

## **PART A**

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# Managing health and safety through the contracting chain

### **IN THIS PART:**

- 2.0** Introduction to Part A
- 3.0** Introduction to HSWA
- 4.0** What is expected of principals, contractors, subcontractors and other PCBUs?



| TERM OR SYMBOL  | MEANING IN THIS DOCUMENT  |
|---|---|
| <b>Must</b>   | A mandatory legal requirement under HSWA or regulations.  |
| <b>Other wording including 'check', 'make sure', 'design', 'do not'</b> | <p>How WorkSafe expects certain health and safety risks to be managed.</p> <p>This is not mandatory to follow – you may adopt other practices, as long as these practices provide a level of health and safety as good as or better than the standard in this code.</p> |
| <b>You/your</b>   | Refers to the PCBU involved in forestry and harvesting operations.  |

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## 2.0

# Introduction to Part A

### IN THIS SECTION:

#### 2.1 What does this Part cover?

## 2.1 What does this Part cover?

- 2.1.1 The Health and Safety at Work Act 2015 (HSWA) is New Zealand's key work health and safety law.
- 2.1.2 All work and workplaces are covered by HSWA unless they have been specifically excluded.
- 2.1.3 This Part provides:
  - an explanation of the duty holders in HSWA
  - an overview on how PCBUs in a contracting chain could work together to manage health and safety
  - your duty to manage risk
  - some things to consider when managing health risks including using exposure and health monitoring.
  - the common health risks to forestry workers, and what you can do to eliminate or minimise these risks
  - expectations of principals, contractors, subcontractors, and other PCBUs.
- 2.1.4 This Part does not explain all the duties that PCBUs may have under HSWA.
- 2.1.5 Certain duties will be introduced where relevant later in the guidance.

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# 3.0

## Introduction to HSWA

### IN THIS SECTION:

- 3.1** Who are the duty holders
- 3.2** Introduction to the contracting chain PCBUs
- 3.3** Working with other PCBUs to manage health and safety through the contracting chain
- 3.4** How to manage risk?
- 3.5** Managing work-related health risks

### 3.1 Who are the duty holders?

- 3.1.1 HSWA sets out the work health and safety duties that duty holders must comply with.
- 3.1.2 There are four types of duty holder under HSWA:
- a person conducting a business or undertaking (PCBU)
  - an officer
  - a worker
  - an 'other person' at the workplace.
- 3.1.3 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](#))

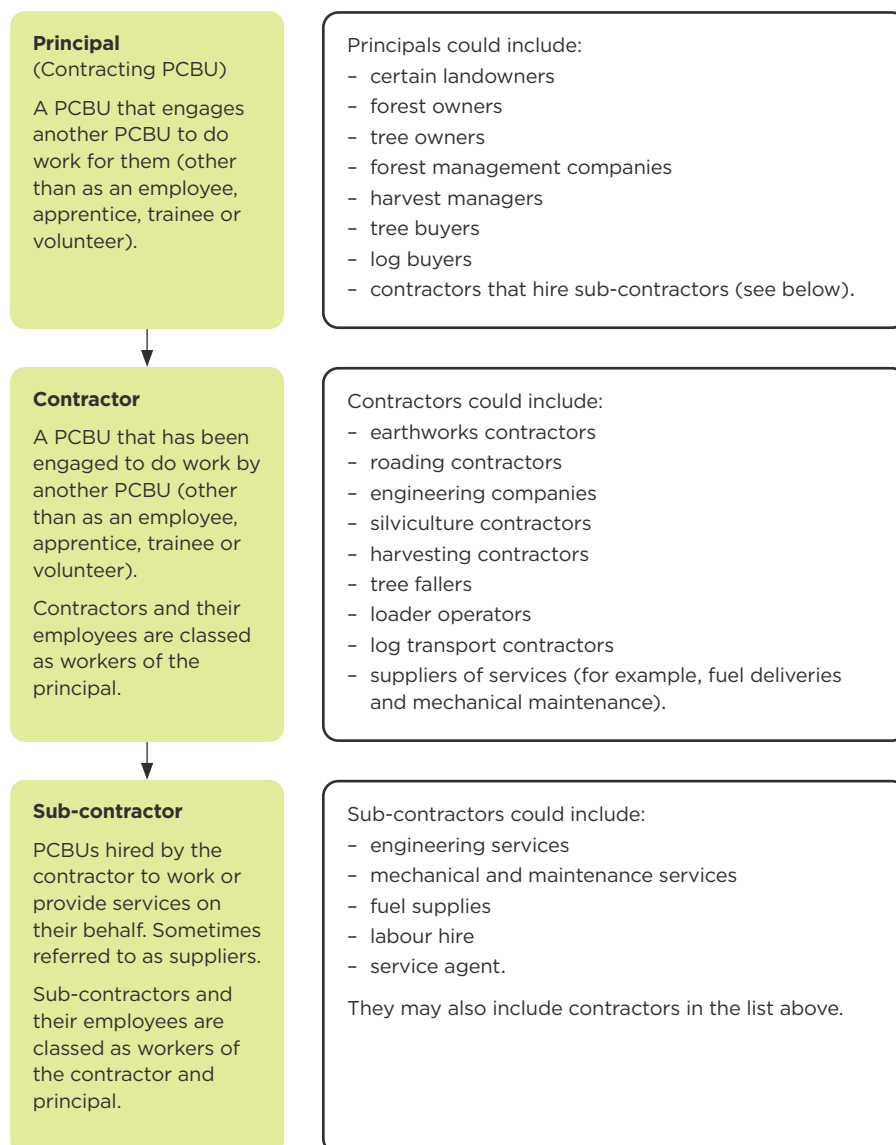
| DUTY HOLDER  | WHO ARE THEY?   | EXAMPLES  | WHAT ARE THEIR DUTIES?   |
|--|---|---|--|
| Person conducting a business or undertaking (PCBU) | <p>A PCBU may be an individual person or an organisation.</p> <p>The following are not PCBUs:</p> <ul style="list-style-type: none"> <li>- officers</li> <li>- workers</li> <li>- other persons at a workplace</li> <li>- volunteer associations that do not have employees</li> <li>- home occupiers (such as home owners or tenants) who pay someone to do work around the home (<a href="#">section 17 of HSWA</a>)</li> </ul> | <ul style="list-style-type: none"> <li>- a business (includes principals, contractors and sub-contractors)</li> <li>- a self-employed person</li> <li>- partners in a partnership</li> <li>- a government agency</li> <li>- a local council</li> <li>- a school or university.</li> </ul> | <p>A PCBU has many duties. Key duties are summarised below.</p> <p><b>Primary duty of care</b> (<a href="#">section 36 of HSWA</a>)</p> <p>PCBUs must ensure, so far as is reasonably practicable:</p> <ul style="list-style-type: none"> <li>- the health and safety of their worker(s) and workers they influence or direct</li> <li>- that the health and safety of other persons is not put at risk from its work.</li> </ul> <p>For more information:</p> <ul style="list-style-type: none"> <li>- see <a href="#">Resources webpage</a></li> <li>- see Appendix 2 for an explanation of 'so far as is reasonably practicable'.</li> </ul> <p><b>Managing risks</b> (<a href="#">section 30 of HSWA</a>)</p> <p>Risks to health and safety arise from people being exposed to hazards (anything that can cause harm). A PCBU <b>must</b> manage work health and safety risks.</p> <p>A PCBU <b>must</b> 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.</p> <p>If it is not reasonably practicable to eliminate the risk, it <b>must</b> be minimised so far as is reasonably practicable.</p> <p>For more information, see Appendix 6.</p> <p><b>Overlapping duties: working with other PCBUs</b> (<a href="#">section 34 of HSWA</a>)</p> <p>A PCBU with overlapping duties <b>must</b>, so far as is reasonably practicable, consult, cooperate and coordinate activities with other PCBUs they share duties with.</p> <p>For more information, see Section 3.3 and Appendix 3.</p> <p><b>Involving workers: worker engagement, participation and representation</b> (<a href="#">Part 3 of HSWA</a>)</p> <p>A PCBU <b>must</b>, 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.</p> <p>A PCBU <b>must</b> have worker participation practices that give their workers reasonable opportunities to participate in improving health and safety on an ongoing basis</p> <p>For more information, see Appendix 4.</p> |

| DUTY HOLDER                   | WHO ARE THEY?  | EXAMPLES   | WHAT ARE THEIR DUTIES?  |
|-------------------------------|--|--|---|
| Upstream PCBU                 | A PCBU in the supply chain   | <ul style="list-style-type: none"> <li>- a designer</li> <li>- a manufacturer</li> <li>- a supplier</li> <li>- an importer</li> <li>- an installer, constructor, or commissioner.</li> </ul>   | <p><b>Upstream PCBU</b> (<a href="#">sections 39–43 of HSWA</a>)</p> <p>An upstream PCBU <b>must</b> 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.</p> <p>For more information, see Appendix 5.</p>  |
| Officer                       | A specified person or a person who exercises significant influence over the management of the business or undertaking ( <a href="#">section 18 of HSWA</a> ) | <ul style="list-style-type: none"> <li>- a company director</li> <li>- a partner or general partner</li> <li>- a chief executive.</li> </ul>   | <p><b>Officers</b> (<a href="#">section 44 of HSWA</a>)</p> <p>An officer <b>must</b> exercise due diligence that includes taking reasonable steps to ensure that the PCBU meets their health and safety duties.</p> <p>For more information, see <a href="#">Resources webpage</a></p>   |
| Worker                        | An individual who carries out work for a PCBU ( <a href="#">section 19 of HSWA</a> )   | <ul style="list-style-type: none"> <li>- an employee</li> <li>- a contractor or sub-contractor</li> <li>- an employee of a contractor or sub-contractor</li> <li>- an employee of a labour hire company</li> <li>- an outworker (including homeworker)</li> <li>- an apprentice or trainee</li> <li>- a person gaining work experience or on work trials</li> <li>- a volunteer worker.</li> </ul> | <p><b>Workers</b> (<a href="#">section 45 of HSWA</a>)</p> <p>A worker <b>must</b> take reasonable care of their own health and safety, and take reasonable care that they do not harm others at work.</p> <p>A worker <b>must</b> cooperate with reasonable policies and procedures the PCBU has in place that the worker has been told about.</p> <p>A worker <b>must</b> comply, as far as they are reasonably able, with any reasonable instruction given by the PCBU so the PCBU can meet their legal duties.</p> <p>For more information, see <a href="#">Resources webpage</a></p> |
| Other person at the workplace | An individual present at a workplace (not a worker)  | <ul style="list-style-type: none"> <li>- a workplace visitor</li> <li>- a casual volunteer (not a volunteer worker)</li> <li>- a customer.</li> </ul>  | <p><b>Other person at the workplace</b> (<a href="#">section 46 of HSWA</a>)</p> <p>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.</p> <p>They <b>must</b> comply, as far as they are reasonably able, with reasonable instructions relating to health and safety at the workplace.</p> <p>For more information, see <a href="#">Resources webpage</a></p>   |

**TABLE 2:** HSWA duty holders and certain duties

## 3.2 Introduction to contracting chain PCBUs

- 3.2.1 Contracting is when a PCBU (called the contracting PCBU), hires another PCBU (called a contractor) to do work for them.
- 3.2.2 The forestry industry has traditionally referred to these roles as 'principals' and 'contractors' so these terms are used in this guidance.
- 3.2.3 In a contracting chain, and for HSWA purposes, employees of the contractor are workers of the principal (as well as being workers of their employer) (Figure 1).




**FIGURE 1:**  
PCBUs in the  
contracting chain




### 3.3 Working with other PCBUs to manage health and safety through the contracting chain

What are overlapping duties?

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-  3.3.1 As a PCBU, you **must**:
- ensure, so far as is reasonably practicable, the health and safety of your worker(s) and other workers you influence or direct
  - ensure, so far as is reasonably practicable that the health and safety of other persons is not put at risk from the work that you do.
- 
- 3.3.2 PCBU's operating in a contracting chain are likely to have shared health and safety duties with other PCBU's in that contracting chain in relation to the same matter. They all have a duty for keeping workers safe. This is known as overlapping duties.
- 3.3.3 Examples of overlapping duties could include:
- managing shared health and safety risks
  - notifying WorkSafe when notifiable work is to begin or when a notifiable event occurs.
- 3.3.4 Overlapping duties are explained next.
- 3.3.5 If you are new to risk management, see Section 3.4 for guidance.

How can PCBU's work together?

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-  3.3.6 Where there are overlapping duties, all PCBU's **must**, so far as is reasonably practicable:
- consult with each other
  - cooperate with each other
  - coordinate their activities.
- 3.3.7 Each PCBU is responsible for making sure their own duties are met. PCBU's cannot contract out of their health and safety duties or transfer responsibility for meeting their duties to others in the contracting chain.
- 3.3.8 The extent of the duty depends on the ability of each PCBU to influence and control the matter.
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How can PCBU's work out the extent of their duty?

- 3.3.9 The extent of each PCBU's responsibility to carry out their duties will most likely be different. This will depend on what ability the PCBU has to influence and control the health and safety matter. The more influence and control a PCBU has over a health and safety matter, the more responsibility it is likely to have.
- 3.3.10 A PCBU can have influence and control over health and safety matters through:
- control over work activity: A PCBU in control of the work activity may be in the best position to control the health and safety risks.
  - control of the workplace: A PCBU who has control over the workplace (and/or plant and structures at the workplace) will have some influence and control over health and safety matters relating to work carried out by another PCBU.
  - control over workers: A PCBU will have more influence and control over its own employees and contractors than those of another PCBU.

- 3.3.11 A PCBU with a higher level of influence and control (and with the greatest share of the responsibilities) will usually be in the best position to manage the associated risks.
- 3.3.12 A PCBU with less control or influence may fulfil their responsibilities by making arrangements with the PCBU with the higher level of influence and control.
- 3.3.13 The size of the PCBU or its financial resources (for example, a large company versus a sole trader) does not equal a PCBU's ability to have control or influence over health and safety matters. This means that the PCBU with the most financial resources does not automatically have most of the responsibilities.

### One simple way of understanding overlapping duties

- 3.3.14 Stand back from what you are doing and look at what is going on around you, and who is going to do what.
- 3.3.15 Talk to the other PCBUs involved. Agree on how risks are going to be managed:
  - talk about what is going on – and what will be going on in the future – and who is going to be doing it
  - discuss the level of control that each PCBU has over the activity
  - agree on who will manage what and how it will be managed
  - agree on shared facilities, if applicable
  - talk about how they are going to monitor and check on things.
- 3.3.16 For more information:
  - Appendix 3
  - see [Resources webpage](#)

#### **Example: Notifying WorkSafe**

An example of a shared overlapping duty is the duty to notify WorkSafe in the event of:

- the commencement of hazardous work
- a death
- a notifiable injury or illness or
- a notifiable incident (for example, a hazardous substance spill, an electric shock, or engineering failure).

The PCBUs in the contracting chain decided which PCBU would notify WorkSafe. They agreed on the process to be followed:

- If there is a death at the workplace, WorkSafe will be called immediately on 0800 030 040.
- For other events, WorkSafe will be notified through the [Notify WorkSafe](#) page of the WorkSafe website.
- The notifying PCBU would then tell the other PCBUs that a notification had been made.

While only one PCBU has been nominated to notify the regulator, all PCBUs are responsible for ensuring a notification has been made.

**Example: PCBU's in a forestry contracting chain working together to create a fatigue management policy or agreement**

The PCBU's agreed not to create situations where there is pressure on PCBU's further down the contracting chain to meet requirements that are likely to result in fatigue or unhealthy work pressures for workers.

They developed a fatigue management agreement that included:

- minimum hours of sleep opportunity between shifts and at least two full nights between each week of work
- maximum shift length, considering:
  - time of day
  - type of work
- maximum travel time before and after a shift
- maximum hours to be worked in a week
- maximum hours to be worked in a month
- procedures for detecting, reporting, and addressing fatigue.

The PCBU's together monitored and reviewed the agreement to make sure fatigue is being managed effectively. If needed, the PCBU's would together investigate incidents where fatigue may be involved.

### 3.4 How to manage risk

#### Overall duty to manage risk

3.4.1 PCBU's have the duty to manage work-related health and safety risks.



3.4.2 You **must** eliminate risks so far as is reasonably practicable. If you cannot eliminate the risk, you **must** minimise it so far as is reasonably practicable. You **must** do this to the extent to which you have, or would reasonably be expected to have, the ability to influence and control the matter to which the risks relate.

3.4.3 You **must** consult, cooperate and coordinate activities with other PCBU's you have overlapping duties with (see Section 3.3).

3.4.4 An approach to managing risk is covered in Appendix 6.


3.4.5 In addition to their HSWA duties, PCBU's must follow specific requirements for managing certain risks. These include risks from remote or isolated work, and risks from falling objects and working under raised objects.

#### Requirements for managing remote or isolated work


3.4.6 Work can be remote or isolated from the assistance of other people because of location, time, or the nature of the work.

3.4.7 Remote or isolated work includes:

- working alone or separated from colleagues
- working in an isolated or inaccessible area - where the nearest emergency help (for example, fire service or hospital) is some distance away
- working outside normal business hours or shift/night work
- working in locations where communication is difficult.

- 
-  3.4.8 PCBU **must** follow the prescribed risk management process to manage the health and safety risks to workers who carry out remote or isolated work.
- 3.4.9 The PCBU **must** provide a system of work that includes effective communication with workers.
- 
- 3.4.10 For more information about the prescribed risk management process, see [Resources webpage](#)

### Requirements for managing the risks of falling objects and working under raised objects

- 3.4.11 A lot of your day-to-day practice on a forestry site is about stopping things falling on people. PCBUs have specific steps to take when deciding how to manage the risks from falling and raised objects.
- 
-  3.4.12 PCBUs **must** follow the prescribed risk management process to manage the health and safety risks from raised or falling objects.
- 3.4.13 If it is not reasonably practicable to eliminate the risks, the PCBUs **must** take specified steps to minimise risk.
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## 3.5 Managing work-related health risks

How can worker health be harmed?

- 3.5.1 More workers will be affected by work-related health issues than acute injuries.
- 3.5.2 A worker's health might be harmed by:
- physical factors such as the repetition of a task, the length of time doing a task, and stresses and strains on the body
  - environmental factors such as noise, temperature, and sun exposure
  - organisational factors such as rosters and shifts, training and levels of experience, and worksite communication
  - individual factors such as fitness, fatigue, and previous injury
  - psychological factors such as production pressure, job demands, stress, workplace relationships, and workplace support.
- 3.5.3 There is a two-way relationship between work and health. Work can affect a worker's health and a worker's health can affect their work.

### Example

A worker is part of the breaking-out crew. Their job requires fitness and stamina. The crew needs to be agile and to concentrate on what they are doing.

Usually, the crew take breaks or swap tasks with co-workers so they do not get fatigued.

But this day:

- the crew is short-handed so workers cannot swap tasks
- the crew is running behind so workers take shorter breaks.

Because the crew is working faster, workers are more fatigued. One worker strains a muscle.

The head breaker-out does not notice it and the injured worker does not tell them. Instead, the injured worker keeps working because of the pressure to get the job done. But the muscle discomfort gets worse and becomes a distraction.

Because the injured worker is not paying full attention to the job, the risk of making a mistake increases considerably.

The individual factors alone may not cause a risk but added together they increase the risk of causing harm.

### How can exposure monitoring and health monitoring be used to effectively manage health risks?

- 3.5.4 Figure 2 explains what exposure monitoring and health monitoring are.
- 3.5.5 Monitoring is not a control measure. It does not replace the need for control measures to eliminate or minimise worker exposure to harm.

### Exposure monitoring

**Exposure monitoring** measures and evaluates what your workers are being exposed to while they are at work.

This can involve workers wearing a device while they work. Examples of personal exposure monitoring:

- measuring the level of noise workers are being exposed to
- measuring the amount of a chemical workers are being exposed to
- measuring the amount of vibration workers' arms, hands or whole body are being exposed to.

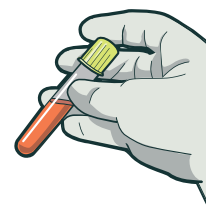
It should be carried out by suitably qualified, trained and experienced people who know how to carry out the monitoring you need (such as Occupational Hygienists).



**Biological exposure monitoring** is another type of exposure monitoring. It usually involves taking blood or urine samples to test for a substance (or a metabolite of a substance) workers are working with.

Blood or other invasive samples must be taken by a health practitioner such as an Occupational Health Nurse or phlebotomist (for blood).

A suitably qualified, trained and experienced person is needed to interpret the results.



### Health monitoring

**Health monitoring** looks at whether a worker's health is being harmed because of what they are being exposed to while they are at work.

Examples:

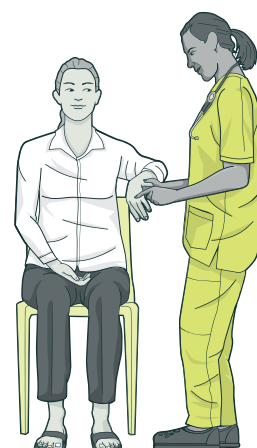
- carrying out hearing tests to check for hearing loss from being exposed to noise
- checking for skin damage from being exposed to chemicals
- checking for nerve, muscle or circulation damage from being exposed to vibration.

Well-being programmes, employment prescreening and fitness-to-work examinations are **not** health monitoring.

Monitoring should be carried out at the beginning of a worker's employment (to get baseline readings). Then regular (ongoing) monitoring should be carried out.

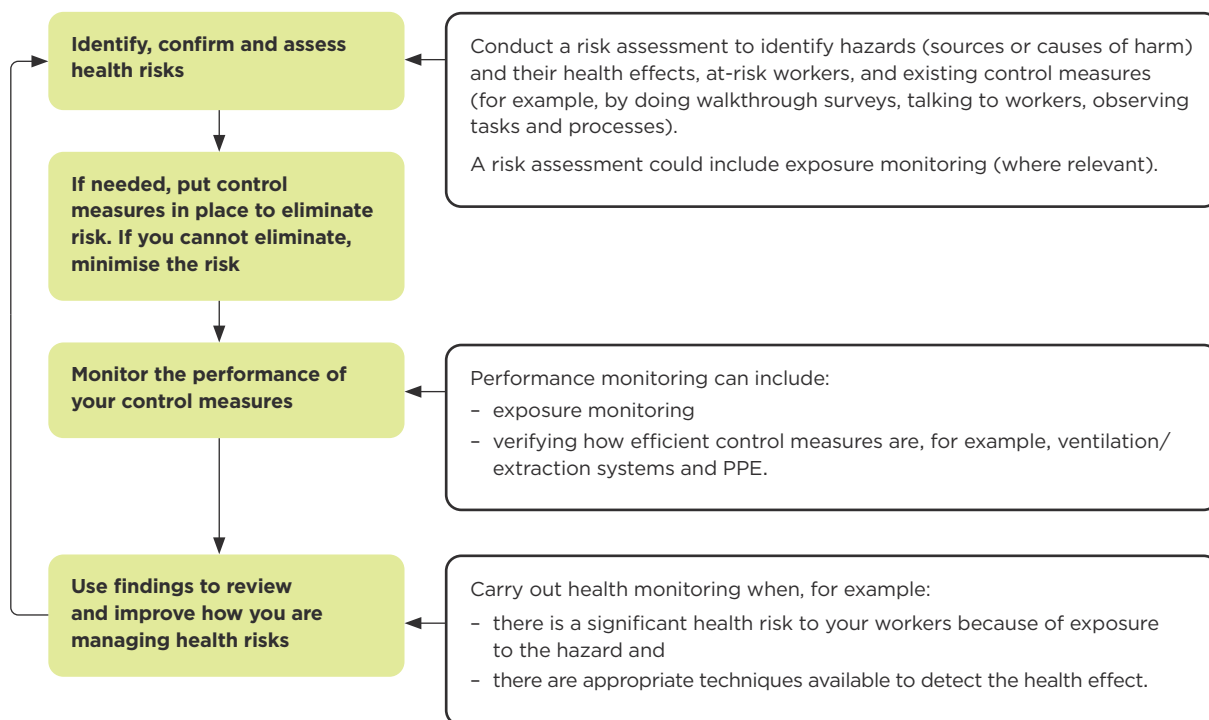
It should be carried out by suitably qualified, trained and experienced health practitioners with the knowledge, skills, training and experience to carry out the monitoring you need.

For example, an Occupational Health Nurse could carry out initial health assessment (health screening) and subsequent routine regular testing. If suspected, workers should be sent to a health practitioner who understands occupational health for a full medical assessment/formal diagnosis and feedback to the PCBU. This could be an Occupational Physician or GP with relevant experience.



**FIGURE 2:** Exposure monitoring and health monitoring

- 3.5.6 Exposure monitoring and health monitoring – along with verifying that control measures are working effectively – can be used to manage health risks (Figure 3). Health monitoring can also confirm that control measures are preventing harm.



**FIGURE 3:** Role of exposure monitoring and health monitoring in managing health risks

#### WHEN TO MONITOR?



- 3.5.7 You **must** ensure, so far as is reasonably practicable, the health and safety of workers, and that other persons are not put at risk by your work. In some circumstances, this could mean monitoring worker exposure and/or the health of workers.

3.5.8 You may be required to monitor worker exposure or worker health in circumstances specified in HSWA regulations.

3.5.9 WorkSafe could also request you carry out monitoring to meet your primary duty or HSWA regulation requirements.

3.5.10 For further information see [Resources webpage](#)

#### WHAT TYPE OF MONITORING?

3.5.11 The type of monitoring depends on the kind of work you do.

3.5.12 You will need to talk to a suitably qualified and experienced health and safety professional to advise if monitoring is appropriate for you - and if so, what type and how often. You could need initial monitoring carried out, and then regular (ongoing) monitoring.

3.5.13 For more information on selecting external monitoring providers, putting in place monitoring programmes including what to do if workers do not want to take part, see [Resources webpage](#)

## What are common hazards that can harm workers' health?

- 3.5.14 Health hazards that forestry workers could be exposed to include:
- fatigue
  - mental health harm
  - noise
  - vibration
  - temperature extremes (hot and cold)
  - UV/sun exposure
  - harmful substances
  - hazardous manual tasks (work-related musculoskeletal disorders).
- 3.5.15 These may not be the only health hazards your workers are exposed to, but they are a good place to start. These topics are addressed next.

## Fatigue

### WHAT IS FATIGUE AND HOW CAN IT HARM?

- 3.5.16 Fatigue is a state of physical and/or mental exhaustion.
- 3.5.17 Forestry work relies on workers being physically and mentally alert. A worker's fitness to work can be affected by fatigue. This can create a risk to their health and safety and the safety of those around them.
- 3.5.18 The more fatigued a worker gets, the more likely they are to be affected and make bad decisions.
- 3.5.19 Fatigue can also cause micro-sleeps, where the person briefly falls asleep. Micro-sleeps can be dangerous if they occur at the wrong time (for example, when the person is in control of mobile plant).

#### Things that can lead to workers experiencing fatigue include:

- long driving times (many workers travel considerable distances to get to their sites)
- longer shifts
- the physical nature of many forestry jobs
- mental demands
- using certain machines
- personal health or lifestyle factors.

#### Fatigue can be made worse by:

- cloudy days
- not being able to see clearly (mist or haze)
- high temperatures
- dehydration
- low temperatures (frost/snow)
- wet weather
- loud noise
- tasks which are difficult or carry on for long periods of time
- tasks which are repetitive, monotonous and boring
- difficult conditions underfoot (slippery ground or stems, high hindrance undergrowth).

**FIGURE 4:** Causes of fatigue



## WHAT ARE POSSIBLE CONTROL MEASURES?

3.5.20 Table 3 describes control measures that can be used to reduce the chances of workers experiencing fatigue.

| POSSIBLE CONTROL MEASURE  | EXAMPLES   |
|---|--|
| <b>Create work schedules that allow for sufficient rest during work shifts and between shifts (in consultation with your workers)</b>   | <ul style="list-style-type: none"> <li>– Keep a log of hours worked to make sure working hours are not too long. If longer working days are required, consult with your workers before deciding these hours.</li> <li>– Check that casual staff or labour hire workers have not recently worked a shift somewhere else (for example, the same day or the previous night). If they have they might already be tired.</li> <li>– Consider staggered start and finish times, longer rest breaks, and periods off work:               <ul style="list-style-type: none"> <li>- build in a minimum 15-minute break every three (3) hours, or two 30-minute breaks per day</li> <li>- encourage workers to take microbreaks. A break of five (5) minutes per hour can make a big difference.</li> </ul> </li> <li>– Factor in travel times to work sites. Long travel times to remote worksites will contribute to fatigue, as will the effects of staying away from home for days at a time.</li> <li>– Monitor and place limits around the number of overtime hours that can be worked. Avoid incentives to work excessive hours.</li> <li>– Monitor and put limits around shift swapping and on-call duties.</li> <li>– Design rosters that follow natural sleeping rhythms and allow for good sleep opportunity and recovery time.</li> <li>– If night work is required, limit the number of night shifts in a row that your workers can work.</li> <li>– Do not allow workers to work if fatigued.</li> </ul> |
| <b>Schedule tasks suitably throughout a work period</b><br>A worker's ability to remain alert and focused can be reduced between 3.00am and 5.00am, and between 3.00pm and 5.00pm | <ul style="list-style-type: none"> <li>– Take workers' alertness and focus into account when managing the risks of higher risk activities. For example, tree felling/breaking out, manual tasks, or tasks using mobile plant or vehicles taking place between 3.00am and 5.00am and 3.00pm and 5.00pm.</li> </ul>  |
| <b>Limit periods of excessive mentally or physically demanding work</b>   | <ul style="list-style-type: none"> <li>– Rotate tasks between workers.</li> <li>– Make sure plant, machinery, and equipment are fit-for-purpose.</li> <li>– Make sure workers take breaks if they lose concentration.</li> </ul>   |
| <b>Make sure workloads are manageable</b>   | <ul style="list-style-type: none"> <li>– Set reasonable timeframes. Take into account workflow changes due to factors such as machinery breakdowns, unplanned absences, or resignations.</li> <li>– Do not let production pressure affect decisions.</li> </ul>  |
| <b>Provide workers with training and information on fatigue management so they can self-manage outside of work hours</b>  | <ul style="list-style-type: none"> <li>– Train workers:               <ul style="list-style-type: none"> <li>- to recognise the signs and symptoms of fatigue</li> <li>- how to avoid fatigue</li> <li>- how to make sure they are well-rested and ready for work at the beginning of their shift.</li> </ul> </li> </ul>  |
| <b>Provide a process for workers to report fatigue-related issues to management</b>   | <ul style="list-style-type: none"> <li>– Encourage workers to:               <ul style="list-style-type: none"> <li>- communicate with their manager if they start showing signs and symptoms of fatigue</li> <li>- report fatigue-related incidents.</li> </ul> </li> </ul>   |
| <b>Develop a fatigue management plan</b>  | <ul style="list-style-type: none"> <li>– With workers, develop a fatigue management plan that outlines the actions you will take to minimise the risk of fatigue (see Section 3.3).</li> </ul>   |
| <b>Use technology to monitor for fatigue</b>  | <ul style="list-style-type: none"> <li>– In consultation with your workers, consider wearable devices and systems that monitor and alert when fatigue is detected.</li> </ul>  |

**TABLE 3:** Possible control measures for fatigue

3.5.21 For more information, see [Resources webpage](#)

## Mental harm

### HOW CAN MENTAL HEALTH BE HARMED?

- 3.5.22 Harm to mental health may be immediate or long-term. It can come from a single event or repeated exposure.
- 3.5.23 Harm to mental health can decrease workers' mental wellbeing resulting in, for example, increased stress, reduced work performance and increased risk of self-harm and suicide.

### WHAT ARE RISK FACTORS FOR MENTAL HARM AND POSSIBLE CONTROL MEASURES?



- 3.5.24 You **must** manage risks to your workers' mental health as well as risks to their physical health and safety.
- 3.5.25 Many potential risks to worker mental health can be minimised by PCBUs working together at the planning and design stages of work.
- 3.5.26 Table 4 shows causes and possible control measures.

| CAUSE OF MENTAL HEALTH HARM  | POSSIBLE CONTROL MEASURES INCLUDE:   |
|--|--|
| <ul style="list-style-type: none"> <li>- conflicting demands</li> <li>- repetitive tasks</li> <li>- unreasonable deadlines</li> <li>- shift work, night work, working away from home</li> <li>- long periods of remote or isolated work.</li> </ul>  | <ul style="list-style-type: none"> <li>- Provide workers the resources they need to do the job properly and safely.</li> <li>- Set reasonable deadlines.</li> <li>- Design shifts to allow for adequate rest and notify workers of changes in advance (see Section 3.5).</li> <li>- Clarify roles so everyone understands their responsibilities.</li> </ul>   |
| <ul style="list-style-type: none"> <li>- bullying, harassment, poor interpersonal relationships at a worksite (this risk can increase when there are multiple PCBUs working at a site)</li> <li>- lack of supervision or support, or conflicting directions (especially when there are multiple PCBUs and it is unclear who controls the worksite).</li> </ul> | <ul style="list-style-type: none"> <li>- Create a positive work environment where workers are encouraged and supported. Promote workplace dignity, respect, and the upholding of a person's mana (status).</li> <li>- Have clear policies on stress, bullying and violence, how workers raise concerns, and how bad behaviour will be responded to.</li> <li>- Make sure site managers/team leaders are accessible and available to workers.</li> <li>- Have a clear process to raise issues with other contractors, subcontractors, or co-workers.</li> <li>- Where possible, be aware of personal circumstances that affect your workers and provide support as appropriate. Allow flexibility or time off where needed.</li> </ul>  |
| <ul style="list-style-type: none"> <li>- trauma (such as witnessing injuries and death).</li> </ul>  | <ul style="list-style-type: none"> <li>- Provide incident response training for all workers on:               <ul style="list-style-type: none"> <li>- what to do in emergency or trauma situations</li> <li>- how to deal with the emotional aftermath of witnessing traumatic situations</li> <li>- where and how they can seek help for themselves if needed.</li> </ul> </li> <li>- Minimise exposure to traumatic events:               <ul style="list-style-type: none"> <li>- limit the number of people who witness the scene. Keep workers that are not directly involved away</li> <li>- identify the roles and responsibilities of those who will step up if a situation occurs</li> <li>- develop a trauma response plan that covers these situations and how they will be handled.</li> </ul> </li> <li>- Make sure workers who have witnessed injuries and death are supported:               <ul style="list-style-type: none"> <li>- make sure workers (including managers) know where they can get extra support from an appropriately qualified person. Where reasonably practicable, allow for workers to access support services during paid work time. Especially if the need for help has been triggered by work factors</li> <li>- consider the cultural needs of your workers. For example, workers may wish to have a hui lifted at the site of a fatality before feeling spiritually safe to continue work at that site.</li> </ul> </li> </ul> |

**TABLE 4:** Cause of mental health harm and possible control measures

- 3.5.27 For more information, see [Resources webpage](#)

## Noise


### HOW CAN NOISE BE HARMFUL?

- 3.5.28 Noise is a common hazard on forestry sites. The biggest noise risks come from chainsaws and mobile plant.
- 3.5.29 Noise is considered hazardous when it reaches 85 decibels (dBA) or more. If people have to raise their voices or shout to be heard in a conversation, then the noise level may be too high.
- 3.5.30 Working in or near machinery can expose workers to continual or excessive noise. If the noise levels are too high, or prolonged, they can lead to hearing loss.
- 3.5.31 Noise induced hearing loss is permanent. It can have a significant impact on a worker's life. Loud noise can also lead to tinnitus – a persistent ringing or buzzing in the ears.

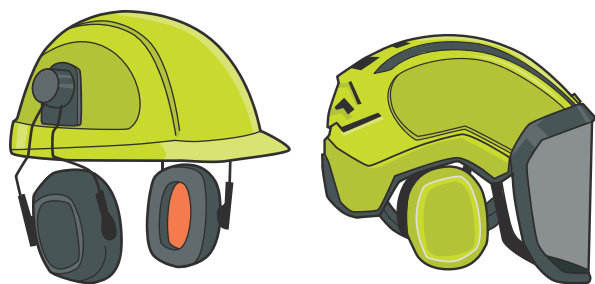


- 3.5.32 You **must**, so far as is reasonably practicable, make sure that workers are not exposed to noise levels that are:
- equivalent to 85 decibels averaged over 8 hours, or
  - a peak noise level over 140 decibels.
- 3.5.33 This always applies, whether or not your workers are wearing hearing protection.

### WHAT ARE POSSIBLE CONTROL MEASURES

| CONTROL MEASURE   | EXAMPLES  |
|---|---|
| Eliminate the source of the noise   | <ul style="list-style-type: none"> <li>– Change work processes to eliminate hazardous noise (for example, stop using a noisy machine).</li> </ul>   |
| Minimise exposure of workers to excessive noise   | <ul style="list-style-type: none"> <li>– Replace noisy plant, equipment, and vehicles with quieter plant, equipment, and vehicles.</li> <li>– Fit silencers (such as mufflers or enclosures) on noisy plant.</li> <li>– Enclose engines (insulation) and heavy equipment workstations to contain the noise.</li> <li>– Sound-proof cabins.</li> <li>– Make sure workers keep doors and windows closed while working.</li> <li>– Keep workers out of high noise areas if they do not need to be there.</li> <li>– Reduce exposure time for workers operating noisy equipment.</li> <li>– Make sure plant is well maintained to reduce noise from friction, vibrating surfaces, mechanical impacts, high velocity air flow or liquid flow, and fan blades.</li> </ul> |
|  <b>Provide hearing protection for workers to use (Grade 5)</b><br>Only rely on hearing protection when you have taken all other reasonably practicable steps to minimise exposure to noise. | <ul style="list-style-type: none"> <li>– Figure 6 shows examples of hearing protection.</li> <li>– Section 10 explains the requirements you <b>must</b> meet if you are using PPE to minimise risks. Appendix 7 contains relevant standards for PPE. Look for the mark/stamp on the PPE to check it is compliant with the relevant standard.</li> </ul>   |

**TABLE 5:** Possible control measures for noise



**FIGURE 5:**  
Examples of  
hearing protection

## What about exposure monitoring and health monitoring?

- 3.5.34 Exposure monitoring checks the amount of noise your workers are exposed to. It can be used to inform you:
- if control measures are needed
  - what level of hearing protection is required
  - whether existing control measures are being effective at minimising the risk.
- 3.5.35 Consider including health monitoring (hearing tests to check for hearing loss) into your health monitoring programme.
- 3.5.36 For more information, see [Resources webpage](#)

## Vibration

### WHAT IS EXCESSIVE VIBRATION AND HOW CAN IT HARM?

- 3.5.37 Exposure to excessive vibration can cause permanent and disabling damage to forestry workers.
- 3.5.38 Forestry workers can be exposed to harmful levels of vibration through various sources. For example, from:
- spending long periods of time sitting on or operating mobile plant, vehicles, or machinery that vibrates
  - using tools or machinery that vibrate for long periods of time.
  - working in cold conditions can increase the harmful effects of vibration on the body.
- 3.5.39 There are two main types of vibration that can harm workers - whole body vibration and hand-arm vibration (Figure 6).

#### Whole body vibration


- occurs when vibration is passed through the body from a surface where a worker sits or stands on
- occurs most often in workers driving or operating machinery or other vehicles over rough or uneven surface
- can affect the body in several ways and can contribute to several health disorders.

#### Hand-arm vibration

- occurs when vibration is passed through the hands and arms, usually from hands or power tools
- workers can develop Hand-Arm Vibration Syndrome (HAVS), Carpal Tunnel Syndrome (CTS), and other musculoskeletal conditions if they regularly use hand-held power tools and machines, especially for long periods of time.

**FIGURE 6:** Whole body vibration and hand-arm vibration

## WHAT ARE POSSIBLE CONTROL MEASURES

| CONTROL MEASURE   | EXAMPLES  |
|---|---|
| Eliminate the source of the vibration   | <ul style="list-style-type: none"> <li>- Use tools or machines operated by remote control or use mobile plant-mounted tools rather than hand tools.</li> </ul>  |
| Minimise exposure of workers to excessive vibration   | <ul style="list-style-type: none"> <li>- Use power tools and plant that produce less noise and vibration.</li> <li>- Use methods of work that produce less vibration (for example, use hydraulic rather than compressed air tools).</li> <li>- Isolate vibrating machinery, mobile plant, or vehicles from the operator by providing fully independent seating.</li> <li>- Use mats or insoles to reduce foot-transmitted vibration.</li> <li>- Choose power tools and plant that direct cold air (for example, from the tool's exhaust) away from hands.</li> <li>- Train workers on choosing the right tool or plant for the job (one which has the appropriate size, power, and capacity for the task and work conditions).</li> <li>- Make sure workers know how to safely use the plant or tools in a way that minimises the levels of vibration.</li> <li>- Maintain power tools and machines regularly. Repair faults as soon as possible. Make sure suspension systems are well maintained.</li> <li>- Maintain vehicle seats and seat suspension.</li> <li>- Limit the time workers are exposed to vibration, especially while working in cold conditions (for example, job rotation, lots of breaks).</li> <li>- Discuss with workers how exposure to vibration can harm them and train them how to identify the symptoms of HAVS and CTS. Tell workers how they can report their symptoms</li> <li>- Reduce exposure to working in the cold, providing warm/hot drinks. Have workers take breaks in a warm place.</li> </ul> |
|  <b>Provide PPE for workers to use</b><br>Only rely on PPE when you have taken all other reasonably practicable steps to minimise exposure to vibration. | <ul style="list-style-type: none"> <li>- Section 10 explains the requirements you <b>must</b> meet if you are using PPE to minimise risks. Appendix 7 contains relevant standards for PPE. Look for the mark/stamp on the PPE to check it is compliant with the relevant standard.</li> <li>- Use thermal PPE to keep workers warm and dry (for example, thermal non-slip gloves that are not too thick).</li> </ul>  |

**TABLE 6:** Possible control measures for vibration

### What about exposure monitoring and health monitoring?

3.5.40 Exposure monitoring checks the amount of vibration your workers are exposed to. It can be used to inform you:

- if control measures are needed
- whether existing control measures are effective at minimising the risk.

3.5.41 Consider including health monitoring (that looks for signs and symptoms of vibration-related illness or injury) into your health monitoring programme:

- For hand-arm vibration, health monitoring checks for nerve, muscle or circulation damage in hands, wrists and arms.
- For whole body vibration, health monitoring checks for lower back, neck or shoulder pain or other signs of discomfort.

3.5.42 For more information, see [Resources webpage](#)

## Extreme temperatures

### HOW CAN WORKING IN EXTREME TEMPERATURES HARM WORKERS AND WHEN CAN IT HAPPEN?

3.5.43 The outdoor nature of forestry means forestry workers are particularly vulnerable to the effects of working in extreme temperatures.

3.5.44 Exposure to extreme hot or cold temperatures can cause serious harm to forestry workers.

#### 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 high humidity, or when exposed to radiant heat.
- High body temperatures that can cause harm to workers can occur:
  - in the summer months
  - in humid environments
  - during highly physical activities when warm or heavy clothing is being worn, including personal protective equipment (PPE)
  - when working near a source of radiant heat such as machinery or generators.

#### Working in extremely cold environments can put workers' bodies under stress


- If their bodies have to work too hard to stay warm, this can cause cold-related illness and injuries which can lead to permanent tissue damage and death.
- Low temperatures can occur:
  - in wet conditions (being damp or wet can significantly increase the rate a body cools)
  - winter conditions (frost or snow)
  - at night (outside temperatures drop even further at night)
  - in windy conditions (high winds can amplify the effects of cold)
  - in alpine regions
  - in open vehicles.

**FIGURE 7:** Causes of heat and cold-related illness and injury

### WHAT ARE POSSIBLE CONTROL MEASURES?

3.5.45 Table 7 shows possible control measures for work at extreme temperatures.

| CONTROL MEASURE   | EXAMPLES OF CONTROL MEASURES FOR EXTREME HEAT   | EXAMPLES OF CONTROL MEASURES FOR EXTREME COLD   |
|---|---|---|
| Minimise sources of heat                                      | <ul style="list-style-type: none"> <li>- Replace heat-producing plant with plant that produces less heat.</li> <li>- Insulate heat-producing plant or use heat screens to reduce radiant heat.</li> </ul>   |   |
| Use plant appropriate for the conditions                      | <ul style="list-style-type: none"> <li>- Make sure vehicle and mobile plant cabs have air conditioning.</li> </ul>  | <ul style="list-style-type: none"> <li>- Have plant that is designed with built-in protection against cold injuries (such as thermally-insulated handles and heated operator cabs).</li> </ul>  |
| Schedule the work to minimise exposure to extreme temperature | <ul style="list-style-type: none"> <li>- Where possible, schedule work for cooler times of the day or year.</li> <li>- Frequently rotate workers on tasks. Use mechanical aids to reduce worker effort.</li> <li>- Allow extra rest breaks and provide rest facilities away from the heat and sun.</li> <li>- Encourage self-paced work where possible.</li> <li>- Make sure workers are acclimatised to the conditions.</li> <li>- Provide cool drinks.</li> <li>- Avoid putting workers with pre-existing medical conditions that may make them susceptible to heat stress in jobs where they will be exposed to extreme heat.</li> </ul> | <ul style="list-style-type: none"> <li>- Where possible, schedule work for warmer times of the day or year.</li> <li>- Allow extra breaks for warming up or rotating workers more often when they are exposed to cold conditions. Provide a shelter away from wind and rain during breaks.</li> <li>- Encourage self-paced work where possible.</li> <li>- Make sure workers are acclimatised to the conditions.</li> <li>- Provide warm drinks.</li> <li>- Avoid putting workers with pre-existing medical conditions that may make them susceptible to cold stress in jobs where they will be exposed to extreme cold.</li> </ul> |

| CONTROL MEASURE  | EXAMPLES OF CONTROL MEASURES FOR EXTREME HEAT  | EXAMPLES OF CONTROL MEASURES FOR EXTREME COLD   |
|--|--|---|
| <b>Provide training to workers</b>   | <ul style="list-style-type: none"> <li>- Train workers on how to identify signs and symptoms of heat-related illness in themselves and their workmates.</li> <li>- Train workers on the importance of staying hydrated. Encourage them to drink water at the beginning and end of the day.</li> </ul>  | <ul style="list-style-type: none"> <li>- Train workers on how to identify signs and symptoms of cold-related illness in themselves and their workmates.</li> </ul>  |
|  <b>Provide PPE to workers</b><br>Only rely on PPE when you have taken all other reasonably practicable steps to minimise the risk. Section 10 explains the requirements you <b>must</b> meet if you are using PPE to minimise risks. Appendix 7 contains relevant standards for PPE. Look for the mark/stamp on the PPE to check it is compliant with the relevant standard. | <ul style="list-style-type: none"> <li>- Provide PPE specialised protective clothing that shields workers from a hot environment. Examples of PPE include:               <ul style="list-style-type: none"> <li>- heat-reflective clothing</li> <li>- face shields</li> <li>- sunhats</li> <li>- heat-resistant footwear.</li> </ul> </li> <li>- Make sure PPE is as light as possible and breathable so workers can sweat freely (without compromising its protective function).</li> </ul> | <ul style="list-style-type: none"> <li>- Provide specialised protective clothing that protects from cold, wind, and water.</li> <li>- PPE may include thermal and weather-proof clothing, that protects workers from cold, wind, and water.</li> <li>- Make sure clothing is made of materials that provide good insulation and waterproofing (where required) but are still breathable.</li> <li>- Encourage workers to wear layered clothing to maximise insulation and allow them to add or remove layers to keep comfortable when changing environments.</li> </ul> |

**TABLE 7:** Possible control measures for work at extreme temperatures**Dehydration**

It is important that workers drink water regularly and drink well during the day.

It is recommended:

- workers carry enough water to drink regularly throughout the day
- workers drink enough water that they have to urinate regularly during the workday
- workers avoid drinking energy drinks or soft drinks and cordials during the workday
- workers drink plenty of water at night to recharge the body for the next day
- for machine operators, make sure the air conditioning (if it is fitted) in the cab is working effectively. If it is not working, tell workers to let the foreman know so it can be fixed.

**WHAT ABOUT EXPOSURE MONITORING AND HEALTH MONITORING?**

3.5.46 Exposure monitoring checks the thermal conditions your workers are exposed to. It can be used to inform you:

- if control measures are needed
- whether existing control measures are effective at minimising the risk.

3.5.47 Consider including health monitoring (that looks for signs and symptoms of heat or cold-related illness or injury) into your health monitoring programme.

3.5.48 For more information, see [Resources webpage](#)

## UV/sun exposure


### HOW CAN UV/SUN EXPOSURE HARM WORKERS?

- 3.5.49 Exposure to ultraviolet (UV) radiation from the sun can increase the chance of workers developing serious health conditions. UV radiation can harm a worker in several ways, including skin cancer and eye damage (such as cataracts). All skin types can be damaged by UV rays.
- 3.5.50 The total amount of UV radiation that a worker may be exposed to when working outside depends on the factors described in Table 8.

| FACTORS AFFECTING UV EXPOSURE        | THINGS TO CONSIDER   |
|--------------------------------------|--|
| The time of day and the time of year | UV levels are highest when the sun is high and during summer when the sun is in the sky for longer   |
| The weather conditions               | UV levels are generally higher on a cloudless day. However, UV radiation can pass through cloud cover and reach harmful levels even on a cloudy day.                     |
| Work surfaces                        | Workers can be exposed to UV radiation as it reflects off lighter colour surfaces. The lighter the colour of the surface, the more UV radiation will be reflected.       |
| Medication and chemical exposure     | Certain medication and chemical exposures can increase the chance of UV damage because they cause photosensitivity, which makes a person more sensitive to UV radiation. |

**TABLE 8:**  
Factors that can affect UV exposure

### WHAT ARE POSSIBLE CONTROL MEASURES

| CONTROL MEASURE   | EXAMPLES   |
|---|--|
| Provide shelter   | <ul style="list-style-type: none"> <li>- Provide shade during breaks.</li> </ul>   |
| Schedule the work to minimise exposure to UV  | <ul style="list-style-type: none"> <li>- Rotate workers on jobs where there is the most UV exposure.</li> </ul>  |
| Provide training to workers   | <ul style="list-style-type: none"> <li>- Train workers on the risks of UV exposure, for example:               <ul style="list-style-type: none"> <li>- how they can keep themselves protected</li> <li>- what warning signs of UV damage to look out for</li> <li>- what to do if they suspect sun damage.</li> </ul> </li> </ul>   |
|  <b>Provide PPE to workers</b><br>Only rely on PPE when you have taken all other reasonably practicable steps to minimise the risk.<br>Section 10 explains the requirements you <b>must</b> meet if you are using PPE to minimise risks. Appendix 7 contains relevant standards for PPE. Look for the mark/stamp on the PPE to check it is compliant with the relevant standard. | <ul style="list-style-type: none"> <li>- PPE for UV radiation may include:               <ul style="list-style-type: none"> <li>- sunscreen and lip protection</li> <li>- breathable protective clothing</li> <li>- protective hats or sun protection attached to helmets (Figure 9)</li> <li>- protective eyewear or sunglasses.</li> </ul> </li> </ul> <p>When considering what PPE options are appropriate, check that the proposed PPE is not going to introduce new risks. Examples include:</p> <ul style="list-style-type: none"> <li>- workers overheating if the material is too heavy or not breathable</li> <li>- PPE equipment or clothing getting caught in machinery if it is too loose</li> <li>- wide brimmed hats or dark glasses limiting vision.</li> </ul> |

**TABLE 9:** Possible control measures for UV radiation





**FIGURE 8:**  
Example of sun protection  
that can be fitted to hard  
hats and helmets

### WHAT ABOUT HEALTH MONITORING?

- 3.5.51 Consider including a system that checks workers for the risks from sun exposure. This could include:
- encouraging workers to regularly check their own skin. Encourage workers to get an abnormal mole, freckle or spot checked by their doctor (consider funding this expense)
  - providing annual skin checks by a doctor or nurse trained in skin cancer detection
  - offering yearly vision checks
  - encouraging workers to report incidents of sun exposure and sunburn.

3.5.52 For more information, see [Resources webpage](#)

### Harmful substances

#### WHAT KINDS OF HARMFUL SUBSTANCES COULD WORKERS BE EXPOSED TO?

- 3.5.53 Exposure to harmful substances can cause serious harm to forestry workers. Harmful substances include:
- substances classed as 'hazardous substances' (for example, flammable, explosive and toxic substances such as fuels, oils and hydraulic fluid, weed spraying chemicals (herbicides), explosives)
  - other substances such as the lithium inside batteries or diesel exhaust.

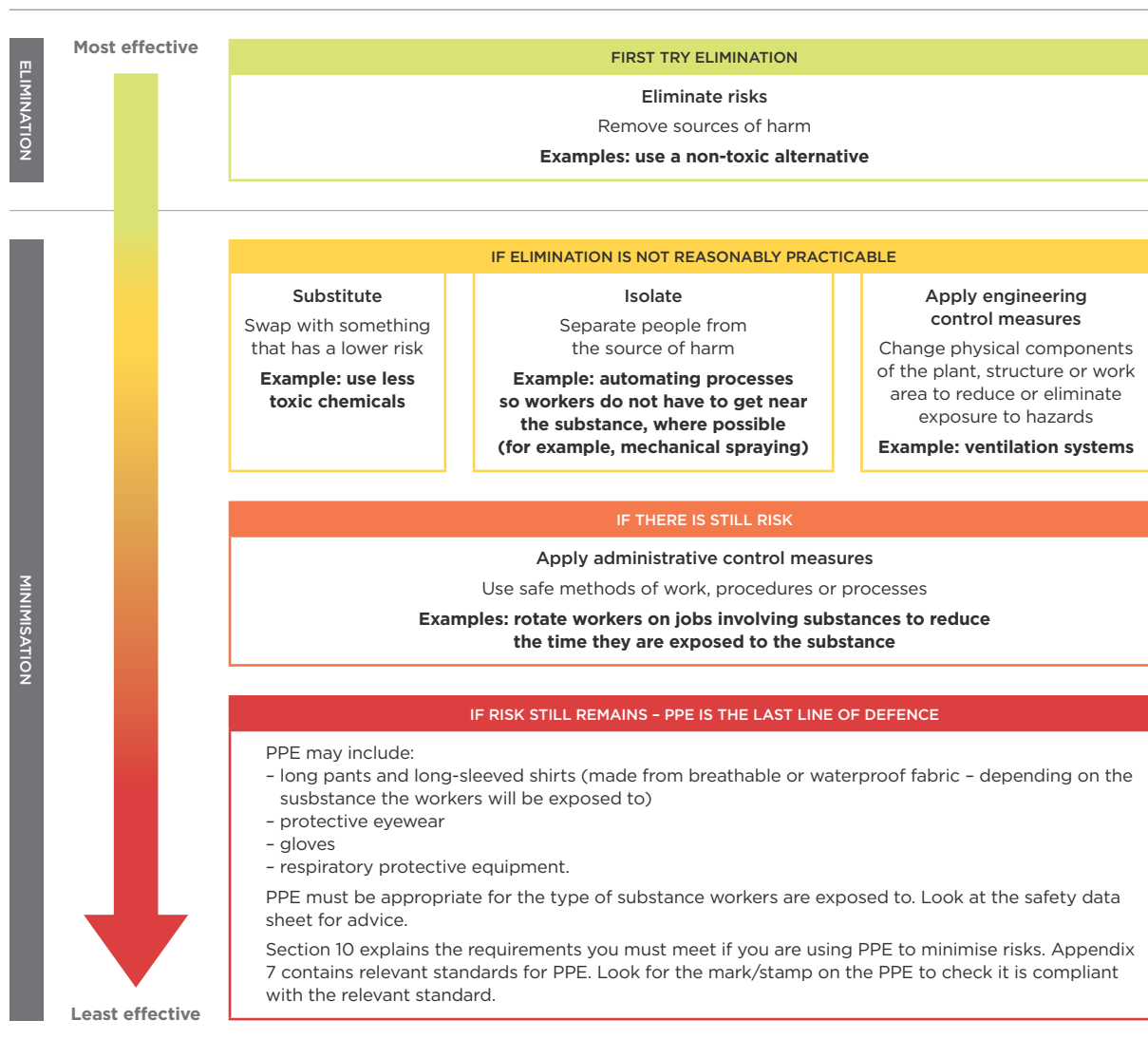


- 3.5.54 For those harmful substances that are classed as 'hazardous substances', you **must** follow the Hazardous Substances Regulations that set out the rules for hazardous substances including for transporting, storage, handling and training.

3.5.55 For more information, see [Resources webpage](#)

## WHAT RISK MANAGEMENT PROCESS MUST YOU FOLLOW?

3.5.56 You must follow this process when managing risk associated with substances hazardous to health



**FIGURE 9:** Approach to manage risk from harmful substances

## WHAT ABOUT EXPOSURE MONITORING AND HEALTH MONITORING?

- 3.5.57 You may be required to monitor worker exposure or worker health if your work involves certain harmful substances. For more information about what harmful substances this applies to, see [Resources webpage](#)
- 3.5.58 Exposure monitoring to check the amounts of harmful substances in the work environment can help to inform you whether the control measures are being effective at minimising the risk.
- 3.5.59 Any exposure monitoring and health monitoring recommended will depend upon the harmful substance workers are being exposed to.

3.5.60 For example:

- for airborne particulates (for example, wood dust, welding fumes), exposure monitoring could involve measuring the amount of the substance in the air. Health monitoring could involve checking for loss of lung function.
- for substances that can irritate the skin (for example, wood dust), exposure monitoring could involve measuring the amount of substance on the skin. Health monitoring could involve checking for skin inflammation/dermatitis.

3.5.61 For more information, see [Resources webpage](#)

## Hazardous manual tasks

### WHAT ARE MANUAL TASK RISKS AND WHAT HARM CAN OCCUR?

3.5.62 Some manual tasks may cause musculoskeletal disorders (hazardous manual tasks). This includes muscle sprains, back and joint injuries.


Examples of manual tasks in forestry include:

- lifting gear in or out the back of a truck
- carrying heavy loads
- dragging gear, chains, wires or vegetation
- operating machinery
- tree planting.

### WHAT ARE POSSIBLE CONTROL MEASURES?

3.5.63 Table 10 shows possible control measures.

| CONTROL MEASURE   | EXAMPLES  |
|---|---|
| <b>Eliminate hazardous manual tasks</b>   | <ul style="list-style-type: none"> <li>- Consider using alternative work methods that do not require manual tasks.</li> </ul>   |
| <b>Buy equipment that meets ergonomic standards</b>   | <ul style="list-style-type: none"> <li>- Consider:               <ul style="list-style-type: none"> <li>- cab access</li> <li>- cab visibility</li> <li>- the ergonomics of the operator's seat and controls</li> <li>- working posture.</li> </ul> </li> </ul>   |
| <b>Adjust equipment to the user</b>   | <ul style="list-style-type: none"> <li>- Adjust seating and controls for each operator before they start operating the machine.</li> </ul>  |
| <b>Climb in or out of machine or mobile plant carefully</b>   | <ul style="list-style-type: none"> <li>- Keep handrails, steps and non-slip surfaces maintained.</li> <li>- Keep steps and the cabin clean and free of mud and debris.</li> <li>- Keep three points of contact when climbing in or out of the machine.</li> </ul> |
| <b>Care when hooking and unhooking logs</b>   | <ul style="list-style-type: none"> <li>- Where possible use a grapple.</li> <li>- When the breaker-out is pulling out chokers from a motorised carriage, face the carriage directly to minimise twisting.</li> </ul>  |
| <b>Choose tools and machinery with built-in controls to reduce physical impacts on the operator</b> | <ul style="list-style-type: none"> <li>- Select equipment that is easy to handle.</li> <li>- Make sure that the right tool is available and is used for the right job.</li> <li>- Make sure tools and machinery are regularly maintained.</li> </ul>              |
| <b>Limit the amount of heavy lifting required by workers</b>  | <ul style="list-style-type: none"> <li>- Use mechanical lifters where possible.</li> <li>- Replace heavy items with lighter or smaller items.</li> </ul>  |
| <b>Move workers between tasks to vary the physical demands</b>                                      | <ul style="list-style-type: none"> <li>- Move between tasks that involve sedentary work (for example, machine operators) and movement.</li> <li>- Plan tasks that involve walking.</li> <li>- Plan light work after repetitive physical work.</li> </ul>          |

| CONTROL MEASURE   | EXAMPLES  |
|---|---|
| Schedule regular breaks/<br>microbreaks   | <ul style="list-style-type: none"> <li>- Have operators rest muscles frequently with micro-pauses while working the machine.</li> <li>- Have operators take regular breaks and stretch their muscles and joints outside of the machine.</li> </ul>  |
|  <b>PPE</b><br>Only rely on PPE when you have taken all other reasonably practicable steps to minimise the risk. | <ul style="list-style-type: none"> <li>- Make sure workers wear gloves and safety boots to protect against cuts and crushed toes.</li> <li>- Section 10 explains the requirements you <b>must</b> meet if you are using PPE to minimise risks. Appendix 7 contains relevant standards for PPE. Look for the mark/stamp on the PPE to check it is compliant with the relevant standard.</li> </ul> |

**TABLE 10:** Possible control measures for manual risks

### WHAT ABOUT HEALTH MONITORING?

3.5.64 Consider including health monitoring (checking workers for signs of discomfort, pain, or injury to muscles, ligaments, bones, tendons, blood vessels, and nerves) into your health monitoring programme.

3.5.65 For more information, see [Resources webpage](#)

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## 4.0

# What is expected of principals, contractors, subcontractors and other PCBU's?

### IN THIS SECTION:

- 4.1** What is expected of principals?
- 4.2** What is expected of contractors?
- 4.3** What is expected of subcontractors?
- 4.4** Other PCBU's in the contracting chain
- 4.5** What is expected of landowners?

## 4.1 What is expected of principals?

### Duties of principals

4.1.1 Principals (contracting PCBUs) engage other PCBUs to do work for them (other than as an employee, apprentice, trainee or volunteer).



4.1.2 As a PCBU, you **must**:

- ensure, so far as is reasonably practicable, the health and safety of your worker(s) and other workers you influence or direct
- ensure, so far as is reasonably practicable, that the health and safety of other persons is not put at risk from the work that you do
- make sure, so far as is reasonably practicable, the provision and maintenance of safe plant and structures and the safe use, handling, and storage of plant, substances and structures
- consult, cooperate and coordinate with other PCBUs in the contracting chain to manage shared duties.

4.1.3 Section 3.3 provides guidance to help PCBUs work out the extent of each PCBU's responsibility to carry out their overlapping duties.



### DUTY OF A PCBU WHO MANAGES OR CONTROLS A WORKPLACE

4.1.4 A PCBU who manages or controls a workplace **must** ensure that, so far as is reasonably practicable, the workplace, the means of entering and exiting the workplace, and anything else arising from the workplace are without health and safety risks to any person.

### DUTY OF A PCBU WHO MANAGES OR CONTROLS PLANT (FOR EXAMPLE, MACHINERY, VEHICLES, TOOLS) AT A WORKPLACE

4.1.5 A PCBU who manages or controls plant at a workplace **must**, so far as is reasonably practicable, ensure that the plant is without risks to the health and safety of any person.

### What is expected of principals

4.1.6 The following sections cover some general expectations of principals. Expectations may differ depending upon the nature of the contracting. For example, a one-off job versus a long-term contract.

4.1.7 Principals are expected to:

- engage competent, safe contractors taking into consideration the type of work to be carried out and the equipment needed to ensure healthy and safe work
- give contractors all the information they need to keep them and their workers healthy and safe while working
- monitor the contractors' health and safety performance
- take the lead in encouraging good health and safety practices throughout the contracting chain.

## Choosing a capable contractor

- 4.1.8 When choosing a contractor, consider their health and safety record as well as their ability and capacity to do the work.
- 4.1.9 Consider:
- the contractor's incident and hazard and risk reporting procedures
  - doing an assessment of their health and safety performance, including:
    - any work injuries or near misses over the past five years
    - information on prosecutions they have undergone
    - their finances, capacity and equipment to do the work
    - if they have a relevant industry certification (such as Safetree certification).
  - the contractor's ability to provide competent workers and equipment needed for healthy and safe work
  - whether the contractor has effective worker engagement. For example, do they have worker representation and are there opportunities for workers to have their say?

Look for positive signs, for example:

- evidence of proactive steps they have taken to improve health and safety
- evidence of ongoing improvement in health and safety
- evidence that they have good worker engagement and relationships.

## Check contractors have a documented health and safety system

- 4.1.10 Confirm that the contractor has a documented health and safety system. This could include:
- a health and safety policy
  - a drug and alcohol policy, including testing
  - training and supervision
  - health and safety meetings
  - hazard identification and risk assessment and management
  - auditing and inspection programmes
  - incident reporting and investigation
  - emergency procedures.
- 4.1.11 However, further information may be needed for more complex work. See Sections 4.2.8–4.2.9 for more information.

## What to cover in contracts?

- 4.1.12 Make sure your contracts and agreements clearly define responsibilities and duties including subcontracting processes to ensure health and safety requirements are appropriately addressed within the contracting chain.
- 4.1.13 Work with the contractors to identify any work or workplace hazards and risks and any other health and safety requirements.
- 4.1.14 Once the scope of the work has been agreed, provide a job prescription. This might take the form of a planting or spraying prescription, a job specification, or a harvesting or logging plan.

## Planning

- 4.1.15 The planning stage of any operation is a good chance to identify hazards and eliminate risks at an early stage.

### DEVELOPING HARVEST PLANS

- 4.1.16 This works best when you include, if possible, earthworks and roading contractors, harvesting contractors and log truck operators.
- 4.1.17 Consulting and coordinating with the relevant parties can help with:
- deciding on the best extraction method
  - the design of the roading network
  - the position, size and design of the skid sites
  - the elimination of risk before work starts.
- 4.1.18 Include information from the pre-harvest inventory and constraints assessments in the harvest plan. The harvest plan should include recent topographical maps of the site showing:
- location of the site-specific constraints and hazards
  - access points and routes (including shared access ways)
  - proposed road system
  - location of skid site
  - maximum and average haul distances (for log extraction)
  - overhead power lines
  - underground utilities
  - areas of steep terrain, cliffs or quarries
  - areas with windthrow
  - boundaries onto neighbouring properties
  - rivers and creeks – water management needs
  - wāhi tapu and other areas of historical or cultural significance
  - areas with poor ground conditions (erosion-prone, unstable or wet soil)
  - areas of public access such as roads or walking and mountain biking tracks.
- 4.1.19 The harvest plan should also provide guidance on:
- the equipment contractors need to complete the work
  - the tree extraction method
  - reporting expectations
  - electrical hazard management
  - how the risks from any shared access ways will be managed.

## 4.2 What is expected of contractors?

### What are the duties of contractors?

- 4.2.1 A contractor is a PCBU that has been engaged to do work by another PCBU (other than as an employee, apprentice, trainee or volunteer):
- If you (the contractor) have subcontractors, you are classed as a principal for the purposes of this guidance.
  - If you are a self-employed contractor/sole trader/lone operator, you are classed a PCBU and a worker.
- 4.2.2 Contractors are responsible for planning and carrying out the work they are engaged to do.





4.2.3 As a PCBU, you **must**:

- ensure, so far as is reasonably practicable, the health and safety of your worker(s) and other workers you influence or direct
- ensure, so far as is reasonably practicable that the health and safety of other persons is not put at risk from the work that you do
- make sure, so far as is reasonably practicable, the provision and maintenance of safe plant and structures and the safe use, handling, and storage of plant, substances and structures
- consult, cooperate and coordinate with other PCBU's in the contracting chain to manage shared duties.

4.2.4 Section 3.3 provides guidance to help PCBU's work out the extent of each PCBU's responsibility to carry out their shared duties.



**DUTY OF A PCBU WHO MANAGES OR CONTROLS A WORKPLACE**

4.2.5 A PCBU who manages or controls a workplace **must** ensure that, so far as is reasonably practicable, the workplace, the means of entering and exiting the workplace, and anything else arising from the workplace are without health and safety risks to any person.

**DUTY OF A PCBU WHO MANAGES OR CONTROLS PLANT AT A WORKPLACE**

4.2.6 A PCBU who manages or controls plant at a workplace **must**, so far as is reasonably practicable, ensure that the plant is without risks to the health and safety of any person.

4.2.7 The following sections cover some general expectations of contractors. Expectations may differ depending upon the nature of the contracting, for example, a one-off job versus a long-term contract.

**Have a health and safety management system that is suitable for the size of the business and level of risk**

4.2.8 For guidance on a minimum health and safety management system, see Section 4.1.10.

4.2.9 For more complex work, further information may be needed. For example, contractors that manage a worksite could have a system that covers:

- clearly defined roles and responsibilities
- regular work hazard and risk inspections by workers and supervisors
- the process to check that the PPE used onsite is up to standard
- first aid available on site
- plant and equipment inspection and maintenance
- managing sub-contractors
- managing visitors
- who will be responsible for keeping in touch with other parties outside the worksite that are affected by the work (for example, neighbouring properties), and managing any conflicts that arise
- worker competency assessments and training plans
- return-to-work policies and assessments
- dynamic risk management training

- stop-work processes for weather extremes and unusual conditions
- management of work around power lines
- vehicles
- transport and mobile plant
- working at height
- landing size and capacity.

### Having competent people

2.10 A competent person is someone who can consistently demonstrate the skill and knowledge derived from experience and/or training for the type of work the person is tasked to do.



4.2.11 Section 11 explains the requirements you **must** meet for training, information, instruction and supervision.

### Site supervision (if relevant)

4.2.12 Have a competent person in charge of the worksite.

4.2.13 Their role involves:

- effectively supervising and controlling the work
- understanding and managing the health and safety system (including emergency procedures).

## 4.3 What is expected of subcontractors?

### What are the duties of subcontractors?

4.3.1 Subcontractors are PCBUs hired by a contractor to work or provide services on their behalf. Sometimes subcontractors are referred to as suppliers.

4.3.2 If you are a self-employed contractor/sole trader/lone operator, you are both a PCBU and a worker.



4.3.3 As a PCBU, you **must**:

- ensure, so far as is reasonably practicable, the health and safety of your worker(s) and other workers you influence or direct
- ensure, so far as is reasonably practicable that the health and safety of other persons is not put at risk from the work that you do
- make sure, so far as is reasonably practicable, the provision and maintenance of safe plant and structures and the safe use, handling, and storage of plant, substances and structures
- consult, cooperate and coordinate with other PCBUs in the contracting chain to manage overlapping duties.

4.3.4 Section 3.3 provides guidance to help PCBUs work out the extent of each PCBU's responsibility to carry out their shared duties.

4.3.5 The following sections cover some general expectations of sub-contractors. Expectations may differ depending upon the nature of the contracting. For example, a one-off job versus a long-term contract.

## Work with other PCBUs in the contracting chain

- 4.3.6 Work closely with the contractor to manage risks:
- be involved, where practicable, in any risk management planning
  - alert the contractor when control measures are not adequate, or when new risks arise.

## Be aware of the onsite rules and procedures

- 4.3.7 Be aware of on-site rules and procedures including inductions, toolbox talks, health and safety plans and reporting procedures.

## 4.4 Other PCBUs in the contracting chain

- 4.4.1 There are other PCBUs that may be involved in providing professional services, materials, plant, or people in and around the contracting chain. For example:

- engineers
- suppliers of plant
- labour hire
- plant servicing and repair.

- 4.4.2 They may have the same duties as other PCBUs in the contracting chain.



- 4.4.3 As a PCBU, you **must**:
- ensure, so far as is reasonably practicable, the health and safety of your worker(s) and other workers you influence or direct
  - ensure, so far as is reasonably practicable that the health and safety of other persons is not put at risk from the work that you do.

- 4.4.4 For example, when servicing, repairing or modifying plant including safety equipment.

## Upstream duties

- 4.4.5 PCBUs that have upstream duties are those that:
- design plant, substances, or structures
  - manufacture plant, substances, or structures
  - import plant, substances, or structures
  - supply plant, substances, or structures
  - install, construct or commission plant or structures.



- 4.4.6 These PCBUs **must**, so far as is reasonably practicable, make sure the plant, substances, and structures they design, manufacture, import, supply or install are without health and safety risks when they are used for their intended purpose in a workplace.

- 4.4.7 Upstream businesses are in a strong position to eliminate or minimise risk. They can influence and sometimes eliminate health and safety risks through designing or manufacturing products that are safe for the end user.

- 4.4.8 For specific duties for upstream PCBUs, see Appendix 5.

## 4.5 What is expected of landowners?

You may have duties under HSWA

- 4.5.1 If you own the land and are putting it into forest, you may be a PCBU with duties under HSWA.

Consider engaging a forest manager

- 4.5.2 A forest manager or forestry consultant can plan and coordinate the whole process from site preparation and planting through to the eventual harvest.
- 4.5.3 If you engage a forest manager, engage a reputable company with robust health and safety systems.

If you plan ahead, you can eliminate or, at the least, minimise those risks

- 4.5.4 If you are planting a new forest, many of the risks will not happen until harvest occurs which could be in 20 to 30 years' time.

Know what hazards and physical constraints there are on your land

- 4.5.5 Use aerial photos, farm maps, topographic maps, LIDAR or drone footage. Identify constraints and hazards such as:
- tree damage (for example, wind affected)
  - tracks, roads and bridges
  - overhead power lines
  - drains and culverts
  - underground utilities
  - areas of steep terrain, cliffs, sink holes and drop-offs
  - rivers and creeks (particularly with respect to any downstream uses)
  - flood prone areas
  - erosion-prone or unstable soils
  - areas of public access
  - boundaries onto neighbouring properties.
- 4.5.6 For more information, see [Resources webpage](#)