. Build regular weekend breaks into the shift schedule where reasonably practicable. When shifts are longer than 7-8 hours, for night shifts and for shifts with early morning starts, think about how many shifts should be worked in a row before providing rest days. The number of days required to fully recover greatly depends on the nature of the previous work pattern and most importantly, on the sleep debt that has built up. Consider the sleep debt that will build up as a result of the work pattern.

TABLE 7: Rest breaks

On-call work

Schedule enough rest time for workers carrying out on-call/standby duties. Workers who are on-call experience disrupted sleep and poor sleep quality, regardless of whether they are called in to work or not. Recovery opportunities following periods of on-call work are necessary.

Napping at work

Napping at work is an effective strategy for temporarily reducing the effects of fatigue, including before driving home from work. However, it should not be used as a routine strategy for extending shifts, and it requires policy and procedures around its use.

Massey University's Safer Nursing 24/7 Code of Practice provides the following guidance for workplace napping:

- encourage workers to submit a fatigue report when needing to nap at work. Ensure this process is simple so that napping is not discouraged.
- do not allow workers to use napping at work for enabling extended shifts on a regular basis
- ensure workers advise the shift supervisor where and when they plan to nap, and when they return to work
- ensure that napping only happens during a break when it has been cleared with the shift supervisor, to ensure that the worker's absence does not increase the likelihood of fatigue for others on the shift
- ensure that workers do not spend any more than 40 minutes trying to sleep during a nap, and that they allow time to recover from the effects of sleep inertia
- cover napping procedures in shift work and fatigue training
- provide suitable facilities for napping.

Have clear policies and procedures

A policy is an effective way to communicate your business's approach or commitment to managing the risks of shift work. Include information about:

- the fact that shift work is a contributor to fatigue, and that it can have negative effects on worker health and safety
- adequate resourcing to develop and maintain fatigue risk management processes
- roles and responsibilities of management, supervisors and workers
- organisational commitment to strategies to support the fatigue risk management processes, including adequate staffing, training, and communication to all levels of the business
- commitment to review the policy within a set timeframe.

In other procedural documents, record information about:

- shift work arrangements (specific work patterns)
- processes regarding overtime or calling workers back
- control measures for specific risks, tasks, jobs, and operations
- self and peer assessment checklists
- procedures for reporting fatigue risks
- procedures for supporting fatigued workers.

Develop your policies and procedures with your shift work and fatigue working group, if you have one.

Business.govt.nz, along with Employment New Zealand and the Ministry of Business, Innovation and Employment, have created a policy building tool which you may find useful in helping to build your fatigue policy: wpb.business.govt.nz

Ensure workers know what to do if they have a problem

Workers need to know who can help them if they have concerns about their shift work.

- Clearly identify the right people for workers to speak to about the shift work (this could be a manager, HSR, trusted mentor/buddy or someone else).
- Make it clear and obvious to workers what to do if they cannot find a solution.
- Put an open, supportive, 'no-blame' culture in place. It is important that workers feel they are able to safely report and speak about fatigue (or other ill effects of shift work) without fear of negative consequences.
- Have processes and policies that explain what will happen when workers report fatigue or ill-effects of shift work, and make sure these are freely available to workers.

Set up effective and ongoing ways for risk reporting

Establish a system to support reporting of shift work and fatigue-related risks, problems, and incidents. This system should involve:

- including fatigue as an option on near-miss and incident report forms
- thoroughly investigating fatigue as a factor when looking at incidents.

Encourage early reporting so that problems can be dealt with quickly and effectively.

Set up effective and ongoing methods of communication

Communication is essential for effective management of shift work and fatigue, and needs to be clear, planned, ongoing, and in place from the start. Everyone in the business needs to be aware of:

- policies and procedures
- their roles in the fatigue management process, and
- where to find support and resources.

Effective processes around communication are particularly important when looking at shift handovers. Have workers work together or in teams, and encourage workers to look out for each other.

If someone must work alone, make sure they always have a way of communicating with others. See our guidance for more information on lone workers: worksafe.govt.nz

Provide training for workers at all levels

Training on shift work and fatigue is vital at all levels of a business. It promotes productive and constructive conversations around identifying and assessing the risks of shift work, and putting control measures in place.

Training ensures that workers can make informed decisions about how to use time away from work, including sleep opportunities, and how to use strategies at work to temporarily reduce the effects of fatigue.

As an essential component of fatigue risk management processes, training ensures everyone in a business can participate in health and safety processes, including reporting of risks. Training needs to be tailored for different organisational groups, depending on their specific role.

3.4 Check control measures are working

Identifying, assessing, managing, and monitoring risks is a continuous loop of activity. Control measures need to be re-assessed when new tasks, equipment, procedures or work schedules are introduced, and changes are proposed to the work environment or work schedule.

Control measures need to be reviewed if there is any indication that they are not effective.

Suggested actions are outlined in Table 8 below:

Monitor any changes to shift work schedules and/or work conditions	Making changes to schedules or work conditions may fix some problems, but it can also create new ones, so monitor any changes closely.
Use information from workers	Workers are your best source of information about whether your control measures are working. Get their views – you could use focus groups, questionnaires, interviews and observation.
Use reports, registers and near-misses	You can also use reports, registers and near-misses to check the effectiveness of your control measures. This could include: – reports of incidents and near-misses – reports of absenteeism and staff turnover – increases/decreases in performance and productivity – records of appointments with an Employee Assistance Programme (if you use this).

TABLE 8:
Actions to take to check control measures are working

Appendices

IN THIS SECTION:

Appendix 1: Health and Safety at Work Act duties

The Health and Safety at Work Act 2015 (HSWA) is New Zealand's key work health and safety law.

All work and workplaces are covered by HSWA unless they have been specifically excluded. For example, HSWA does not apply to the armed forces in certain situations.

HSWA sets out the work health and safety duties that duty holders must comply with.

There are four types of duty holder under HSWA:

- a person conducting a business or understanding (PCBU)
- an officer
- a worker
- an 'other person' at the workplace.

Most duties under HSWA relate to **how** work is carried out. However some duties are linked to **where** work is carried out: the workplace.

> A **workplace** is a place where work is being carried out or usually carried out for a business or undertaking. It includes any place where a worker goes or is likely to be while at work section 20 of HSWA

DUTY HOLDER	WHO THEY ARE?	EXAMPLES	WHAT ARE THEIR DUTIES?	FOR MORE INFORMATION
Person Conducting a Business or Undertaking (PCBU)	A person conducting a business or undertaking (PCBU) may be an individual person or an organisation	– a business – a self-employed person – partners in a partnership – a government agency – a local council – a school or university.	A PCBU has many duties. Key duties are summarised below. **Primary duty of care** section 36 of HSWA A PCBU must ensure, so far as is reasonably practicable, the health and safety of workers, and that other persons are not put at risk by its work.	Introduction to the Health and Safety at Work Act 2015 Appendix 2 of this guidance for an explanation of 'so far as is reasonably practicable'
	The following **are not** PCBUs: – officers – workers – other persons at a workplace – volunteer associations that do not have employees – home occupiers (such as home owners or tenants) who pay someone to do work around the home section 17 of HSWA		**Managing risks** section 30 of HSWA Risks to health and safety arise from people being exposed to hazards (anything that can cause harm). A PCBU must manage work health and safety risks. – A PCBU must first try to **eliminate** a risk so far as is reasonably practicable. This can be done by removing the source of harm – for example, removing faulty equipment or a trip hazard. – If it is not reasonably practicable to eliminate the risk, it must be **minimised** so far as is reasonably practicable.	Identifying, assessing and managing work risks Appendix 5 of this guidance
			Overlapping duties: working with other PCBUs section 34 of HSWA A PCBU with overlapping duties must, so far as is reasonably practicable, consult, cooperate and coordinate activities with other PCBUs they share duties with.	Appendix 3 of this guidance

DUTY HOLDER	WHO THEY ARE?	EXAMPLES	WHAT ARE THEIR DUTIES?	FOR MORE INFORMATION
			Involving workers: worker engagement, participation and representation Part 3 of HSWA A PCBU must, so far as is reasonably practicable, engage with their workers (or their workers' representatives) about health and safety matters that will directly affect the workers. A PCBU must have worker participation practices that give their workers reasonable opportunities to participate in improving health and safety on an ongoing basis.	Appendix 4 of this guidance
Upstream PCBU	A PCBU in the supply chain	– a designer – a manufacturer – a supplier – an importer – an installer, constructor, or commissioner.	**Upstream PCBU** sections 39–43 of HSWA An upstream PCBU must ensure, so far as is reasonably practicable, that the work they do or the things they provide to other workplaces do not create health and safety risks.	Introduction to the Health and Safety at Work Act 2015
Officer	A specified person or a person who exercises significant influence over the management of the business or undertaking section 18 of HSWA	– a company director – a partner or general partner – a chief executive.	**Officer** section 44 of HSWA An officer must exercise due diligence that includes taking reasonable steps to ensure that the PCBU meets their health and safety duties.	Introduction to the Health and Safety at Work Act 2015
Worker	An individual who carries out work for a PCBU section 19 of HSWA	– an employee – a contractor or sub-contractor – an employee of a contractor or sub-contractor – an employee of a labour hire company – an outworker (including homeworker) – an apprentice or trainee – a person gaining work experience or on work trials – a volunteer worker.	**Worker** section 45 of HSWA A worker must take reasonable care of their own health and safety, and take reasonable care that they do not harm others at work. A worker must cooperate with reasonable policies and procedures the PCBU has in place that the worker has been told about. A worker must comply, as far as they are reasonably able, with any reasonable instruction given by the PCBU so the PCBU can meet their legal duties.	Introduction to the Health and Safety at Work Act 2015
Other person at the workplace	An individual present at a workplace (not a worker)	– a workplace visitor – a casual volunteer (not a volunteer worker) – a customer.	**Other person at the workplace** section 46 of HSWA An 'other person' has a duty to take reasonable care of their own health and safety, and not adversely affect the health and safety of anyone else. They must comply with reasonable instructions relating to health and safety at the workplace.	Introduction to the Health and Safety at Work Act 2015

Appendix 2: So far as is reasonably practicable

section 22 of HSWA

Certain PCBU duties (the section 36–43 duties including the primary duty of care) must be carried out 'so far as is reasonably practicable'.

What to consider when deciding what is 'reasonably practicable'

Just because something is possible to do, does not mean it is reasonably practicable in the circumstances.

Consider:

- What possible actions can be taken to ensure health and safety?
- Of these possible actions, at a particular time, what is reasonable to do?

Think about the following questions.

WHAT IS KNOWN ABOUT THE RISK?

- How likely is the risk to occur?
- How severe is the illness or injury that might occur if something goes wrong?
- What is known, or should reasonably be known, about the risk?

WHAT IS KNOWN ABOUT POSSIBLE CONTROL MEASURES?

- What is known, or should reasonably be known, about the ways (control measures) to eliminate or minimise the risk?
- What control measures are available?
- How appropriate (suitable) are the control measures to manage the risk?
- What are the costs of these control measures?
- Are the costs grossly disproportionate to the risk? Cost must only be used as a reason to not do something when that cost is grossly out of proportion to the risk.

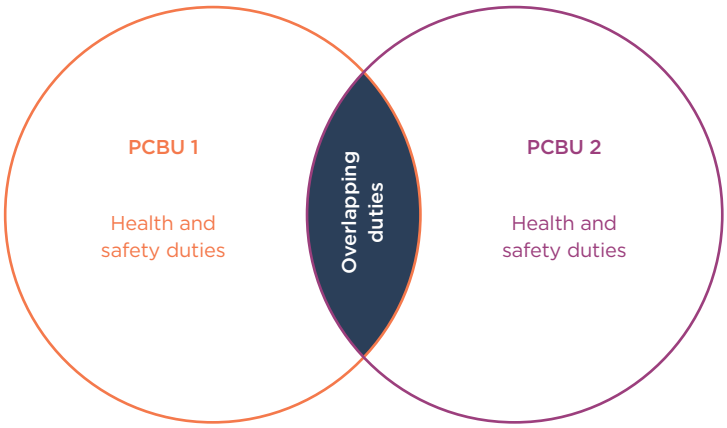
> While PCBUs should check if there are widely used control measures for that risk (such as industry standards), they should always keep their specific circumstances in mind. A common industry practice might not be the most effective or appropriate control measure to use.
>
> If PCBUs are not sure what control measures are appropriate, WorkSafe recommends getting advice from a suitably qualified and experienced health and safety professional.

For more information, see our guidance: Reasonably practicable

Appendix 3: Working with other PCBUs – overlapping duties

section 34 of HSWA

More than one PCBU can have a duty in relation to the same matter. These PCBUs have overlapping duties – this means that the duties are shared between them.



Duties regularly overlap:

- in a shared workplace (for example, a building site or a port) where more than one business has control and influence over the work on site.
- in a contracting chain, where contractors and subcontractors provide services to a head contractor or client and do not necessarily share the same workplace.

A PCBU must, so far as is reasonably practicable, consult, cooperate and coordinate activities with all other PCBUs they share duties with so that all PCBUs can meet their joint responsibilities.

A PCBU cannot transfer or contract out of their duties, or pass liability to another person.

However a PCBU can make an agreement with another PCBU to fulfil specific duties. Even if this occurs, all PCBUs are still responsible for meeting their legal duties.

Example

A local hotel contracts out housekeeping services to an agency. The hotel and agency both have a duty to ensure the health and safety of the housekeeping workers, so far as is reasonably practicable. This includes the duty to provide first aid facilities.

The agency reaches an agreement with the hotel – if their workers need first aid while working at the hotel they can use the hotel's first aid facilities.

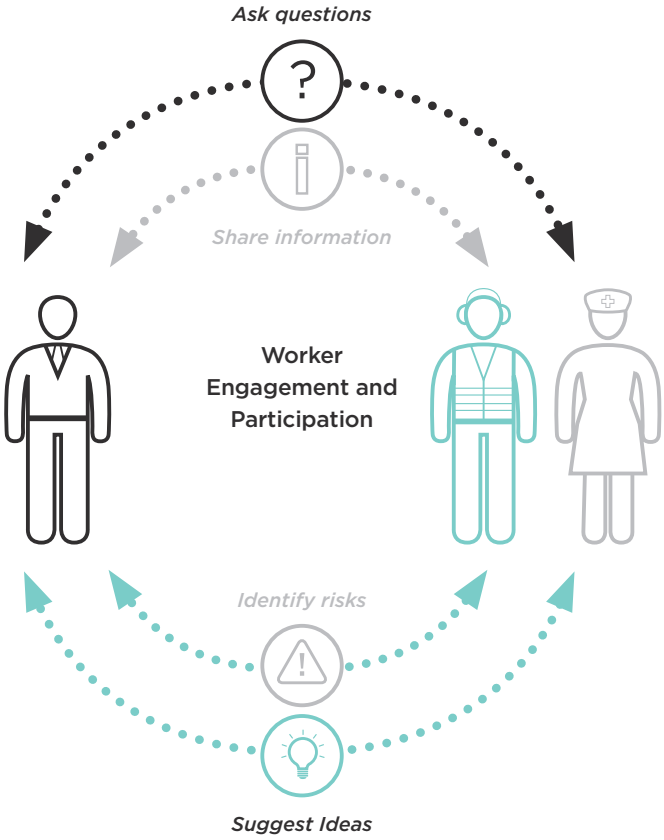
For more information, see our guidance: Overlapping duties

Appendix 4: Worker engagement, participation and representation Part 3 of HSWA

Engage with workers and enable their participation

A PCBU has two main duties related to worker engagement and participation:

- to engage with workers on health and safety matters that affect or are likely to affect workers, so far as is reasonably practicable, and
- to have practices that give workers reasonable opportunities to participate effectively in the ongoing improvement of work health and safety.



A PCBU can engage with workers by:

- sharing information about health and safety matters so that workers are well-informed, know what is going on and can contribute to decision-making
- giving workers reasonable opportunities to have a say about health and safety matters
- listening to and considering what workers have to say at each step of the risk management process
- considering workers' views when health and safety decisions are being made
- updating workers about what decisions have been made.

A PCBU must engage with workers during specified times, including when identifying hazards and assessing risks.

A PCBU must have clear, effective, and ongoing ways for workers to suggest improvements or raise concerns.

Worker representation

Workers can be represented by a Health and Safety Representative (HSR), a union representing workers, or a person that workers authorise to represent them (for example, a community or church leader, or another trusted member of the community).

HSRs and Health and Safety Committees (HSCs) are two well-established methods of participation and representation. If workers are represented by an HSR, worker engagement must also involve that representative.

For more information

WORKSAFE GUIDANCE

Good practice guidelines

Worker engagement, participation and representation

Interpretive guidelines

Worker representation through Health and Safety Representatives and Health and Safety Committees

Pamphlets

Worker representation

Health and Safety Committees

Appendix 5: Managing risk section 30 of HSWA

Risks to health and safety arise from people being exposed to a hazard (a source or cause of harm).

A PCBU must first try to **eliminate** a risk if this is reasonably practicable. If it is not reasonably practicable to eliminate the risk, it must be **minimised** so far as is reasonably practicable.

A PCBU must engage with workers and their representatives:

- when identifying and assessing risks, and
- when making decisions about how to eliminate or minimise the risks using appropriate control measures.

Follow the steps below to identify, assess and manage work health and safety risks.

STEP 1: IDENTIFY HAZARDS THAT COULD GIVE RISE TO WORK RISKS

With your workers, identify what could harm the health or endanger the safety of one or more workers or others (such as visitors, or bystanders).

STEP 2: ASSESS WORK RISKS

With your workers, identify and assess the risks arising from each work hazard. Ask:

- Who might be exposed to the hazard?
- What could happen?
  - How severe could the resulting injuries be?
  - How could people's health be affected?
  - How likely are these consequences?

Decide which risks to deal with immediately. For example, risks with potentially significant consequences such as serious injury or death, chronic ill-health, or those with a high likelihood of occurring.

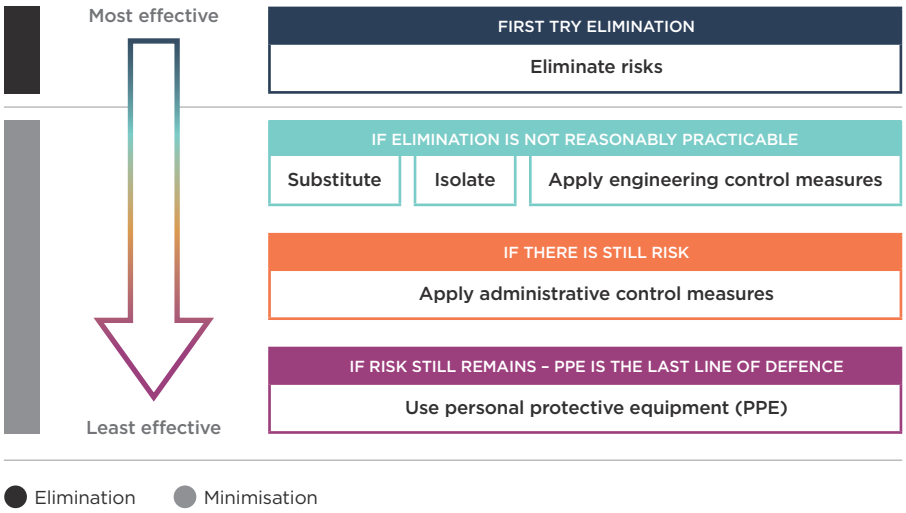
STEP 3: DECIDE HOW TO MANAGE EACH RISK

With your workers, decide how to manage work risks.

Multiple control measures may be needed to deal with a given risk. Give preference to control measures that protect many workers at the same time (for example, safety barriers, safety nets).

A PCBU can use the following hierarchy of control measures to work out the most effective control measures to use.

Hierarchy of control measures



First try to eliminate

First try to eliminate the risk, if this is reasonably practicable. This can be done by removing the source or cause of harm (such as faulty equipment, a noisy machine or a trip hazard).

Then try to minimise

If it is not reasonably practicable to eliminate the risk, the risk must be minimised so far as is reasonably practicable.

Minimise the risk using one or more of the following actions:

- substitute/swap with something that has a lower risk
- isolate the hazard by separating people from the source of harm
- apply engineering control measures (where physical components of the plant, structure or work area are changed to reduce or eliminate exposure to hazards).

If the risk still remains after taking one or more of the actions above, try to minimise the risk with administrative control measures (safe methods of work, procedures or processes).

If there is still risk, use personal protective equipment (PPE) to minimise the risk. PPE is the least effective control measure, and should only be used when other control measures alone cannot adequately manage the risk.

STEP 4: PUT CONTROL MEASURES IN PLACE

As soon as possible after a decision is made about the control measures, a PCBU should:

- put the control measures in place
- instruct and train workers (including new workers) about the control measures, including why it is important to use them and how to apply them.

STEP 5: REVIEW AND IMPROVE CONTROL MEASURES

Control measures should remain effective, be fit-for-purpose, be suitable for the nature and duration of the work, and be used correctly.

With your workers, regularly monitor control measures to confirm that the measures are effective.

You should review control measures:

- when a new risk is identified
- when there is a change at the workplace or to the work
- when workers or their health and safety representative ask for a review
- when there is evidence that control measures may not be working effectively to manage the risk (for example, when you receive monitoring results or a report following an incident investigation).

Use guidance from WorkSafe or others (for example, industry associations) to help to identify, assess, and manage risks, and review control measures. If you need help, WorkSafe recommends getting advice from a suitably qualified and experienced health and safety professional.

For more information, see our guidance: Identifying, assessing and managing work risks

Appendix 6:

Fatigue identification tool

Use this checklist to help you decide if your workers might be at risk from fatigue.
If the answer is yes to any of the questions, you should carry out a fatigue risk assessment.
Evaluate the frequency, likelihood and consequences of each of the below risk factors.
These should all be considered as a starting point for assessing fatigue-related risks.

Adapted from Safe Work Australia, *Guide for managing the risk of fatigue at work: 2013*

Mental and physical work demands

Does anyone carry out work for long periods which is physically demanding? (for example, tasks which are especially tiring and repetitive such as bricklaying, process work, moving bags of cement, felling trees)	Yes	No
Does anyone carry out work for long periods which is mentally demanding? (for example, work requiring vigilance, work requiring continuous concentration and minimal stimulation, work performed under pressure, work to tight deadlines, emergency call outs, interacting/dealing with the public)	Yes	No

Work scheduling and planning

Does anyone consistently work or travel between midnight and 6am?	Yes	No
Does the work schedule prevent workers having at least one full day off per week?	Yes	No
Does the roster make it difficult for workers to consistently have at least two consecutive nights of unrestricted sleep per week?	Yes	No
Do work practices include on-call work or call-backs?	Yes	No
Does the roster differ from the hours actually worked?	Yes	No
Does the work roster include rotating shifts?	Yes	No
Does anyone have to travel more than one hour to get to their job?	Yes	No

Work time

Does anyone work more than 12 hours regularly? (includes overtime)	Yes	No
Does anyone have less than 10 hours break between each shift? (for example, split shifts, quick shift changeovers)	Yes	No
Is work performed at low body clock times? (between 2am and 6am)	Yes	No

Environmental conditions

Is work carried out in harsh or uncomfortable conditions? (for example, hot, humid or cold temperatures)	Yes	No
Does anyone work with plant or machinery that vibrates?	Yes	No
Is anyone working with hazardous chemicals?	Yes	No
Is anyone consistently exposed to loud noise?	Yes	No

Non-work factors

Are workers arriving at work fatigued?	Yes	No

Appendix 7: Extra information on fatigue, sleep and circadian rhythms

Fatigue

Fatigue is a physiological state where someone is unable to mentally and physically function at their best. This is caused by four main things: missing out on sleep, being awake for too long, working and sleeping in the wrong parts of the body clock cycle, and workload (mental and physical).

How to recognise fatigue

People experience fatigue differently, and may present different symptoms than other people to varying degrees. Somebody may be experiencing fatigue, but it might not be obvious from the outside.

A fatigued worker may show the following signs and symptoms, among others:

- excessive yawning or falling asleep at work
- short term memory problems and an inability to concentrate
- finding it harder to interact with other people
- poorer decision-making and judgement
- reduced hand-eye coordination or slow reflexes
- other changes in behaviour, for example repeatedly arriving late for work
- increased days off work and sick leave.

A fatigued worker may also experience symptoms that others cannot see, including:

- feeling drowsy
- headaches
- dizziness
- blurred vision or impaired visual perception
- a need for extended sleep during days off work.

Sleep need

Getting enough sleep (both quality and quantity) is essential for people to be able to function at their best and stay well. Although this varies from person to person, the National Sleep Foundation* provides general recommendations for how much nightly sleep people need (within a 24 hour block), by age group. The table below shows their recommendations:

	AGE RANGE	RECOMMENDED HOURS OF SLEEP
Newborn	0–3 months old	14–17 hours
Infant	4–11 months old	12–15 hours
Toddler	1–2 years old	11–14 hours
Preschool	3–5 years old	10–13 hours
School age	6–13 years old	9–11 hours
Teen	14–17 years old	8–10 hours
Young adult	18–25 years old	7–9 hours
Adult	26–64	7–9 hours
Older adult	65 or more years old	7–8 hours

* www.sleepfoundation.org

If people are regularly missing out on the recommended amount of sleep, they can be at higher risk of poor health and lower functioning. For shift workers, they may not get all their sleep in one block. The best quality sleep is usually obtained at night.

Sleep loss

Missing out on enough, good quality sleep is one of the main risks of shift work. The negative effects of missing out on the recommended hours of good quality sleep build up across several days, leading to a sleep debt. The greater the sleep debt, the more likely workers are to experience negative effects, which may include falling asleep uncontrollably (microsleeps).

For the first few days, people are likely to feel sleepier and more fatigued as they miss out on more and more sleep. Other aspects of how we feel and function that are affected include:

- feeling irritable
- mood swings
- lower alertness
- slower reaction times
- poor coordination
- less effective communication
- slower thinking
- less situational awareness
- less creative problem-solving.

After the first two to three nights of missing out on good quality sleep, people feel increasingly sleepy. However, with additional nights of short sleep, they may report feeling no sleepier even though their functioning is continuing to get worse. This is especially dangerous, as it means a person is less able to determine how their own functioning has changed due to missing out on sleep.

After building a sleep debt, a person needs at least two consecutive nights of unrestricted, good quality sleep for sleep structure to return to normal. A person usually achieves unrestricted night-time sleep when they go to bed and rise when they choose, and when the sleep period occurs at night. However, it may take more than two nights of unrestricted sleep after building a sleep debt before they can function at their best.

People vary in their ability to cope with shift work. Some people may find it easier to fall asleep and stay asleep at times when their body is programmed to be awake, whereas others may find this difficult to achieve. There are some personal factors that may make it more difficult for someone to cope with the disruption to their circadian rhythms, including:

- being an older adult
- already having poor sleep habits
- having poor general health and wellbeing, including stress, some medical conditions and sleep disorders (such as insomnia and sleep apnoea)
- using some medications and drugs.

Circadian disruption

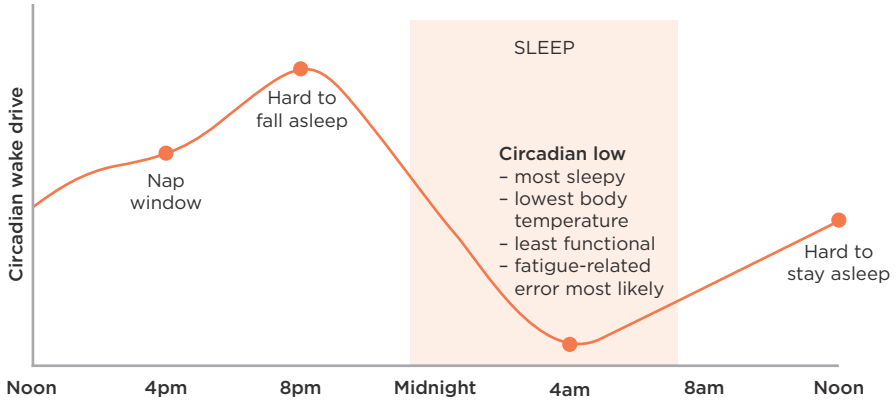
Circadian rhythms are biochemical, behavioural and biological processes that occur in the body, on an approximately 24 hour cycle. Understanding how these work, including how they interact with disrupted sleep and shift work, is important. This information can help you and workers to make safe and healthy decisions regarding shift work.

People are programmed to be active and alert during daytime hours, and sleep at night. We follow this pattern because of an internal clock in the brain, called the circadian body clock. This controls daily cycles of different processes in the body, including core temperature, hormones, falling and staying asleep, moods, and ability to work. These daily cycles are called circadian rhythms.

The circadian body clock, and the circadian rhythms the clock influences, are kept in step with the 24 hour day/night cycle mainly through exposure to daylight. Meal times, interactions with other people, physical activity and work hours also play a role in keeping the circadian body clock in step with the day/night cycle. If the natural timing of the circadian body clock and circadian rhythms is disrupted, people can experience shorter, poor quality sleep, sleepiness, poor functioning and poor health.

The circadian body clock cannot fully adapt to the changes that shift work brings. As a result, circadian rhythms become out of sync with the world around us, and with each other. This disruption can result in poor sleep, poor health, and lower functioning.

The graph below shows the circadian rhythm in alertness/sleepiness over a 24 hour period, and when it is easier or more difficult to fall asleep.



The circadian body clock naturally makes people feel:

- **sleepiest** in the earliest hours of the morning (when they are the most error-prone), and in the late afternoon
- **most alert** in the few hours before normal bedtime (making it difficult to fall asleep ahead of an early morning shift), and across the morning (making it difficult to fall asleep beyond lunch time, after a night shift).

This means that for shift workers, sleep is often cut short and can be of a poorer quality. The table below shows the barriers to sleep that may arise for different types of shift workers.

Night shift workers	Sleep during the day is usually lighter and shorter than when sleeping at night. The amount of sleep a night worker will get depends on when they can get into bed after a night shift, before the circadian body clock makes them feel more alert around lunchtime/early afternoon.
Early starters	Sleep is cut short because early morning starts cut into the preferred sleep time. The circadian body clock makes people feel more alert in the few hours before a person's normal bedtime, making it difficult to fall asleep earlier than usual.
Late finishers	Sleep may be cut short because late finishes mean that workers get into bed later than usual, but they may have to wake early for work, household, family or other commitments in the morning.

Extended wakefulness (staying awake for a long time)

Depending on the pattern of work and sleep, shift workers may spend long periods of time awake. If a worker is able to get 8 hours of sleep per night, then they are then able to function normally for approximately 16 hours during the day. After about 16 hours of being awake, peoples' ability to function in a safe and healthy way starts to decrease.

Workload

Workload is made up of a combination of:

- task duration (how long the work takes)
- task complexity (how difficult or easy the work is)
- task intensity (how much physical and mental effort the work demands)
- how well the person is able to meet the above demands.

When a person is fatigued, sleepiness can become more obvious during low physical or mental workload because of the lack of stimulation. High physical or mental workload may lead to fatigue, because of the effort needed to carry out the work. It can also delay and/or disturb later sleep, adding to already-present fatigue. It is important to take regular rest breaks during high workload tasks, as this can help prevent workers becoming impaired during a single work period.

TASK-ON-TASK FATIGUE

Task-on-task fatigue is caused by performing mental or physical tasks, particularly difficult or high-concentration tasks, without stopping. This type of fatigue is made worse by sleep loss, and is worse during the night. As with a high workload, regular rest breaks and keeping the work period shorter can limit time-on-task fatigue increasing.

Appendix 8: Glossary

TERM	DEFINITION
Fatigue	Fatigue is a physiological state where someone is unable to mentally and physically function at their best.
Permanent shifts	Permanent shifts have start and finish times that do not change from day to day. That is, the worker always starts and finishes work at the same time. They may also be called fixed shifts, regular shifts, or non-rotating shifts.
Rotating shifts	Workers on a rotating shift system are assigned to shifts where the start and finish times change over time. These are called 'rotating shifts' because workers move from one shift to another and the shifts rotate around the clock. They may rotate in a forward direction (for example, morning shift to afternoon shift to night shift) or backward direction (for example, afternoon shift to morning shift to night shift). The rotation may be fast (for example, every 1–3 days) or slower (for example, every week). Workers usually take turns working on all shifts that are part of a rotating shift system.
Shift system	The term shift system describes the characteristics of a pattern of work in an organisation. It may include one type or different types of shifts, including permanent shifts, rotating shifts, variable shifts and split shifts. A shift system is described by its different components, including but not limited to shift type, length, timing and rotation, as well as breaks between and within shifts, workload and task assignment, and work predictability and flexibility. A shift system can be continuous (that is, running shifts that cover all 24 hours of the day) or semi-continuous (for example, running two or three shifts per day, with or without weekend work).
Sleep debt	A sleep debt occurs when a person gets less sleep than they need, and can be calculated as the difference between the amount of sleep a person needs and the amount they actually get. A sleep debt builds up if a person does not get enough, good quality sleep night after night. A sleep debt can lead to poorer functioning and health, with a higher sleep debt resulting in a greater impact on functioning and health.
Sleep inertia	Sleep inertia is a temporary feeling of sleepiness and confusion, that is often experienced alongside poor functioning, and that occurs immediately after waking from sleep. Sleep inertia is worse when a person has not been getting enough sleep (has a sleep debt), wakes during the night time, and/or wakes from deep sleep. The experience of sleep inertia is different from person to person and usually lasts for up to 15–30 minutes. In some cases, sleep inertia can be severe and last for up to two hours.
Split shifts	A split shift is where a person's workday is split into two or more parts separated by a long break. For example, a worker might work from 6–10am and then return to work from 2–9pm on the same day. A regular meal break does not count as a 'split' in a person's workday. A typical split shift has work that is separated by two or more hours.
Unrestricted sleep	Unrestricted sleep occurs when a person can get into bed when they feel sleepy in the evening and sleep during the night for as long as they need to, until they wake naturally in the morning (without an alarm).
Variable shifts	Variable shifts are shifts with different lengths (and start and end times) on different days. For example, working a 10-hour shift on Day 1 from 9am-7pm and working a 6 hour shift on Day 2 from 11am–5pm. Variable shifts often mean a worker does not have regular pattern of work.

Disclaimer

This publication provides general guidance. It is not possible for WorkSafe to address every situation that could occur in every workplace. This means that you will need to think about this guidance and how to apply it to your particular circumstances.

WorkSafe regularly reviews and revises guidance to ensure that it is up-to-date. If you are reading a printed copy of this guidance, please check worksafe.govt.nz to confirm that your copy is the current version.

ISBN 978-1-98-856776-1 (online)

Published: April 2021

PO Box 165, Wellington 6140, New Zealand

worksafe.govt.nz

WSNZ_3888_AUG 2021

ISBN 978-1-98-856776-1 (online)

WORKSAFE
Mahi Haumaru Aotearoa

Level 6, 86 Customhouse Quay
PO Box 165, Wellington 6140
0800 030 040 worksafe.govt.nz