

Workplace: _____

Hazard location: _____

Risk Assessment

 by _____ date _____

IDENTIFY HAZARD: _____

Any current controls: _____

ASSESS RISK:

Likelihood: (Factual information prompts. OPEEP analysis may assist in sourcing facts – see over).

Consequence: (Consider the *most likely injuries* and/or the *worst case* scenarios) _____

Level of LIKELIHOOD	Extent of CONSEQUENCE				
	No Injury	Minor	Moderate	Major	Catas-trophic
Almost Certain	3	3	4	4	4
Likely	2	3	3	4	4
Possible	1	2	3	4	4
Unlikely	1	1	2	3	4
Rare	1	1	2	3	3

4	Acute risk. <i>Stop work. Act now. Urgent. Take immediate action for the risk.</i>
3	High risk. <i>Urgent attention. Highest management decision required.</i>
2	Moderate risk. <i>Follow any management instructions.</i>
1	Low risk. <i>OK. Monitor & review work; people; process changes; equipment; material.</i>

CONTROL RISKS: (Use the *Hierarchy of Risk Controls* (below) starting at LEVEL 1)

LEVEL 1 - Elimination - _____

LEVEL 2 - Substitution / Isolation / Engineering controls - _____

LEVEL 3 - Administrative controls / PPE - _____

Controls implemented by: _____ Date: _____

REVIEW: Scheduled review date _____

Are controls measures in place?	Yes or No	Comments
Do controls eliminate or reduce the risk?	Eliminate or Reduce	Comments:
Are there any new problems with the risk?	Yes or No	Comments:

Risk Management (Refer to *WHS Act 2011, section 18; WHS Regulation 2011, section 35* and *How to Manage WHS Risk - Code of Practice 2011*):

- (a) Identify hazards
- (b) Assess risks
- (c) Control risks
- (d) Review control measures

OPEEP (may include):

- O** Organisation (training; safety culture; history)
- P** People (witnesses; associated people; experts; functional capabilities; rosters)
- E** Environment (weather; workplace; incident scene)
- E** Equipment (vehicles; plant; tools; infrastructure; PPE)
- P** Procedures (documents; maps; charts; reports; photographs)

Hierarchy of Risk Control - eliminating hazards and minimising exposure to risks
(Refer to *WHS Act 2011, section 17; WHS Regulation 2011, section 36* and *How to Manage WHS Risks - Code of Practice 2011*): **Consideration must be given to all controls in the following order**

- LEVEL 1 - Eliminate** the hazards **MOST EFFECTIVE**
- LEVEL 2 - Substitute** the hazard with something safer (usually a control with chemical use)
 - Isolate** the hazard from people (e.g. barricades)
 - Reduce the risk through **engineering** controls (e.g. guards)
- LEVEL 3 - Reduce exposure to the hazard using administrative actions** (e.g. training)
 - Use Personal Protective Equipment (**PPE**) **LEAST EFFECTIVE**

Reasonably Practicable (Refer to *WHS Act 2011, section 18* for full definition):

Take into account and weigh up all of the following factors to ensure health and safety:

- (a) likelihood of hazard or risk occurring
- (b) degree of harm (consequence) that may result from the hazard or risk
- (c) what the person ought to know about the hazard/risk & ways to eliminate/minimize them
- (d) availability & sustainability of the controls
- (e) after assessing the risk & available controls, if the cost of controls is grossly disproportionate

Duty of Care - Persons Conducting a Business or Undertaking (PCBU)

(Refer to *WHS Act 2011, sections 19 - 26*):

The Duty of Care for a PCBU may include (Refer to *WHS Act 2011, section 19(3)*):

A PCBU **MUST** ensure the following (however duties are not limited by these points):

- (a) Provide & maintain a work environment without risks to healthy & safety
- (b) Provide & maintain safe plant & structures
- (c) Provide & maintain safe systems of work
- (d) Ensure safe use, handling & storage of plant, structures & substances
- (e) Provide adequate facilities & ensure access to those facilities
- (f) Provide information, training, instruction or supervision to protect persons
- (g) Monitor health of workers & conditions at the workplace to prevent illness or injury

Duty of Care – Officer (Refer to *WHS Act 2011, section 27*):

Duty of Care - Workers and Others (Refer to *WHS Act 2011, sections 28 & 29*):

A worker **MUST** comply with (a) to (d) and others **MUST** comply with (a), (b) and (c):

- (a) Take reasonable care of his/her own health & safety
- (b) Take reasonable care that his/her acts or omissions do not adversely affect the health and safety of others
- (c) Comply with reasonable instructions given by the PCBU to allow the person to comply with the Act
- (d) Cooperate with any reasonable policy and procedure relating to health and safety that has been notified to the workers

ACCIDENT / INCIDENT REPORT FORM

<input type="checkbox"/> HAZARD	<input type="checkbox"/> INCIDENT	<input type="checkbox"/> INJURY	<input type="checkbox"/> NEAR MISS	<input type="checkbox"/> REPORT ONLY
---------------------------------	-----------------------------------	---------------------------------	------------------------------------	--------------------------------------

1. DESCRIPTION

NAME OF PERSON MAKING REPORT: _____

DATE OF INCIDENT: _____ TIME _____ am/pm DATE REPORTED: _____ TIME _____ am/pm

INCIDENT LOCATION: _____

NAME OF PERSON/S INVOLVED: _____

WITNESSES: _____

SUPERVISOR: _____ HAS SUPERVISOR BEEN NOTIFIED: Yes No

PCBU NOTIFIED : _____ TIME: _____ am/pm

DESCRIPTION / DIAGRAM: _____

2. INJURY DETAILS (if applicable)

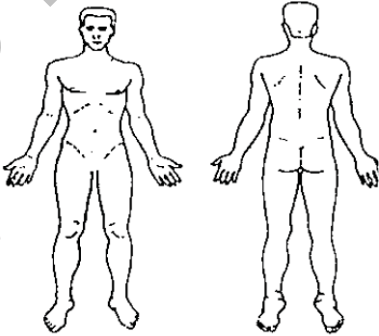
INJURED PERSON: _____

INDICATE INJURY TYPE AND BODY PART ON THE DIAGRAM:

Abrasion Cut Bruise Sprain/Strain Fracture Burn Foreign body

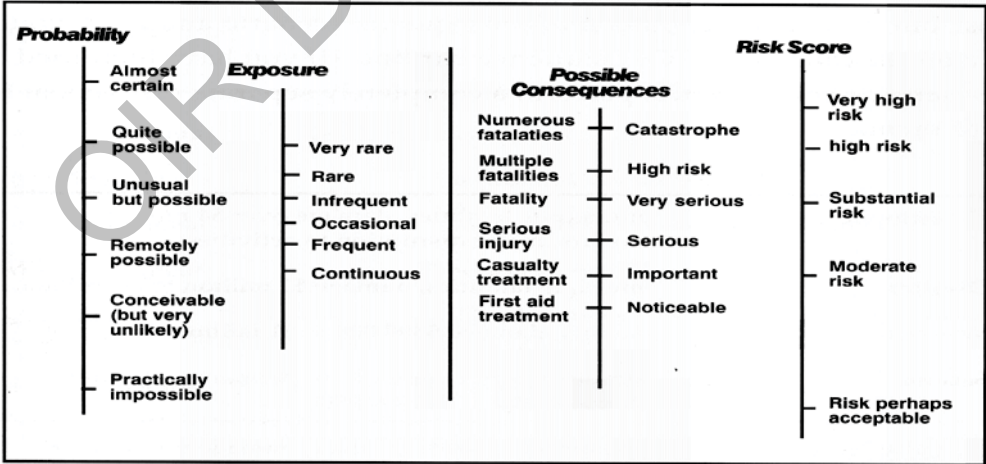
Other (specify) _____

DESCRIPTION OF FIRST AID TREATMENT GIVEN:



TREATED BY: _____ DATE: _____ TIME: _____ am/pm

3. RISK RANKING



4. IMMEDIATE ACTIONS TAKEN BY PERSON REPORTING

***SIGN OFF** PERSON REPORTING: _____ SIGNATURE: _____ DATE: _____

Manager/Supervisor Investigation

5. ACTIONS TAKEN BY MANAGER/SUPERVISOR

6. INVESTIGATION - Root Cause & Contributing Factors

People – PPE; position,	<hr/> <hr/>
Equipment	<hr/> <hr/>
Procedures - work practice, instructions, communication	<hr/> <hr/>
Environment	<hr/> <hr/>

CORRECTIVE ACTION TO BE TAKEN TO PREVENT RECURRENCE: _____

INVESTIGATION TEAM: _____

***SIGN OFF** SUPERVISOR'S NAME: _____ SIGNATURE: _____ DATE: _____

7. DEPARTMENT MANAGERS REVIEW

IS FURTHER INVESTIGATION OR ACTIONS REQUIRED

YES <input type="checkbox"/>	COMPLETE REPORT FORM NO. _____	NO <input type="checkbox"/>	SIGN OFF _____
------------------------------	--------------------------------	-----------------------------	----------------

COMMENTS: _____

***SIGN OFF** MANAGERS NAME: _____ SIGNATURE: _____ DATE: _____

8. REVIEW

Injury Classification: Report only First Aid Medical Treatment Restricted Work Lost Time Occ. Illness

Injury Outcome: WorkCover Q Super Report Only Non-Work Related

COMMENTS: _____

***SIGN OFF** SAFETY OFFICER NAME: _____ SIGNATURE: _____ DATE: _____



Serious about farm safety

A guide to developing a health and safety management system for small to medium sized agricultural businesses

worksafe.qld.gov.au

Contents

Introduction	1
Essential definitions	2
Legislation	3
What duties apply?	3
Codes of practice	3
General responsibilities	4
Duties	4
Duty to consult	4
Reasonably practicable	5
Workers	5
Safety management systems	6
Management commitment	6
Consultation, cooperation and coordination	7
Health and safety committee	8
Risk management	8
Identify the hazards	9
Assessing risks	10
Controlling risks	11
Reviewing the controls	12
Safe work procedures	13
Developing a safe work procedure	13
Sample SWP for tractor use	15
Housekeeping	16
Potential hazards	16
Induction, training and supervision	17
Induction	17
Training	19
Supervision	20
Reporting safety	20
Incident notifications	21
Other notifications	21
Workers' compensation and return to work	21
Getting back to work is good for business	22



State of Queensland 2017.

Unless otherwise noted, this document is available under a Creative Commons Attribution 3.0 Australia licence. You are free to copy, communicate and adapt the work, so long as you attribute The State of Queensland. For more information see: <http://creativecommons.org/licenses/by/3.0/au>.

The material presented in this publication is distributed by the Queensland Government for information only and is subject to change without notice. The Queensland Government disclaims all responsibility and liability (including liability in negligence) for all expenses, losses, damages and costs incurred as a result of the information being inaccurate or incomplete in any way and for any reason.

PN11650

General information for the agriculture industry 23

Remote or isolated work	23
Hazardous manual tasks	23
Facilities	24
First aid and emergency procedures	24
Personal protective equipment (PPE)	25
Heat stress.....	25
Plant and machinery	25
Quad bikes	26
Tractors	26
Guarding.....	27
High risk work licences.....	28
Electrical safety.....	28
Powerlines	28
Never do your own electrical work.....	30
Safety switches.....	30
Hazardous chemicals	30
Managing agricultural chemical spray drift	31
Hazardous atmospheres	32
Falling objects	32
Confined spaces	33
Cutting and welding	33
Noise	33
Falls	34
Animal handling	34
Zoonotic diseases	35
Asbestos	35
Safety of children on farms	36
Creating healthy workplaces to strengthen your business	36
Templates on CD	38

Introduction

Serious about farm safety will assist small to medium sized agricultural businesses to develop a system to manage health and safety risks around the property and other agricultural workplaces. Implementing a simple health and safety system will reduce the risk of workplace injuries and can help you to reduce your workers' compensation premium.

All business owners and employers are required to provide a safe workplace for workers and visitors. This guide will help you cut through the complexities of work health and safety regulation and compliance.

Workplace health and safety policies and procedures should form the framework of a health and safety system. The information and templates will help you set up your own safety system. You can download the blank templates from the CD or from worksafe.qld.gov.au.

Reference should also be made to the legislation and codes of practice available at worksafe.qld.gov.au.

- *Work Health and Safety Act 2011* (WHS Act)
- *Work Health and Safety Regulation 2011* (WHS Regulation)
- *Electrical Safety Act 2002* (ES Act)
- *Electrical Safety Regulation 2013* (ES Regulation).



Essential definitions

Officer – is a person who makes, or participates in making decisions that affect the whole or substantial part of the organisation's activities.

Person conducting a business or undertaking (PCBU) – is a business or an undertaking that is either done alone or with others, whether or not for profit or gain. A PCBU can be a sole trader (e.g. a self-employed person), a partnership, company, unincorporated association or government department or public authority (including municipal council).

Person with management or control – a PCBU with management or control over the workplace.

Plant – machinery, equipment, appliance, container, implement or tool.

Structure – anything that is constructed, whether fixed or moveable, temporary or permanent and includes buildings, masts, towers, framework, pipelines, transport infrastructure and underground works (shafts and tunnels).

Substance – any natural or artificial substance in the form of a solid, liquid, gas or vapour.

Supply – supply and resupply of a thing provided by way of sale, exchange, lease, hire or hire purchase arrangement.

Volunteer – a person who acts on a voluntary basis, regardless of whether they receive out of pocket expenses.

Work group – a group of workers who share similar work conditions (e.g. workers in a packing shed).

Worker – includes employees, contractors, subcontractors, outworkers, apprentices and trainees, work experience students, volunteers and PCBUs, who are individuals if they perform work for the business.

Workplace – any place where work is carried out for a business or undertaking. This may include offices, factories, shops, construction sites, farms, packing sheds, vehicles, ships aircraft or other mobile structures on land or water such as offshore units and platforms.

Legislation

What duties apply?

All workers in Australia are protected by work health and safety laws. This includes employees, contractors, subcontractors, outworkers, apprentices and trainees, work experience students, volunteers and employers who perform work. The WHS Act also helps to protect the general public so their health and safety is not put at risk by work activities.

Work Health and Safety Act 2011

The WHS Act provides a nationally consistent framework to protect the health, safety and welfare of all workers at work and of all other people who might be affected by the work.

Anyone with duties under the WHS Act should refer to the WHS Regulation and applicable codes of practice.

Work Health and Safety Regulation 2011

The WHS Regulation outlines how a duty under the WHS Act must be performed and prescribes procedural or administrative matters to support the WHS Act (e.g. licences for specific activities or record keeping).

Electrical Safety Act 2002

The ES Act is the legislative framework for electrical safety in Queensland and is designed to prevent people from being killed or injured and property from being destroyed or damaged by electricity.

Electrical Safety Regulation 2013

The ES Regulation 2013 identifies specific ways to meet electrical safety duties under the ES Act.

Codes of practice

Codes of practice give practical guidance to assist duty holders to meet the requirements of the WHS Act and the ES Act, and provide effective ways to identify and manage risks.

Compliance with Acts and Regulations may be achieved by following a method that is not set out in the code of practice. Codes of practice are not mandatory and a duty holder may choose to use another way to achieve compliance, however, any other method must provide an equivalent or higher standard of work health and safety than suggested by the code of practice.

General responsibilities

A PCBU must manage health and safety risks to workers, customers, visitors and onlookers to the work activity. These risks can be managed by providing: safe environments for workers, safe systems of work, safe plant and machinery, safe storage of hazardous chemicals, adequate facilities for workers, access to relevant information, induction, training and supervision of workers, a monitoring program for workers' health and suitable workplace conditions.

Although there are similarities in work practices and hazards, every agricultural business is likely to be different in some way and will need to develop its own safety solutions.

Duties

The WHS Act outlines general health and safety duties of employers and workers. In addition, people with control of a workplace or designers, manufacturers, importers, suppliers and installers of plant or structures will have duties to follow.

A person may have more than one duty. For example, the working director of a company has duties as an officer of the company and also as a worker. More than one person may have the same duty. For example, a property owner and a contractor share the duty of ensuring the health and safety of workers while on the property.

Officers of a PCBU must also exercise due diligence to ensure the PCBU complies with its health and safety duties and obligations and show they have taken reasonable steps to manage health and safety. There are detailed definitions for an 'officer' and 'due diligence' at worksafe.qld.gov.au.

Duty to consult

Employers have a duty to consult with their workers and health and safety representatives (HSRs) about matters that directly affect them in the workplace. This includes consulting with contractors, workers from a labour hire company, students or family members working on the property, apprentices, trainees and volunteer workers.

If there is more than one duty holder in the workplace, (e.g. the property owner and contractor) they have a duty to consult with each other, cooperate to meet health and safety obligations and share information.

Reasonably practicable

The guiding principle of the WHS Act is that all people are given the highest level of health and safety protection from hazards arising from work, so far as is reasonably practicable.

In other words, what could be reasonably done at a particular time to ensure ongoing health and safety, taking into account:

- the likelihood of the relevant hazard or risk occurring
- the degree of harm that might result from the hazard or risk
- what the person knows, or ought to reasonably know, about the hazard or risk and the ways of eliminating or minimising the risk
- the availability and suitability of ways to eliminate or minimise the risk.

Workers

Workers also have a duty to take reasonable care for their own health and safety and not adversely affect the health and safety of other people. Workers must comply with any reasonable instruction and cooperate with any reasonable health and safety policy or procedure (e.g. workers must follow procedures for operating machinery or instructions to wear personal protective equipment).

Safety management systems

Work health and safety does not have to be complicated. Safety management systems can be customised depending on the size, needs and activities of the agricultural business. The following elements are essential for a safety management system.

Management commitment

The primary responsibility for a safe workplace rests with the employer. It is the employer's responsibility to ensure everyone is clear about their health and safety responsibilities and to build the safety culture. That means being prepared to implement safe work practices and systems, identifying and controlling risks, providing sufficient time and safe and effective tools to achieve the desired work outcomes, engaging with workers and ensuring notifiable incidents are reported.

A manager who leads by example and promotes health and safety as a high priority sends a message that your business is serious about safety. An easy starting point to demonstrate this commitment to safety is to develop a workplace health and safety (WHS) policy. A WHS policy forms the framework for all your business and work operations. A policy describes the expected standards, priorities and timeframes for health and safety for workers and employers. It should also contain information about consulting with workers or their elected representatives.

The policy should be signed off by the business owner and a worker representative and have a date of review to keep it relevant for your workplace. All workers should be made aware of the WHS policy, have access to it and ensure that it is understood.

Refer to T1 – Sample Health, safety and wellbeing policy

Management commitment

- Determine safety responsibilities and clearly communicate them.
- Commit time and resources.
- Make safety a priority.
- Demonstrate commitment to safety at the highest level in the organisation.
- Maintain the commitment to safety and build the safety culture.

Refer to T2 – Management commitment checklist

Consultation, cooperation and coordination

The decisions you make will have health and safety consequences for everyone at your workplace. The WHS Act requires employers to consult, cooperate and coordinate activities with all other people who have a work health and safety duty in relation to the same matter.

This includes cooperation between the people who manage or control the work and those who carry out the work or who are affected by the work. A safe workplace is more easily achieved when everyone communicates with each other to identify hazards and risks, talks about health and safety concerns and works together to find appropriate solutions.

By consulting with your workers, you can share WHS information with them and take their views into account before making any decisions. Including workers in the decision-making process shows clear management commitment to safety and by regularly consulting with them they can alert you to any WHS issues they experience and be involved in finding solutions to those issues. Your workers are often best placed to identify solutions that you may have overlooked.

Consultation can be conducted through formal talks or an informal discussion, such as during breaks. The chosen format will depend on the type and size of your business. You should keep records or diary notes of what was discussed and any action items.

Regular consultation is better than only consulting when issues arise; this allows you to proactively identify and fix potential problems early before they result in an injury.

Refer to T3 – Record of staff toolbox meeting



Health and safety representatives (HSRs) are elected by a work group to represent their fellow workers' health and safety interests. Whether the work group has a HSR will depend on the size of your workforce and whether the workers make a request to elect one. There are a number of requirements to be met to elect a HSR which can be found at worksafe.qld.gov.au.

Health and safety committee

A health and safety committee facilitates cooperation between a PCBU and workers in developing and carrying out measures to ensure health and safety at work.

For more information, read the *Work health and safety consultation, cooperation and coordination code of practice 2011* and the *How to manage work health and safety risks code of practice 2011* at worksafe.qld.gov.au.

Consultation, cooperation and coordination

- Implement consultation arrangements suitable for your workplace.
- Record decisions that affect safety.
- Encourage your workers to become involved.
- Send a clear message about the importance of safety.
- Review safety solutions for effectiveness.

Risk management

The most important aspect of work health and safety is to manage risk, by identifying and controlling hazards that could be harmful to you or your workers.

Employers must do whatever is reasonably practicable to eliminate or minimise health and safety risks arising from their business or undertaking. The easiest way to manage risk is to consider the three elements: workers, processes and methods of work.

Risk management involves four steps which are set out in *How to manage work health and safety risks code of practice 2011*:

- Identify hazards – find out what could cause harm.
- Assess risks – understand the nature of the harm that could be caused by the hazard, how serious the harm could be and the likelihood of it happening.
- Control risks – implement the most effective control measure that will eliminate or reduce the risk, using the hierarchy of controls, and that is reasonably practicable in the circumstances.
- Periodically review control measures to ensure they are working as planned.

Identify the hazards

A hazard is anything that has the potential to cause injury, illness or damage to health. To identify hazards in your workplace:

- inspect the workplace for potentially hazardous equipment, plant, machinery and activities
- monitor the work performed by each staff member and note any hazards while doing these tasks
- draw on the knowledge and experience of your staff and other producers/growers and ask what causes problems, incidents, injuries or near misses (involving your staff in the discussion will increase their acceptance of changes)
- review manufacturer's instructions on using equipment, machinery and products
- review any regulatory requirements and codes of practice
- compare your business' injury and incident records with the wider industry.

Hazards of a fruit growing orchard may include:

- manual handling, such as lifting heavy objects or frequent/repetitive lifts
- use of hand tools and/or power tools
- operating machinery, rural mobile plant, elevating work platforms (EWPs)



- operating a chainsaw
- hazardous chemicals
- picking fruit from ladders
- overhead power lines
- moving fruit bins
- noise
- sun exposure.

Hazards on a turf farm may include:

- operating machinery
- overhead power lines
- handling hazardous chemicals
- sun exposure
- manual handling, such as lifting heavy objects or frequent/repetitive lifts
- flying particles
- dust.

Hazards in beef cattle production may include:

- riding a horse, quad bike or motorbike
- animal handling in stockyards, when mustering and when loading and unloading stock
- working in and maintaining stockyards
- handling chemicals
- sun exposure
- dust
- zoonoses.

Assessing risks

During the assessment process you should observe:

- how each hazard may cause harm
- the effectiveness of existing control measures
- how work is being done versus how it is meant to be done (rather than relying on written manuals and procedures which may not be followed).

Include non-production tasks such as maintenance, cleaning and equipment breakdowns.

The likelihood that someone will be harmed can be estimated by knowing:

- the frequency and duration your workers are exposed to a hazard
- the effectiveness of the current controls to reduce risk
- whether hazards are more likely to cause harm because of the working environment
- whether the way people act, their language, cultural differences or their behaviour will affect the likelihood of a hazard occurring.

You can rate the likelihood as one of the following:

- certain to occur – expected to occur in most circumstances
- very likely – will probably occur in most circumstances
- possible – might occur occasionally
- unlikely – could happen at some time
- rare – may happen only in exceptional circumstances.

The level of risk will increase as the likelihood of harm and its severity increases. It is mandatory to complete risk assessment forms for all the identified hazards, such as confined spaces and hazardous chemicals, and keep a copy for future reference.

Controlling risks

Controls should be implemented according to the hierarchy of risk control.

Once all the hazards are listed and the level of risk assessed, you will need to control each risk. The items with the highest level of risk need to be addressed first.

The ways of controlling risks are ranked from the highest level of protection to the lowest in the hierarchy of risk control. If the hazard cannot be eliminated, you must minimise the risk by putting control measures in place. There may be more than one control method or there may be a combination of controls. You may need to use the best solution at the time while developing a more effective control, which may take more time and resources.

Things to consider when deciding on control measures include the:

- physical environment (e.g. the terrain, heat, cold, wet surfaces, and overhead power lines)
- nature of the work, the process and working conditions, required qualifications, training and knowledge of the task
- nature and severity of any potential injury or disease.

Hierarchy of risk control

Level 1

Eliminate the hazard.

Level 2

Substitute the hazard with something safer.

Isolate the hazard from people.

Reduce the risks through engineering controls.

Level 3

Reduce exposure to the hazard using administrative actions (e.g. safe work procedures, training).

Use personal protective equipment (PPE).

PPE is the lowest level of control and other controls should be considered first. PPE is often used in conjunction with other control measures.

Refer to T4 — Risk assessment form

Refer to T5 — Risk register template

Reviewing the controls

Monitor and review your control measures to check if:

- they have been implemented as planned
- the risk is being controlled
- the controls have not introduced any new problems.

Safe work procedures

Safe work procedures (SWPs) will help your workers consistently and safely manage specific work tasks to avoid injury or illness while doing them. They are an administrative control that outlines the sequence of steps to do a task safely. To be effective, SWPs should be developed in consultation with your workers.

Developing a safe work procedure

1. Choose a task and analyse it

You may need to refer to information sources such as equipment manuals, your workers, safety data sheets or industry guides.

Break the hazardous task into steps and determine possible risks and control solutions. Identify any physical changes to your workplace that are required, such as adding a guard to moving machinery or any new equipment needed to replace dangerous equipment.

To develop your SWP, combine the task's steps with the most appropriate controls. Adding pictures to each step will help to clearly describe the process.

The final SWP should be signed and dated by a manager and be readily accessible for workers.

The next hazardous task should use the same process.

Refer to T6 — Task analysis template

Sample safe work procedure

Job name	Station bore run
	The bore run covers eight bores with diesel pumps, and three windmills. The run is along a 360 km route in isolated areas of the property and includes black spots for radio reception. Most times it is a single person run. You are required to fill all fuels, check all tank levels, check all troughs for float valve operation, leaks, and cleanliness, and check operation and flows on all wind mills.
Describe the main hazards of the job	Actions to be taken
1 Travelling in isolated areas or working on your own	Take an appropriate communication device and know how to use it. Have someone accompany you on your first trip. Take sufficient food and water with you.
2 Mechanical breakdown	Check the vehicle's mechanics, including the oil, water, tyres, lights and battery before you leave. Take spare tyres, a tool box and ensure you know some basic mechanics. Stay with the car if it breaks down.
3 Travelling on rough roads	Drive according to conditions. Use 4WD where appropriate. Don't cross flooded creeks.
4 Decompression levers	Always use the decompression levers for diesel engines in the event of a break-down. Know how to use them.
5 Working at heights	Do not work at heights, such as windmill platforms, unless you have edge protection or use a harness. Make sure your boots are clean, use gloves for better grip and ensure loose clothing is tucked in.
6 Heat stress	Avoid heat stress and always drink plenty of water, wear a hat, and wear long sleeve shirts and long pants.
7 First aid	Check the first aid kit prior to departure, and include items for snake bites, burns and splints for broken bones. Make sure you have basic first aid knowledge.
8 Protective clothing	Always wear a wide brim hat, strong ankle-supporting boots, long pants, long sleeve shirt, gloves and climbing harness.

Sample SWP for tractor use

DO NOT use this machine unless you have been instructed in its safe use and operation.



Pre-operational checks:

1. Ensure that the seatbelt, roll over protective structure (ROPS), falling objects protective structure (FOPS, where fitted) and power take-off (PTO) guard are in sound condition.
2. Faulty equipment must not be used. Report suspect machinery immediately.
3. Check the three-point linkage, pneumatic and hydraulic systems are functioning.
4. Use only implements that meet the specifications listed in the vehicle operation manual.
5. Ensure the tractor driver is trained, competent and licensed if driving on public roads.
6. Check all lights and warning devices are operational and the vehicle is registered, if driving on public roads.
7. *Add others as appropriate.*

Do not allow any person other than the driver to ride on the tractor.

Operational safety checks

1. Never start or operate levers from anywhere other than the driver's seat.
2. Before starting the tractor, ensure all levers are in their neutral positions, the park brake is engaged and the clutch and PTO are disengaged.
3. Do not operate or idle engine in a non-ventilated area.
4. Only tow items using the drawbar or hitch.
5. Drive at a speed to ensure control over unexpected hazards.
6. Do not operate near ditches, holes or embankments, which may collapse under the tractor's weight.

7. Always reverse when going up a steep slope. Avoid slopes that are too steep for safe operation.
8. Do not dismount from a tractor while the engine is running.
9. Ensure that no person or animal is endangered when operating the equipment.
10. Ensure bucket (if fitted) is raised above line of sight.
11. Before dismounting make sure the tractor has come to a complete stop on even ground, the park brake has been applied, the PTO has been disengaged and all control levels are in their neutral positions, the engine is turned off and the keys removed.
12. *Other safety checks?*

Housekeeping

- Clean away any foreign material, debris from in and around engine and implement parts.
- Keep the work area or implement shed in a clean and tidy condition.

Potential hazards

- ◆ Entanglement in PTO
- ◆ Noise
- ◆ Rollover

Summary of safe work procedures:

- Identify and prioritise tasks that require SWPs.
- Develop SWPs.
- Implement SWPs through training.
- Review your procedures and work tasks.
- Plan your approach to developing SWP.
- Involve your workers.
- Keep procedures up-to-date and regularly review SWPs.

Refer to T7 — Safe work procedure template

Induction, training and supervision

Employers must provide their workers with any information, instruction, training and supervision necessary to ensure their health and safety at work. Managers and supervisors should also be provided with the information, instruction and training they need to ensure the health and safety of the people under their supervision.

Induction

Induction is the best way to make new workers (young and old) aware of how the business operates, important procedures and how to manage workplace risks.

Inductions are also relevant to refresh workers moving to a new location in the business, those operating a new piece of machinery or workers who may have been on extended leave. An induction should also be given to visitors entering the workplace.

An induction checklist will help to ensure all topics are covered with each worker or visitor. Have the induction form signed and dated and store in your induction records for future reference.

An induction should:

- describe the worker's role (e.g. who to report to, tasks to be done, hours of work and pay rates)
- explain the workplace layout, such as location of facilities and first aid equipment and details of emergency plans, contact personnel and equipment
- detail the risks associated with the task or workplace
- provide details about the health and safety representative, arrangements for consulting with workers (e.g. toolbox talks) and the roles and responsibilities of key people involved in health and safety at the workplace
- outline workplace policies, general rules (e.g. housekeeping or keeping machine guards in place), specific rules (e.g. not using hazardous chemicals without first reading the safety data sheet) and reporting requirements (e.g. incidents, injuries and damaged equipment)
- include task-based training, including SWPs
- demonstrate the use of PPE and identify appropriate clothing to be worn
- cover workers' compensation insurance and the business's return to work program.

Refer to T8 — Induction checklist

Young workers

Particular attention should be given to young workers with limited experience or background in a rural environment or the type of work. They may not be confident to ask questions, so it is important to make sure they understand the job they are doing, can be adequately supervised, know how to report hazards and can freely discuss any other issues.

Young workers and those with limited English may be less likely to question health and safety practices or speak up if they are unsure. They may find it easier to communicate through a health and safety representative, an interpreter or worker representative. Information to them should be simple and clear and presented in different ways, such as using diagrams, photos, pictures and practical demonstrations to make it easier to understand.

Seasonal and labour hire workers

The responsibility of employers towards seasonal workers is the same as any workers they employ. Seasonal workers need to be adequately inducted into the workplace, trained in their jobs and closely supervised.

Although they might work on a property for only a short time, they are at a higher risk of injury due to their limited understanding of the workplace and the risks associated with the tasks. They should be treated the same as new, inexperienced workers no matter what their age.

You must also ensure that workers from non-English speaking backgrounds understand the information and training they have been given. It may be necessary to provide an interpreter or have written instructions translated into different languages or a visual aid.

Using a labour hire company

Under a labour hire arrangement, both the labour hire PCBU and the host PCBU have duties to ensure the health and safety of labour hire workers. These duties must be fulfilled to the extent to which each PCBU has the capacity to influence and control the matter.

If using a labour hire company, specify to them the tasks to be done, skills and experience needed and any special conditions, equipment to be used, licences required and appropriate clothing to be worn.

The PCBUs must consult, cooperate and coordinate with each other so far as is reasonably practicable. Duty holders under the WHS Act cannot contract out their work health and safety obligations.

Contractors

In the agricultural industry, contractors are often engaged to carry out tasks such as harvesting, mustering, spraying, fencing and pruning. You must also manage the risks to their health and safety as you would for any other worker. That includes a site-specific induction for contractors before the work begins and ensuring the work is completed safely according to agreed procedures.

Contractors will also need to be inducted to the same level as a new worker and a signed agreement should outline that they will not endanger any person by using unsafe work practices or equipment. All machinery and equipment that is brought on-site and is used, must be well maintained, with all guards in place.

Where there are shared responsibilities between the PCBU and a contractor who employs workers, they must consult, cooperate and coordinate with each other to provide a safe work environment, so far as is reasonably practicable.

The health and safety requirements of contractors are usually included in the contract documentation. They must be suitably qualified and hold the necessary licences to carry out the intended work, whether that is driving a forklift requiring a high risk work licence or needing ChemCert to spray herbicides or the like.

Training

Training will help ensure your workers can effectively do the tasks they perform and manage any emergencies or issues that could affect their health and safety. An employer needs to do more than give a worker a work procedure and request them to acknowledge they understand it and can do it. Workers should be able to demonstrate that they are competent in performing the tasks according to the set procedures.

Employers should:

- schedule specific training for workers
- keep records of training for each worker
- review and revise training provided to workers
- keep copies of licences, certificates or other evidence of formal qualifications or competencies held by workers
- evaluate the effectiveness of training given to workers.

Training should:

- be designed for the worker's level of responsibility
- take into account the background skills and knowledge of each worker
- be provided in a language and form that is easily comprehended
- be conducted by a competent person (e.g. experienced employee/manager or an outside training provider).

You should keep each worker's training records for future reference.



Supervision

Good supervisors are essential for improving productivity and maintaining safe practices. Supervision of workers will help ensure that your policies and procedures are being properly followed, and that any non-compliance is swiftly addressed and rectified. Supervisors also provide a direct communication link from the employer to the worker.

The level of supervision required will depend on the level of risk and the experience of the workers involved. High levels of supervision are necessary where inexperienced workers are expected to follow new procedures or to carry out difficult and critical tasks.

Refer to T9 — Contractor induction statement

Refer to T10 — Training register

Reporting safety

You don't need a complicated system in place for reporting hazards. A simple reporting procedure will help you identify WHS problems when they arise and address them.

Safety reporting procedures make it simpler for you and your workers to manage safety issues and stop re-occurrences of incidents and injuries. An analysis of trends may help identify safety issues that were previously unnoticed. It is important that your workers can confidently report hazards to you and know that you will try to fix the issues they report. If not, your workers will become reluctant to report problems in the future.

Incident notifications

The WHS Act sets out what sort of incidents are notifiable to Workplace Health and Safety Queensland (WHSQ). An incident is notifiable if it arises out of the conduct of a business or undertaking and results in the death, serious injury or serious illness of a person or involves a dangerous incident. Go to worksafe.qld.gov.au for more information about the definition of a serious injury or illness, or a dangerous incident.

A PCBU is required to make the notification immediately after becoming aware that a notifiable incident has occurred. Notification must be by the fastest possible means — usually by phone on 1300 362 128. The PCBU must keep a record of each notifiable incident for at least five years from the date notified to WHSQ.

A serious electrical incident or dangerous electrical event is also notifiable under the ES Act. For more information visit electricalsafety.qld.gov.au or contact the Electrical Safety Office on 1300 362 128.

Other notifications

PCBUs are required to notify Workplace Health and Safety Queensland around asbestos removal work, demolition and hazardous chemicals.

Workers' compensation and return to work

If you employ workers you must have an accident insurance policy with WorkCover Queensland to protect against claims for compensation. There are penalties if you don't have an insurance policy.

You cannot pay your own claim costs. Some employers meeting the criteria can self-insure, but the majority of employers in Queensland must insure with WorkCover Queensland. By managing your claims well, you give yourself every opportunity to pay less for the insurance. As an employer you must:

- ensure medical treatment and assessment
- record details of the work-related injury or illness
- provide the worker with relevant return to work information
- notify of an incident at the workplace by emailing a completed incident notification form or phone on 1300 362 128
- offer suitable duties (for injured workers)
- maintain accurate case notes and important details about an injured worker's rehabilitation and return to work program.

Getting back to work is good for business

Getting back to work following a workplace injury is an important step in your injured worker's recovery. Providing immediate and ongoing support to your injured workers will help their recovery, minimise disruption to their personal and work life and reduce negative impacts on your business' viability.

Activity is good for recovery, so put in place workplace policies and procedures to encourage recovery at work and improve the return to work culture. Consider what the injured worker can do, not what they can't do, and work with the injured worker, doctor and insurer to develop a suitable duties plan tailored to the individual circumstances.

Refer to T11 — Suitable duties

General information for the agriculture industry

The agricultural industry presents a wide scope of varying work activities and potential hazards, however there are practical solutions that can be adopted to control the risks.

Remote or isolated work

Work that is isolated from the assistance of other people because of location, time or the nature of the work requires employers to have an effective way of keeping in contact with their workers.

For example, a single worker irrigating on a property could have a call in system through a two-way radio or phone. Remote workers may have access to an emergency position indicating radio beacon (EPIRB) or a GPS tracking system. Alternatively, they might use a 'buddy' system, but the chosen method needs to be reasonably practicable for the situation.

Managing the work environment and facilities code of practice 2011 provides details on appropriately assessing risks and determining control measures for remote and isolated work.

Hazardous manual tasks

A PCBU must manage risks to health and safety from a hazardous manual task. To manage a hazardous manual task means understanding all the relevant matters that could contribute to it. Refer to the *Hazardous manual tasks code of practice 2011*, but consider:

- postures, movements, forces and vibration performed during the task
- the duration and frequency of the task
- workplace environmental conditions
- the design of the work area and layout of the workplace
- the systems of work used
- the nature, size, weight or number of people involved in performing the task.

Common manual task injuries can be caused through tasks that involve handling and restraining livestock or uncoupling equipment. The majority of manual task injuries are through lifting and carrying loads, bending and reaching when performing tasks, repetitive bending and awkward positions, slips, trips and falls or vibration. Involve your workers when developing appropriate solutions, which could include:

- eliminating the tasks or parts of the tasks
- redesigning the work area, such as stockyards, or find a better way of doing the task
- lowering the storage height of objects
- using mechanical aids such as calf cradles, cattle crushes, tailgate loaders, trolleys, forklifts, telehandlers or tractor platforms
- using smaller sized containers or packaging to reduce heavy loads
- improving training and instructions to workers about the tasks
- ensuring workers have adequate rest breaks.

Refer to T12 — Manual tasks risk management worksheet

Facilities

A PCBU must provide adequate facilities for workers, including toilets, clean drinking water, washing facilities, management of temperature extremes (e.g. shade) and eating facilities.

For more information refer to the *Managing the work environment and facilities code of practice 2011*.

First aid and emergency procedures

A duty holder must provide access to first aid equipment and an adequate number of trained workers to administer first aid. Refer to the *First aid in the workplace code of practice 2014*.

They must also develop procedures to deal with a workplace emergency such as a fire, plan evacuation procedures, know how to notify emergency services and know how to implement and communicate the emergency procedures to workers.

It is a good idea to keep a list of the emergency phone numbers readily accessible in the office, in each vehicle and on the wall of the workshop. At a minimum, the numbers should include the Royal Flying Doctor Service (RFDS), doctors, ambulance, fire service and the Poisons Information Centre. It is also a good idea to have the GPS coordinates of the property on the list so these can be provided to a rescue aircraft or ambulance called to the property.

The emergency plan is in addition to the requirement for a fire and evacuation plan under the Building Fire Safety Regulation 2008, however both these plans can be combined into one plan for the workplace.

Refer to T13 — Emergency information list

Refer to T14 — Queensland emergency plans checklist

Personal protective equipment (PPE)

If the PCBU uses PPE to control the risk of injury they must follow the WHS Regulation which discusses the provision, selection, maintenance and information on how to use it correctly.

A worker should be trained, instructed and have information about the safe and correct use of PPE. If PPE is provided, a worker must use it as per the instructions and training.

Relying on PPE alone will not reduce the risk of an incident occurring, but it could reduce the severity of an injury. For example, a helmet could reduce the severity of a head injury to a rider of a quad bike, but it would not prevent the incident from happening.

Heat stress

Working in the sun for a long period of time without adequate breaks, shade or water can mean workers face serious dehydration and are at risk of a heat-related illness or even death.

Workplaces should weigh up all factors such as heat, humidity, water intake, breezes, protective gear, the physical condition of workers, their hours of work and available shade areas.

Once the risk factors have been identified, staff should be provided and instructed in the use of PPE, such as wide brim hats, long sleeved collared shirts, long pants, sunglasses and sunscreen, to ensure they do not put themselves or others at risk from heat stress.

Plant and machinery

A PCBU with management or control of plant must manage the risks associated with plant. That means maintenance, repair, inspection and testing must be carried out by a competent person.

Quad bikes

Quad bike incidents are one of the leading causes of injuries and deaths on farms. Workers and employers should assess the risks of operating a quad bike and use these tips:

- Consider whether a quad bike is the right tool for a particular task.
- Ensure all riders have been trained and are competent.
- Protect yourself by wearing a properly fitting helmet, eye protection, gloves, sturdy footwear and clothing that covers arms and legs.
- Reduce your speed, especially on rough or uneven ground.
- Loaded quad bikes tip on slopes. Reduce your load before you tackle steep terrain.
- Be aware of terrain which has changed due to rain or flood or obstacles that may be hidden in long grass.
- Leave attachments behind that you don't need. Towing attachments adds to the overall weight and instability of the bike.
- Take extra care when carrying liquid loads as the weight will shift when turning corners or crossing slopes making the bike unstable.
- Consider whether the installation of a crush protection device would be suitable for your situation. Make sure it meets engineering criteria.
- Never let children under 16 use an adult-sized quad bike.
- Never double passengers on a single-seat bike.
- Never overload your quad bike above the manufacturer's recommendations.
- Always keep your quad bike maintained using the manufacturer's instructions.

Tractors

PCBUs should consider each type of tractor hazard and associated risk and then choose the most appropriate control measure to ensure the health and safety of all operators.

Guards should protect the operator and others from moving parts of the tractor that could be hazardous, whether performing a normal operation or undergoing routine maintenance.

At a workplace, a tractor weighing between 560 kg and 15,000 kg must not be used unless it is securely fitted with a rollover protective structure (ROPS), regardless of whether it is new or second hand. A plate or decal confirming its compliance should be attached to the ROPS' frame, or inside the cabin.

All types of rural mobile plant are potentially at risk of roll over, including harvesters, spray rigs and earth moving equipment.

It may not be practical to work under trees (in an orchard) or in a place too low (within a building) with an approved ROPS fitted. In this situation, the ROPS may be lowered or

removed, but you should ensure your workers take due care when operating without a ROPS and that the ROPS is returned to its normal position after the height restriction is no longer applicable.

The use of canopies with ROPS and falling object protective structures (FOPS) should be considered to minimise the operator's exposure to UV radiation from sunlight.

Follow these tips:

- Never dismount from a moving tractor or adjust or work on towed implements while they are in motion.
- Do not use or attach implements unless the power take-off (PTO) shaft is guarded.
- Always start a tractor from the driver's seat, not from the ground.
- Make sure the park brake is on and operating effectively before leaving the driver's seat.
- Do not park a tractor on a steep slope.
- Remove the key when the tractor is not in use.
- Make sure all operators are trained and are competent to safely use tractors.
- Wear a seat belt where a ROPS is fitted.

Guarding

A guard is any shield, cover, casing or physical barrier that prevents contact by a person or their clothing with a moving part. Guards should be provided where any part of rural plant is within reach and that could become hazardous during operation, routine maintenance or adjustment. Guards must comply with the relevant Australian standards.

Guards are needed for:

- any rotating shaft, gear, cable, sprocket, chain, clutch, coupling, cam or fan blade
- any crushing or shearing points (e.g. augers and slide blocks, roller feeds and conveyor feeds)
- ground wheels and track gear
- any machine component which cuts, grinds, pulps, crushes, breaks or pulverises farm produce
- hot parts where the surface temperature exceeds 120°C in normal operation.

High risk work licences

Anyone carrying out high risk work, such as operating a forklift or an elevating work platform must hold a photographic renewable high risk work licence for the category of plant. This is inclusive of tractors with fitted masts, but not tractors with any forks. Employers have a responsibility to ensure their workers have the correct licence.

You can apply for a high risk work licence once you complete formal training with a registered training organisation (RTO).

Electrical safety

Powerlines

In Queensland there have been many serious electrical incidents on rural properties resulting in fatalities or hospitalisation from burns.

Landholders need to be aware of the serious electrical risks if working near overhead or underground powerlines. Powerlines in Queensland can carry high voltages up to 330,000 volts. Contact with them can result in a serious injury or death – even working close to them can result in electricity arcing over to a person, machinery or plant. Electrical incidents can also cause significant property damage.

Powerlines and power poles are notoriously difficult to see, especially in rural areas where they may be a single line. Powerlines do not follow a direct line from the top of one pole to another and can sag as much as three or four metres below the cross-arms supporting them, especially in high temperatures. Powerlines can also sway in the wind, so what appears to be a safe working distance may later expose people or property to serious risks.

Power poles should be clearly marked, the electrical entity can install flags or markers on powerlines in frequent traffic areas on your property and you should have a plan of where powerlines are located. Include information about powerline locations in your site induction or farm map for employees or contractors working on your property.

You should find out where your underground lines are located before you dig or excavate. Dial 1100 before you dig and ensure your workers and any contractors operating equipment are suitably trained.

Exclusion zones

Workers, machinery and other plant must keep a minimum safe distance from powerlines at all times as outlined below.

Power line voltage (1 kV = 1000 volts)	Examples	Exclusion zone*
Up to 132 kV	Low voltage and high voltage powerlines usually on poles	3 metres
Between 132 kV and 330 kV	High voltage powerlines usually on poles and towers	6 metres
Over 330 kV	High voltage powerlines usually on towers	8 metres

*Note the above table does not detail all exclusion zone requirements.

Safe and practical solutions

- Avoid working under or near powerlines. If you can't avoid locating plant near live powerlines, you must know the height and reach of the plant you are operating to prevent it entering the exclusion zone. Always lower machinery near powerlines.
- If possible, arrange for powerlines to be de-energised or relocated away from the work area before work starts.
- Use a safety observer on the ground to help keep plant or equipment out of the exclusion zone. Always work away from powerlines – not towards them.
- Arrange for your electricity entity to install flags or indicators on overhead lines as visual markers, or mark the position of underground electric lines and the safe exclusion zone distance before excavating.
- Know where powerlines, poles and stays are located and train your workers to do the same. Induct all workers, visitors and family members with a safety briefing.
- Establish aircraft landing strips and approach paths away from powerlines.
- Before excavation work starts, obtain the most up-to-date information from Dial Before You Dig.

Private property poles

Power poles on rural properties can be owned by an electricity distributor or privately owned. Have someone with appropriate skills and knowledge, such as a licensed electrical contractor, check private power poles on your property at least every five years for deterioration due to corrosion, rot or termites. If you suspect your power poles are unsafe, arrange for an electrical contractor to inspect them and replace unsound ones.

Never do your own electrical work

Anyone doing unlicensed electrical work is putting themselves and others at risk of electric shock.

Doing your own electrical work is illegal and can void your insurance. Installing or repairing electrical equipment or cables must only be done by a licensed electrician. Even when you think you know what you are doing, never attempt to do your own electrical work.

Safety switches

Safety switches can protect you, your family and anyone visiting the property from electric shock, but only on the circuits on which they are installed.

Property owners should consider having safety switches installed on all circuits on their property, including workshops, lights, air-conditioners, ovens, pools and hot water systems.

Safety switches are often confused with circuit breakers and fuses, but they perform different tasks. Safety switches provide personal protection against electric shock by turning off the power in a fraction of a second if a leakage of current is detected.

It's best to have safety switches (residual current devices – RCDs) installed on all circuits, but a portable safety switch will also help to reduce the risk of electric shock. Before entering a ceiling space always turn off all the main power switches at the switchboard. Tape or label the switches so someone else doesn't turn it back on while you are up there.

Hazardous chemicals

Most rural properties and chemical application contractors handle, use and store hazardous chemicals. Hazardous chemicals include fuels, liquid petroleum gas (LPG), ammonia gas, pesticides, herbicides, various acids and industrial gases.

The hazardous chemicals label, provides advice on safe handling, storage and use and information about the chemical's identity and toxicity. Chemical manufacturers are required to supply a safety data sheet (SDS) that details health and physical hazards information that is in line with the globally harmonised system of classification and labelling of chemicals (GHS). The SDS provides information on ingredients, precautions for the safe handling and use, first aid, accidental release measures, and disposal information.

Workers handling and using hazardous chemicals must be suitably trained (e.g. Auschem, Chemcert). Hazardous chemicals should be stored:

- in a well-ventilated and well-lit, lockable shed with an impervious floor and bunding, or other spill containment system to contain leaks and spills
- having containers protected from damage (e.g. impact by vehicles and machinery)
- away from respirators, protective clothing and safety equipment
- away from incompatible chemicals

- in containers with GHS compliant labels intact (if labels come off, always re-label container)
- securely to prevent unauthorised access
- with suitable fire-fighting equipment nearby.

Each workplace should identify the hazards and implement appropriate control measures to manage the risk.

- Keep a register of hazardous chemicals with their SDS readily available to workers.
- Ensure safety signage and placarding for storing hazardous chemicals is appropriate where required.
- Have an emergency services manifest for manifest quantities of hazardous chemicals.
- Ensure emergency plans include the types and quantities of hazardous chemicals.
- Remove any potential ignition sources around flammable materials.
- Ensure storage systems (e.g. tanks) are fit-for-purpose and operated and maintained in a safe manner.
- Properly decommission storage or handling systems that are no longer used.
- Train workers to know how to safely store and handle hazardous chemicals including the associated storage systems and emergency response actions.
- Provide PPE for workers and training in the correct use (e.g. respirators, gloves, chemical resistant boots).

There are requirements where businesses must notify WHSQ around certain thresholds for chemical use and storage for their business, as well as locations of abandoned underground tanks or existing pipelines with hazardous chemicals. A manifest quantity workplace must notify WHSQ and provide manifest and site plan, emergency plan to be sent to Queensland Fire and Emergency Services.

Managing agricultural chemical spray drift

Spray drift from an application of agricultural chemicals has the potential to adversely affect the health and safety of people. Applicators or the PCBU must be sure that spray drift is eliminated through good application practices, or minimised to prevent adverse health impacts.

This includes:

- monitoring and assessing prevailing weather conditions
- keeping a spray diary
- following manufacturer's recommendations on dilutions and application rates
- selecting suitable applicator/nozzles for droplet size required

- keeping spraying equipment maintained and calibrated
- maintaining correct spray height
- notifying neighbours of spraying activities
- training workers on operating spray equipment
- protecting workers from inhalation or skin exposure to hazardous chemicals.

Hazardous atmospheres

You must manage risks associated with a hazardous atmosphere. That includes when:

- the atmosphere does not have a safe oxygen level (e.g. grain respiration occurring in grain silos leading to an oxygen depleted atmosphere; or effluent pits depleted in oxygen as a result of microbial action; or use of vehicle exhaust gas to purge a tank or vessel)
- the concentration of oxygen in the atmosphere increases the fire risk (e.g. gas leak from a compressed oxygen cylinder used for welding activities in a confined area raising the oxygen concentration)
- the concentration of flammable gases, vapours, mists, or fumes exceeds five per cent of the lower explosive limit (e.g. tanks and containers containing residual fuel, or use of solvents in enclosed areas)
- combustible dust, such as wood dust, bio-solids, sugar, starch, flour, feed or grain is present in a quantity and form that would result in a hazardous area, where these dusts could divide, accumulate or be suspended in the air to create a hazardous atmosphere.
- Ensure an ignition source is not introduced into the hazardous area if there is a possibility of fire or explosion.

Refer to T15 – Hazardous chemicals risk assessment checklist

Falling objects

A PCBU must manage risks to health and safety associated with a falling object if it is likely to injure a person. That includes securing tools and equipment when working at height and ensuring no one is working directly underneath you.

If it is not reasonably practicable to eliminate the risk, the PCBU must minimise the risk by either providing adequate protection for workers, such as an exclusion zone, or preventing an object from falling by using a secure barrier.

Confined spaces

The PCBU must manage the risks associated with a confined space at a workplace. Specific examples of possible confined spaces include a hopper, grain silo, field bins, storage tanks (i.e. sewerage, fuel and water), wet and dry wells, manure and silage pits, integrated feed system or vats (i.e. milk, cheese or wine).

Working in a confined space has the potential to increase the risk of injury from noise, being overcome by fumes, gases or depleted oxygen, suffocation, high or low temperatures, manual handling and slips, trips and falls.

If you are working in a confined space, you must:

- be trained in working in confined spaces
- place a trained stand-by-person outside the confined space to talk to anyone in the confined space and implement emergency procedures if required
- provide PPE, rescue, first-aid and fire suppression equipment
- supplying safety harnesses and safety or rescue lines where there is a danger of falling during the ascent or descent to access the confined space
- erect signs that show entry is only permitted after signing the entry permit
- ensure the area is well ventilated.

For more information refer to the *Confined spaces code of practice 2011*.

Cutting and welding

Never cut drums that have contained flammable or combustible liquids or gases. Anyone who cuts or welds metal should have a good understanding of the risks associated with the task.

Drums that contain residual flammable or combustible substances or vapours may explode when exposed to heat. Additionally, drums that have contained substances such as pesticides may release hazardous gases when exposed to heat. Even drums that have been empty for a very long time can contain enough residue substances to explode and/or emit hazardous gas when exposed to heat.

Noise

Employers must protect themselves and their workers from exposure to excessive noise. To do this, you must assess whether noisy activities present a potential risk.

The table below shows the upper noise levels from different farming machinery activities and the allowable exposure times without hearing protection. Noise is excessive where it exceeds the exposure standard of 85 dB(A), averaged over an eight hour period or where a peak noise level of 140 dB (C) occurs.

Typical noise levels from machinery and operations

Levels dB(A)	Farming machinery or operation	Maximum time
80	Tractor idling	No limit
85	Working tractor with an enclosed cab	8 hours
90	Shearing shed	2 hrs 30 min
90	Chainsaw idling	2 hrs 30 min
95	Angle grinder	48 min
95	Grain auger	48 min
95	Header	48 min
100	Tractor operating under load without a cab	15 min
100	Orchard sprayer	15 min
105	Pig shed at feeding time	4.5 min
120	Chainsaw cutting	8 seconds
140	Aircraft at 15 m	No safe exposure
140 dB(C)	Shotguns/rifles and other firearms far exceed the 140 dB limit	No safe limit: <i>Instantaneous damage</i>

Falls

Falls by a person from one level to another must also be managed if it is reasonably likely to cause injury to anyone.

If it is not reasonably practicable to eliminate the risk of a fall, then the duty holder must minimise the risk of a fall by providing adequate protection against the risk.

Refer to *Managing the risk of falls at workplaces code of practice 2011* for more information.

Animal handling

To provide a safe workplace, livestock handling facilities should be well designed and functional from both an animal handling perspective and workers' safety.

- Design and position stockyards and loading facilities using best practice design.
- Ensure the stockyards are suitable for the mob size.
- Separate people and animals wherever possible by having raised walkways and externally operated cattle crushes and gates.
- Install gates that can be closed and secured easily.

- Ensure livestock handlers have a good working knowledge of animal behaviour and temperament.
- Keep stockyards maintained, clear of muck and debris and control excessive dust.
- Make watering and feed points easily accessible.

Zoonotic diseases

Good hygiene of workers is one way to reduce the risk from zoonotic diseases. Most of them are spread by people coming in contact with the bodily fluids and excrement of animals. Where it is reasonably practicable to assume that a worker is at risk of contact with an animal that may carry Q Fever, the worker should be tested and immunised. Animals that pose a risk of Q Fever are cattle, sheep, goats and kangaroos.

For more information on zoonoses, such as Hendra virus, visit worksafe.qld.gov.au.

Asbestos

Materials that contain asbestos can be found in buildings, workplaces and dwellings built before 1990. Asbestos can also be found in a variety of building products and friction materials (e.g. cement sheeting or brake disc pads).

A person with management or control of a workplace must ensure asbestos at the workplace has been identified, is clearly indicated and recorded in a register and there is a written asbestos management plan (if asbestos has been identified or is likely to be there).

An asbestos register is not required if the building was constructed after 31 December 1989, no asbestos has been identified at the workplace and it is not likely to be present.

An asbestos register must be maintained so it is up to date and readily accessible, but it is not required for on-farm domestic dwellings such as homesteads, cottages, shearer's huts or other worker accommodation. Even cottages rented out privately do not need an asbestos register.

An asbestos management plan helps people with management and control of buildings and other relevant structures to prevent exposure to airborne asbestos fibres by their staff and site visitors. They must take reasonable steps to label and record asbestos, inform everyone on the premises where asbestos is present, outline the consequences of exposure to asbestos and implement appropriate control measures. The plan should set out clear aims, stating what, when and how it is going to be done.

The WHS Regulation also requires an asbestos management plan where naturally occurring asbestos is identified or likely to be present at a workplace. Two codes of practice that provide guidance on how to manage, control and safely remove asbestos in the workplace are: *How to manage asbestos in the workplace code of practice 2011* and *How to safely remove asbestos code of practice 2011*.

Templates on CD

- T1 Sample Health, safety and wellbeing policy
- T2 Management commitment checklist
- T3 Record of staff toolbox meeting
- T4 Risk assessment form
- T5 Risk register template
- T6 Task analysis template
- T7.1 Safe work procedure template
- T7.2 Safe work procedure template
- T7.3 Safe work procedure template
- T8 Induction checklist
- T9 Contractor induction statement
- T10 Training register
- T11 Suitable duties
- T12 Manual tasks risk management worksheet
- T13 Emergency information list
- T14 Queensland emergency plans checklist
- T15 Hazardous chemicals risk assessment checklist

OIR Disclosure Log

OIR Disclosure Log

Steps to Manage Fatigue on Farms

All farms must have fatigue management within their safety plan.

While there is no one-size-fits all solution, there are steps that can be taken to reduce the risks.

The Safe Work Australia Guide for Managing the Risk of Fatigue at Work has a wide range of actions that you should consider.

STEP 1

As part of the safety induction with workers and contractors, discuss how you manage fatigue on your farm, including identifying signs of fatigue and reporting procedures.

STEP 2

Structure work rosters to reduce potential for fatigue-related issues. This can include the length and timing of shifts and breaks, the number of shifts in a row and the days off between shifts.

STEP 3

Check to ensure workers have got enough sleep (you could use the fatigue self-assessment wall chart as a start). Have specific actions about what will happen if a worker has not had enough sleep.

STEP 4

Build on your discussions (STEP 1), workers watch for signs of fatigue in themselves and others. Have clear steps to allow control measures to be put in place when fatigue signs are reported to reduce risk.

STEP 5

Recognise fatigue and take steps to limit risks including (where practical):- working in pairs, changing tasks, moving safety critical and monotonous tasks to daytime, increasing breaks, napping, increasing frequency of checking on workers fatigue.

STEP 6

Use your experiences to provide feedback on fatigue and to keep improving your fatigue system and controls.



Tips for hazardous manual task training


For trainers:

- Workers must be provided with information about how to do their job safely.
- This tip sheet is the minimum information that should be included in your workers' hazardous manual tasks training. More information about **hazardous manual tasks** is available.
- Discuss the following sections and insert examples/photos from your workplace.







Hazardous manual tasks (HMT) are any manual tasks that have one or more risk factors which may cause a sprain or strain injury. They are preventable, yet the most common type of workplace injury.

Risk factors

There are six risk factors that lead to sprain and strain injuries.

 **Insert** photos of your workers doing tasks that have these risk factors (click example images to replace them).

 **Discuss** the work activities in your workplace that have one or more of these risk factors.

Exertion/force		Very tiring work that takes a lot of effort. Can be held for a period of time, repeated over and over, or occur suddenly.
Awkward postures		Postures that are uncomfortable or require significant bending, twisting or over-reaching that workers hold over a period of time.
Vibration		Sitting/standing on or holding vibrating equipment – can result in back pain or circulation issues in the hand or arm.
Duration		Doing a task continuously for more than 30 minutes, or more than a total of two hours over a whole shift can increase likelihood of injury.
Repetition		Using the same parts of the body to repeat similar movements over and over.
Mental stress/work pressure		Mental stress and work pressure can increase the risk of physical injuries when not managed as part of hazardous manual tasks.

Causes of risk factors and how to prevent them


The four causes of sprain and strain risk factors are:

1. **Work areas** (e.g. benches that are too low, working in tight areas where you can't freely move).
2. **What is being handled and how** (e.g. carrying a top-heavy container, handling objects with poor handles, pushing a trolley 100 metres up a slope, unloading pallets of stock all shift).
3. **Environmental factors** (e.g. uneven/slippery floor surfaces, poor lighting, hot/cold/windy/humid weather).
4. **Work organisation** (e.g. time pressures, work pace, lack of communication, no proactive maintenance, poor support, very boring or overly mentally demanding work).

Examples of controls (solutions) that are used to reduce sprain and strain risk factors include:

- mechanical aids (e.g. robotics, trolleys, overhead cranes, forklifts, pallet jacks, pallet raisers)
- adjustable equipment (e.g. bench height, pallet raisers)
- clear access (allows use of mechanical aids)
- adequate space to conduct tasks
- adequate lighting
- preventative maintenance of tools/equipment
- non-slip floors/surfaces
- work organisation reduces risk to workers (e.g. task variation, adequate work pace, time, staffing levels, resources, supervisor support)
- well defined communication
- specific safe work procedures that address HMT.

Performing specific hazardous manual tasks safely

 **Insert** examples of tasks in the table that are relevant to the workers attending training.
You may wish to complete this information before the training session


 **Discuss** the workplace tasks including the risk factors and the controls to minimise the risk of injury.


Hazardous manual task (describe the task)	Risk factors in the task (Exertion/force, awkward postures, vibration, duration, repetition, mental stress-work pressure)	Controls used for the task (mechanical aids, tools, equipment, safe work procedures)
<i>Example: moving steel plate</i>	<i>Example: high force, awkward postures</i>	<i>Example: use overhead crane to do this task, discussed the safe work procedure for moving steel plate with workers</i>

Reporting

Workplaces must have procedures for reporting hazards (including risk factors), faulty equipment, maintenance issues or any work-related symptoms including:

- pain, joint stiffness or muscle tightness
- swelling, numbness, pins and needles
- skin colour changes.

 **Insert** information about your workplace procedures for reporting hazards, faults, maintenance issues and symptoms.

 **Discuss** with workers the importance of and procedures for reporting sprains and strains.

Hazards	Procedure
Faulty equipment	List your workplace procedure here
Maintenance	List your workplace procedure here
Work-related symptoms	List your workplace procedure here


Record of training

Keep a record of any HMT training.

Date of session:

Trainer: Enter name/s here

Topics covered: Enter topics here

 **Insert** information about your HMT training.

Worker's name	Worker's signature
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	
Enter worker's name here	

*This factsheet is based on the Hazardous manual tasks Code of Practice 2011.

Labour hire agencies:

Managing the safety of on-hired workers

What is this guide about?

This publication is designed to assist labour hire agencies, group training organisations and other employers who provide workers or apprentices to client companies, to arrange placements that will not expose any worker to health and safety risks.

This publication outlines the workplace health and safety (WHS) duties of labour hire agencies. Please refer to the *Work Health and Safety Act 2011* for more specific information.

How can this information help you?

The following information provides an overview of your WHS responsibilities as a labour hire agency, including:

- consulting with workers on WHS matters
- taking reasonable steps to ensure risks are controlled at the host (client) workplace
- monitoring and reviewing the effectiveness of measures to protect workers.

What are the WHS duties of labour hire agencies?

Labour hire agencies and group training organisations are usually the direct employers of on-hired workers and have duties under the *Work Health and Safety Act 2011*. Even though you will not always have direct control or management of the workplaces involved, your duty remains as an employer to your on-hired workers.

This means that you have a legal duty to take action to establish that the workplace and its operations are safe before workers are placed with a client. You also need to continue monitoring workers' safety throughout the term of their placement.

Your client, as the host employer, also has WHS duties to labour hire workers and contractors.

It is important to understand that labour hire agencies and host employers both have duties for the safety of on-hired workers. A labour hire agency can not 'pass on' its legal duty, even if the host employer agrees to this.

If you are not convinced the host workplace is safe, you should not provide a worker to that workplace.

Effective consultation between labour hire agencies, their workers and their clients is fundamental to securing safe work placements. The labour hire agency should consult with their workers on WHS matters and support workers' rights to be represented. This responsibility is ongoing. You should also be assured of the appropriateness of your clients' WHS consultative arrangements as they relate to your workers.

Establishing your WHS objectives

To effectively manage the workplace health and safety issues associated with labour hire, WHS must be an integral part of the way you do business. You should establish:

- organisational objectives that include WHS goals
- a framework for achieving these goals
- roles and responsibilities for staff accountable for WHS risk assessments and decisions
- training to ensure staff have the right skills to manage on-hired worker placements.

You can begin by assessing your organisation's safety systems by using the *Labour hire agency workplace health and safety health check*¹. This will help to identify any gaps or deficiencies you need to address.

Key steps to ensuring safe work placements

Achieving the safe placement of on-hired workers presents WHS situations that are distinctive to the labour hire industry. Along with the general WHS duties of an employer, labour hire agencies should also take the following steps for every placement:

1. provide an induction
2. assess the placement
3. monitor the workplace.

1. Provide an induction

Information must be provided to the worker about the host workplace and the work tasks, including workplace hazards and their controls. This should include both generic and site-specific WHS training and induction. Usually, you will provide the general induction before placement and the host employer will provide the site-specific induction. You need to consult with the host employer to ensure all appropriate induction and training is covered. If adequate induction and training is not provided (by both the agency and host employer), the worker may be exposed to unacceptable risks from the moment they start work.

¹ See attached — Checklist 1. *Labour hire agency workplace health and safety 'health check'*.

² See attached — Checklist 2. *First contact checklist – host employer*.

2. Assess the placement

The agency must adequately and competently assess the client's worksite and the worker's capacity to undertake the required work safely prior to the placement being made.

You should keep a 'training register' to demonstrate that agency staff (permanent and temporary) have the required knowledge, skills and capabilities to safely carry out the roles assigned to them.

3. Monitor the workplace

The agency must monitor the host workplace to ensure that health and safety requirements are being implemented as expected and that no new or potential risks to health and safety have arisen.

Taking effective action

To effectively assess and control the WHS risks to the on-hired worker, the labour hire agency should:

1. gather information
2. visit the worksite
3. implement hazard controls and assess their adequacy.

1. Gather information

The first step in securing a safe work placement is to gather information about:

- the client (the prospective host employer)
- the work
- the worker
- the work environment.

The client

You must know about the client's operations and hazards, their WHS performance and their approach to managing safety in the workplace. The *First contact checklist – host employer*² provides an overview to making this assessment. Host employers should be made aware of Workplace Health and Safety Queensland's publication *Host employers: Managing the safety of labour hire workers* which will assist host employers to prepare for and manage the safety of labour hire workers.

Remember, it is your decision to place an on-hired worker or apprentice in a workplace. If you are not satisfied that the workplace is safe and the hazards are well managed, you should not provide personnel.

The work

You must obtain details of the jobs to be carried out by the worker, including information about:

- plant or equipment to be operated
- materials and substances to which the worker could be exposed
- specific hazards associated with any operation or activity.

Workplace arrangements for consultation and supervision should be clear to both the labour hire agency and the client, and details of induction and other training should be documented. Your duties are to ensure that consultation, supervision and training of your workers is carried out and ongoing. Describe any personal protective equipment (PPE) that is required and clarify who will provide it.

The worker

You must be confident that the qualifications and experience of the worker will enable them to undertake the work safely. Their level of skills, knowledge, competency, experience and training will all contribute to making this assessment. If the job requires certification, you must ensure on-hired workers have the appropriate and current licences.

The work environment

You can use information about the work environment to determine whether an employer is operating within a high-risk industry or an industry that has risks requiring specific control measures and operating certificates.

Hazards within the work environment must be identified and details should be recorded. The worker should know how to report any safety issues at the workplace. You should also obtain information about facilities and amenities.

2. Visit the worksite

The objective of worksite visits is to assess the WHS risks at the site and demonstrate commitment to carrying out your duty to your workers. The number of site visits required should reflect the degree of potential risk. Known high-risk industries are likely to require more frequent monitoring.

It is essential that the agency engages someone competent to make an informed WHS assessment of the worksite. This will require knowledge and understanding of the client's operations, workplace hazards and WHS management systems. Ongoing contracts should require that site visits are repeated at appropriate intervals to ensure no changes occur that could compromise safety.

The initial site assessment should be made before the worker is placed at another employer's workplace. The host employer's WHS documentation should reflect its safe operating procedures relevant to the work. The WHS policy manual, hazard-specific policies and procedures should be reviewed and a job safety assessment (JSA) carried out and documented.

¹ See attached — Checklist 3. *Assessment of host employer's system for managing workplace health and safety.*

The *Assessment of host employer's system for managing workplace health and safety*¹ provides a template for site visit observations. You can adapt this template to reflect the different circumstances of particular worksites.

3. Implement hazard controls and assess their adequacy

As part of the consultative process with the host employer, you should ensure action is taken to control WHS risks. Remember, the labour hire agency has control over whether or not a worker is placed with a client. Therefore, you must be satisfied that hazards will be managed effectively and your workers will not be at risk. Timeframes must also be agreed with the host employer to ensure that action is taken without undue delay.

Representatives of the labour hire agency and the host employer should document and sign off agreed risk control measures. Review the induction provided to workers to ensure it has taken place and that it was sufficient to address all WHS risks specific to the site and tasks.

A 'monitoring' inspection should be conducted and recorded. Use previous worksite assessments as a starting point. Discuss the job with the worker and meet with the client after the inspection to discuss the results and to resolve any issues or concerns you have identified.

For further information visit Workplace Health and Safety Queensland's website at www.worksafe.qld.gov.au or call **1300 362 128**.

Checklist 1.

Labour hire agency workplace health and safety ‘health check’

Who uses this form? Labour hire agency.

Purpose To assess how well a labour hire agency understands and manages workplace health and safety issues.

What should happen? The management representative of the labour hire agency uses this form to identify health and safety system shortcomings, and formulate plans to remedy these shortcomings. The assessment should be stored with the agency’s workplace health and safety records. Progress towards completing the remedial actions in the plans should be discussed at regular management meetings.

Please answer every question

Q.	Question If ‘no’, go to the action column and describe the steps necessary for your agency to conform to the question.	Yes	No	If ‘yes’, please answer these questions. If ‘no’, go to the action column and describe the steps necessary for your agency to conform to the question.	Action	
					Yes	No
1	Does one of your agency’s selection criteria for host employers include their systematic management of the hazards in the workplace that cause injuries?			Does your agency assess whether the host employer has a system for managing safety?		
				Does your agency assess the effectiveness of the host employer’s system for managing safety?		
				Does your agency have a documented process and tools for guiding this part of the client selection process?		
2	Does your agency assess the risk of injury to agency workers at host employer’s sites before each new placement?			Do the personnel carrying out these assessments possess trade or WHS skills that qualify them as competent to identify all features of the work environment that present a risk of injury?		
				Can personnel carrying out these assessments identify the specific control measures needed to reduce the risk of injury?		
				Is this process documented and does the document identify all risks of injury to which the worker may be exposed?		
				Has the person carrying out the assessment been trained and deemed competent in using the document?		

Continued

Checklist 1. Labour hire agency workplace health and safety ‘health check’ (continued)

Q.	Question	Yes	No	If ‘yes’, please answer these questions. If ‘no’, go to the action column and describe the steps necessary for your agency to conform to the question.	Yes	No	Action
3	Does the ‘assessor’ negotiate with the host employer to improve the management of safety issues?			Does the ‘assessor’: <ul style="list-style-type: none"> • ensure adequate risk control measures are in place before the agency provides workers • document the findings and agreed actions • follow up on agreed actions to verify completion? 			
4	Does the agency ensure workers are not supplied to a host employer before adequate measures to control the risk of injury are implemented?			Does the agency have a documented procedure for ensuring this always occurs?			
				If the agency has a bonus system that encourages salespersons/consultants to make placements, does the agency ensure that salespersons/consultants are not encouraged to make placements even though they know the workplace is unsafe?			
5	Does your agency obtain written information about the jobs, materials and substances, tools and equipment and the environment to which the worker will be exposed?			Do you gather written information about the work that is required of the agency worker?			
				Do you gather written details of the materials and substances to which the agency worker will be exposed?			
				Do you gather written information about the tools and equipment the agency worker will be using?			
				Do you gather written information regarding the environment in which the agency worker will be working (including supervision)?			

Continued

Checklist 1. Labour hire agency workplace health and safety 'health check' (continued)

Q.	Question If 'no', go to the action column and describe the steps necessary for your agency to conform to the question.	Yes	No	If 'yes', please answer these questions. If 'no', go to the action column and describe the steps necessary for your agency to conform to the question.	Yes	No	Action
6	Does your agency provide workers with induction training?			Does the induction training include: <ul style="list-style-type: none"> • information about the work and workplace in which the worker will be working • the risks of injury and how these are controlled by your client • what to do if asked to perform work different to that for which they are employed • the method for reporting safety concerns and any other issues to the agency? 			
7	Does the host employer provide agency workers with induction training?			Does the induction training include: <ul style="list-style-type: none"> • client specific information • how to report safety concerns/consultation procedures • information about the work and workplace in which the worker will be working • the risks of injury and how these are controlled by your client • job/site specific information? 			
				Is the induction training documented?			
				Does the agency verify that induction training has occurred?			

Continued

Checklist 1. Labour hire agency workplace health and safety 'health check' (continued)

Q.	Question	Yes	No	If 'yes', please answer these questions.	Yes	No	Action
	If 'no', go to the action column and describe the steps necessary for your agency to conform to the question.			If 'no', go to the action column and describe the steps necessary for your agency to conform to the question.			
8	Does your agency have a visitation schedule for monitoring the ongoing safety of workers by visiting the workplace?			Is there a documented system to validate workplace visits?			
				Does the monitoring visit seek to identify whether the risks of injury or illness continue to be adequately controlled for the agency worker?			
				Does the agency evaluate the performance of staff responsible for ensuring that agency workers are not placed at risk of injury or illness?			
9	Does your agency have a documented business plan?			Is workplace safety included in the business plan?			
				Are the safety goals clear and widely understood within the agency?			
				Are key and/or senior personnel responsible for achieving the safety goals?			
10	Does your agency ensure an avenue for consultation between the agency, the host employer and the agency workers?			Does the consultation: <ul style="list-style-type: none"> involve the WHSR committee if required take place when there are any changes to the working conditions or tasks involve the person in control of the workplace (usually the host employer)? 			

Checklist 2.

First contact checklist – host employer

Who uses this form? Labour hire agency.

Purpose To obtain preliminary information about the job, work environment and host employer.

What should happen? Keep the original at the labour hire agency in a file with the host employer's name on it.

Client company name: _____

Client address: _____

Client contact name: _____ Telephone: _____

Type of business: _____

1.	The client (host employer)	Client response	Comments
1.1	Structured approach to managing safety Is there a system for managing safety?		
1.2	Is there a documented system for managing safety?		
1.3	Historical WHS performance What is your WorkCover number?		
1.4	What is your industry premium rate?		
1.5	What is your premium rate?		
1.6	Is your premium rating greater than your industry premium? (This can indicate poor workplace health and safety management)		
1.7	Organisational size and structure of workforce Do you know how many full-time workers you have?		
1.8	Do you know how many casual and labour hire workers you have?		
1.9	Is there a much greater number of casual and labour hire workers to full-time workers?		
1.10	Historical claims performance Do you know how many injuries you have had in the past year?		
1.11	Will labour hire workers be working in these areas where injuries were mostly sustained?		

Conduct usual final checks (attach documents)

Continued

Checklist 2. First contact checklist – host employer (continued)

2. The work		Validated on workplace visit
2.1	Job title:	
2.2	Summary of tasks:	
2.3	Plant and equipment to be used:	
2.4	Substances and materials to be used:	
2.5	Hours of work:	
2.6	Intended duration of contract:	
2.7	Supervisor (name, position and contact details):	
2.8	Level of supervision to be provided (tick): <input type="checkbox"/> Continuous <input type="checkbox"/> Frequent <input type="checkbox"/> Occasional <input type="checkbox"/> Minimal <input type="checkbox"/> None	
2.9	Training provided before commencing work (tick): <input type="checkbox"/> Induction <input type="checkbox"/> On-the-job <input type="checkbox"/> Formal <input type="checkbox"/> None	
2.10	Is personal protective equipment required? (tick): <input type="checkbox"/> Yes <input type="checkbox"/> No	
3. The worker		Validated on workplace visit
3.1	Qualifications the worker should possess:	
3.2	Experience the worker should possess:	
3.3	Other selection criteria (medical/literacy/numeracy):	
4. The work environment		Validated on workplace visit
4.1	Physical location of work—address of workplace:	
4.2	Physical location of work (e.g. workshop, plant number etc.):	
4.3	To whom are safety issues to be reported? (name, role and contact details):	
4.4	How are safety issues to be reported? (tick): <input type="checkbox"/> verbally <input type="checkbox"/> in writing <input type="checkbox"/> other	
4.5	Is there a safety coordinator? (tick): <input type="checkbox"/> Yes <input type="checkbox"/> No	

Continued

Checklist 2. First contact checklist – host employer (continued)

4. The work environment		Validated on workplace visit
4.6	Is the safety coordinator? (tick): <input type="checkbox"/> full-time (safety only) <input type="checkbox"/> part-time (inc. other duties) <input type="checkbox"/> external consultant	

5.	Hazards in the workplace	Yes	No	Details	Validated on workplace visit
5.1	Loud noise				
5.2	Lifting				
5.3	Electrical				
5.4	Chemicals				
5.5	People and vehicles in same area				
5.6	Falling objects				
5.7	Dangerous machinery				
5.8	Vehicles/plant				
5.9	Unguarded equipment				
5.10	Heavy tools				
5.11	Stretching or reaching				
5.12	Slippery or cluttered floors				
5.13	Hazardous substances				
5.14	Manual tasks				
5.15	Other				

OIR Disclosure Log

Who completed the workplace visit and validated the information provided by the client?	
Name:	
Signature:	Date:
Proceed to placement (tick): <input type="checkbox"/> Yes <input type="checkbox"/> No	

Checklist 3.

Assessment of host employer's system for managing workplace health and safety

Who uses this form? Labour hire agency.

Purpose To identify the effectiveness of the host employer's health and safety management procedures.

What should happen? Give copies to the client's host employer. Keep the original copy at the labour hire agency in a file with the host employer's name on it. This tool should be used for evaluating the systematic approach to safety taken by potential host employers and used annually to evaluate progress made by the client in systematically managing safety. The more conditions to which a potential client can demonstrate that they conform, the greater confidence you can have of the client's ability to manage the safety of agency workers.

1. Host employer details			
Name:			Title:
Representative:			
Address:			
Completed by: <i>Full name (CAPITALS please)</i>			Title:
2. Commitment and policy		Yes	No
Health and safety issue		If no, what could we do about this?	
2.1	Has the host employer appointed a management representative (a senior manager who is responsible for making sure safety is managed properly)?		
2.2	Has the management representative undergone any workplace health and safety training?		
2.3	Does the host employer have a written workplace health and safety policy?		
2.4	Does the host employer have documented workplace health and safety responsibilities?		
2.5	Does the host employer have documented consultation procedures?		

Continued

Checklist 3. Assessment of host employer’s system for managing workplace health and safety (continued)

3. Planning Health and safety issue		Yes	No	If no, what could we do about this?
3.1	Does the host employer have a safety plan that clearly identifies objectives (e.g. eliminate injuries caused by grinders) relating to the client’s industry/business?			
3.2	If there is a safety plan is it more than a year old or out of date?			
3.3	If there is a safety plan, do the objectives have timeframes and are resources, personnel and responsibilities allocated?			
3.4	Does the host employer have hazard identification and risk assessment procedures?			
3.5	Does the host employer have in place a documented process to control major workplace hazards, such as plant, electricity and hazardous substances?			
3.6	Does the host employer manage risks consistent with the ‘hierarchy’ of control? (i.e. eliminating, substituting/isolating/engineering, and administrative/personal protective equipment).			
3.7	Has the host employer identified the most common causes of injury within their workplace?			
3.8	Does the host employer have a procedure for procurement in which safety is included?			
3.9	Does the host employer have written safe work procedures that reflect the way in which jobs should be done to ensure safety, or are they simply question/answer style work instructions?			
3.10	Does the host employer know which health and safety legislation applies to their business?			

4. Implementation Health and safety issue		Yes	No	If no, what could we do about this?
4.1	Does the host employer make people in their workplace aware of their health and safety responsibilities? If so, how?			
4.2	Does the host employer provide workers with information, training and supervision to ensure they perform the work safely?			
4.3	Does the host employer have a specific process in place for managing the safety of workers and contractors?			
4.4	Does the host employer have a formal induction process?			

Continued

Checklist 3. Assessment of host employer’s system for managing workplace health and safety (continued)

4.	Implementation Health and safety issue	Yes	No	If no, what could we do about this?
4.5	Does the host employer keep WHS and other training records?			
4.6	Does the host employer ensure incidents are reported, investigated and actions taken to prevent a recurrence, and are followed up? If so, how?			
4.7	Does the host employer provide workers with suitable personal protective equipment?			
4.8	Have the host employer’s workers been trained to correctly use, maintain and store personal protective equipment?			
4.9	Is there a process to involve workers in workplace health and safety issues (e.g. consultations/toolbox meetings with two-way flow of information/WHS committee meetings)?			
4.10	Does the host employer have a formal (documented and well-understood) process for workers reporting safety concerns?			
4.11	Does the host employer ensure workers adhere to the policies and procedures? If so how?			
4.12	Is there a documented process for identifying the hazards that can cause injury, harm or illness and for ensuring the risks are controlled?			
4.13	Are hazardous substances clearly labelled and safely stored?			
4.14	Is there a folder (or software system) that contains material safety data sheets for all substances used or stored at the workplace?			
4.15	Are residual current devices (safety switches) fitted to electrical equipment that is frequently moved?			
4.16	Are all circuits protected with earth leakage circuit breakers?			
4.17	Does the host employer have emergency procedures for the workplace that reflect the types of emergencies they could encounter?			
4.18	Have the host employer’s workers been trained in what to do in an emergency?			
4.19	Are periodic checks made to ensure emergency exits are well signposted, easily opened and clear of obstacles?			
4.20	Do workers have access to adequate first aid facilities, such as first aid kits and wash stations?			

Continued

Checklist 3. Assessment of host employer’s system for managing workplace health and safety (continued)

5. Management and evaluation Health and safety issue		Yes	No	If no, what could we do about this?
5.1	Does the host employer review the policies and procedures to identify whether they are working and still suitable?			
5.2	Is there a process to evaluate the recorded workplace injuries and illnesses?			
5.3	Does the host employer have a process in place to monitor their compliance with legal duties?			
5.4	Does the host employer have a process to periodically monitor health and safety in the workplace (i.e. to make sure the safety standard doesn’t deteriorate)?			
5.5	Does the host employer have a process to report work-related injuries or illnesses to the labour hire agency?			
5.6	Does the host employer have a process to report and record any notifiable incidents to Workplace Health and Safety Queensland?			
5.7	Are managers and supervisors reviewed against their management of safety?			
6. Management review Health and safety issue		Yes	No	If no, what could we do about this?
6.1	Does the host employer have a program of evaluating their approach to health and safety that identifies whether the approach is properly implemented and is effective in meeting their WHS objectives?			
6.2	Does the host employer have a process for using the audit information within their WHS planning for future years?			
6.3	Does senior management review the outcomes of audits?			

For further information visit Workplace Health and Safety Queensland’s website at worksafe.qld.gov.au or call **1300 362 128**.

INDUCTION CHECKLIST

Worker's name:	Position:
Supervisor's name:	Start date:
<p>1. Health and safety laws. Inform the worker that:</p> <p><input type="checkbox"/> the employer has a legal duty of care for workers, contractors, volunteers and visitors</p> <p><input type="checkbox"/> they have a legal duty of care for self, fellow workers and others</p> <p><input type="checkbox"/> the employer expects workers to behave in a safe manner and not put themselves or others at risk</p>	
<p>2. Reporting incidents, injuries and hazards. Advise the worker that:</p> <p><input type="checkbox"/> if an injury occurs, no matter how minor, they need to immediately report it to the supervisor</p> <p><input type="checkbox"/> if they identify broken/damaged equipment or something unsafe, it needs to be reported to the supervisor</p> <p><input type="checkbox"/> the first-aid kit and incident record forms are located at.....</p> <p><input type="checkbox"/> reporting hazards is essential and show the process</p>	
<p>3. Workers compensation. Inform the worker of:</p> <p><input type="checkbox"/> workers compensation insurance policy (WorkCover Qld or self-insured) and the internal policy</p> <p><input type="checkbox"/> injury notification forms and the reporting process – complete ASAP following an injury</p> <p><input type="checkbox"/> the suitable duties program that is available (may not be in 'usual' role or worksite)</p> <p><input type="checkbox"/> the process where a local doctor may be used for first contact after injury</p> <p><input type="checkbox"/> the need for a workers compensation medical certificate to be obtained even for medical expenses only</p>	
<p>4. Workplace tour. Introduce the worker and show the locations of the following:</p> <p><input type="checkbox"/> Introduce to co-workers and supervisors</p> <p><input type="checkbox"/> Introduce worker to HSR (Health and Safety Representative), first-aid staff, fire wardens, etc.</p> <p><input type="checkbox"/> Toilets, showers, sinks, drinking water, lockers, work station, storage areas</p> <p><input type="checkbox"/> Fire extinguishers, fire hoses, fire blankets, fire exits, exits, alarms, panic buttons, first-aid kit</p> <p><input type="checkbox"/> Assembly area (where to go if evacuating the work area)</p> <p><input type="checkbox"/> Workplace hazard and safety signs and what they mean</p> <p><input type="checkbox"/> Electrical switch board locations</p> <p><input type="checkbox"/> Dangerous areas (e.g. places where slips, trips and falls might occur) in the workplace</p> <p><input type="checkbox"/> Areas where workers can/cannot smoke</p>	
<p>5. Control of hazardous manual task risks. Explain to the worker the:</p> <p><input type="checkbox"/> procedures for identifying and reporting hazardous manual tasks</p> <p><input type="checkbox"/> symptoms that may indicate a sprain or strain and the need for early reporting of symptoms</p> <p><input type="checkbox"/> materials handling equipment at the workplace e.g. trolleys</p> <p><input type="checkbox"/> safe work procedures, including the use of tools, equipment and work techniques</p> <p><input type="checkbox"/> correct procedures to do the manual tasks involved in their job and have them show their understanding</p>	
<p>6. Hazardous chemicals safety. Show the worker:</p> <p><input type="checkbox"/> where hazardous chemicals are stored</p> <p><input type="checkbox"/> any important handling and storage details about the chemical</p> <p><input type="checkbox"/> where the SDS (Safety Data Sheet) register is kept</p> <p><input type="checkbox"/> where the SDS are kept and explain the purpose of a SDS</p> <p><input type="checkbox"/> any precautions for use with the chemical and emergency procedures e.g. eye wash station locations</p> <p><input type="checkbox"/> how to read an SDS and explain the importance of the information contained in the SDS e.g. is the chemical hazardous to health; precautions for use; spill management</p>	
<p>7. Emergency procedures. Explain to the worker:</p> <p><input type="checkbox"/> how and when to use fire extinguishers, hoses and blankets</p> <p><input type="checkbox"/> the procedures for other emergency situations e.g. a bomb threat call; if a hold-ups occurs; floods; etc.</p>	

8. Plant and equipment used at the workplace.

- List all equipment that could present a hazard e.g. ladders, hoists, compressors, electrical items
.....
.....

- Show and explain to the worker any:
 - Risks and hazards with each piece of plant and the hazard reporting process
 - Guards
 - 'Danger' and 'out of service' tags
 - 'Lock out' procedures
 - Emergency stops
 - What to do if the equipment requires repairs
 - Inspection checklists, maintenance processes and schedules
 - Equipment protection systems e.g. safety switches
 - Electrical safety e.g. keeping water away from electrical equipment
 - Anything specific you must not do:

9. Safe systems of work. e.g. SWMS – Safe Work Method Statements; SWP – Safe Work Procedures

- Show and explain relevant work procedures to the worker
- Explain to the worker the risk assessment process and current controls
- Tell the worker that they need to notify the supervisor of any problems with a work task
- The supervisor is to notify the worker of changes to the SWMS or provide retraining for changes to a SWP
- Explain the process and outcomes for failure to comply with safety directions and site instructions

10. Personal Protective Equipment (PPE) is for personal use and not to be shared. *Show the worker:*

- where PPE is stored or issue the new worker with PPE
 - when PPE should be worn (stress importance)
 - how to fit and use PPE correctly
 - how to clean and maintain PPE
 - how to store PPE when not in use
 - what to do if PPE is damaged i.e. PPE replacement policy
- Check competency. Get the worker to:*
- demonstrate the use of PPE
 - tell you when they will need to wear their PPE
- The employer will provide the listed PPE:*

.....
.....

11. Consultation process and other policies and procedures. *Explain to the worker the:*

- times of safety/staff meetings where safety issues can be raised
- purpose of "toolbox talks" and/or pre-start meetings and when they will be held
- process for access and availability to further training
- company policy on how to deal with aggressive clients
- workplace harassment procedures and note that workplace bullying will not be tolerated
- smoking policy, 'Quit' smoking assistance programs, healthy worker initiatives
- proper use of company property e.g. vehicles, phones, computer, internet access

Induction sign-off	Date
Worker's signature:	
Supervisor's signature:	



Australian Government
**Department of Transport and
Regional Services**

Issued by the
Administrator of Vehicle Standards
in consultation with the
**Australian Motor Vehicle Certification
Board**
comprising Commonwealth, State and Territory representatives

NATIONAL CODE OF PRACTICE

STANDARDS BULLETIN VSB 5A

**COMMERCIAL MANUFACTURE AND
INSTALLATION OF ADDITIONAL SEATS**

Issue 2.0 - Revision 1.0

Supersedes document dated December 1996

This Code does not cover administrative requirements imposed by State,
Territory and Federal jurisdictions

This Code of Practice is intended as a guide for manufacturers
and installers of additional seats

Department of Transport and Regional Services - Vehicle Safety Standards
GPO Box 594 Canberra ACT 2601
Telephone (02) 6274 7111 Fax (02) 6274 7714

Table of Contents

SCOPE	3
INTRODUCTION	3
CAUTION.....	3
APPLICABILITY	4
GENERAL.....	4
SUBMISSION OF EVIDENCE.....	5
SEAT LOCATION REQUIREMENTS.....	5
SIDE-FACING SEATS.....	6
CHILD RESTRAINT ANCHOR POINTS	6
RELOCATION OF SPARE WHEEL	6
INTERFERENCE WITH EXISTING SAFETY EQUIPMENT.....	6
LABELLING OF SEATS	7
SEAT CONSTRUCTION	8
PADDING REQUIREMENTS	8
PADDING MATERIAL	9
INSTALLATION KIT	9
SPACE REQUIREMENTS	10
Head Space.....	10
Leg Space	10
Seat Width.....	11
SEAT STRENGTH	11
Front-facing Seats	11
Rear-facing Seats.....	11
SEAT BELTS.....	12
SEAT BELT ANCHORAGES.....	12
HEAD RESTRAINTS.....	13
Rear-facing Seats.....	13
Front-facing Seats	13
APPENDIX A - DEFINITION OF TERMS.....	16
Seat Reference Point	16
Torso Reference Line.....	16
FIGURE 1 - HEAD AND LEG SPACE.....	17
FIGURE 2 - TEMPLATE FOR DETERMINING HEAD AND LEG SPACE.....	18
FIGURE 3 - DIMENSIONS OF HEAD RESTRAINTS	19

SCOPE

This Code of Practice provides information for vehicle manufacturers, vehicle modifiers, seat manufacturers and seat suppliers to assist them in ensuring that the additional seats constructed, supplied and/or installed by them comply with an acceptable level of occupant protection.

INTRODUCTION

This Code of Practice is to be used for the manufacture and installation of additional seats in motor vehicles on a commercial basis.

Additional adult seats installed in new vehicles first offered for sale in Australia must comply with the Australian National Standards for new vehicles, known as the Australian Design Rules (ADRs). The ADR which specifically applies to seats is ADR 3/...

All other seats should comply with the latest edition of this Code of Practice.

For those people who may wish to construct a one-off additional seat and to install it in their own vehicle they should refer to the latest edition of Vehicle Standards Bulletin No. 5B (VSB 5B) *National Guidelines - Construction and Installation of Additional Seats by Individuals*.

CAUTION

Seats and seat belts play a critical role in occupant protection and personal comfort. The seat and seat belt can be subjected to substantial forces in a crash so they must be carefully designed, constructed and installed to ensure that they provide adequate protection.

Passenger vehicles generally provide a higher level of safety than goods carrying vehicles.

Where additional seats fitted to a new vehicle result in a change of vehicle category from a goods carrying vehicle (Category N series) to a passenger carrying vehicle (Category MA, MB and MC) the modified vehicle must be certified as a vehicle which has undergone a second stage of manufacture and be affixed with a second stage of manufacture plate.

If a goods carrying vehicle which has already been registered and used is converted to a passenger carrying vehicle by the fitting of additional seats engineering evidence must be provided that the vehicle meets those higher safety standards.

A goods carrying vehicle becomes a passenger carrying vehicle when the total number of seating positions multiplied by 68 kgs is 50 per cent or more of the vehicle's load carrying capacity.

APPLICABILITY

This Code of Practice is applicable to additional seats for cars, station wagons, vans, utilities, campervans, small buses and light trucks.

The ADR Vehicle Categories for these vehicles are:

- MA - passenger cars;
- MB - forward control passenger vehicles;
- MC - off-road passenger vehicles;
- MD - light omnibus;
- NA - light goods vehicles; and
- NB 1 - medium goods vehicles up to 4.5 tonnes Gross Vehicle Mass (GVM).

GENERAL

For the purpose of this Code of Practice, additional seats are divided into three categories to allow seats to be designed for occupants of different size and mass. The seat categories are:

- Category 1 - Seats intended for use by adults;
- Category 2 - Seats restricted to use by children up to 12 years of age; and
- Category 3 - Seats restricted to use by children up to 8 years of age.

Category 2 seats may only be installed when the seat manufacturer or installer can demonstrate that the head space and leg space available are only sufficient to accommodate a child up to a 50 percentile 12 year old male child.

Category 3 seats may only be installed when the seat manufacturer or installer can demonstrate that the head space and leg space available are only sufficient to accommodate a child up to a 50 percentile 8 year old male child.

This is aimed at ensuring that the possibility of a seat being occupied by a person larger or heavier than the seat is designed to accommodate is reduced to a minimum.

Although this Code of Practice uses a template to determine head and leg space and for positioning the torso reference line to enable head restraint position and size to be determined; head space, leg space and head restraint position and size data obtained by using an H-Point Machine, as defined in SAE J826 November 1962 or SAE J826 APR 80, will be accepted.

SUBMISSION OF EVIDENCE

Where a State or Territory Registering Authority requires evidence to demonstrate that an additional seat installation complies with the requirements of this Code of Practice, the evidence must be submitted in the form of engineering calculations or test results certified by an engineer with experience in structural design, or as otherwise required by the registering authority.

SEAT LOCATION REQUIREMENTS

Careful consideration should be given to the suitability of the vehicle before additional seat(s) are installed. Aspects that must be considered when assessing the suitability of a vehicle for the installation of additional seats are:

- the space available in the vehicle must be sufficient to accommodate the additional seats and occupants
 - specifications regarding the space required for additional seats and occupants are set out in Figure 1;
- additional seats should not be installed in the trays of utilities or trucks unless adequate roll-over protection is provided
 - fibreglass, plastic and light steel canopies do not provide adequate roll-over protection;
- additional seats should not be installed in the vehicle in a location where there is a high probability that occupants will be injured in a crash
 - for example there is a high probability that an occupant in a rear facing seat in the rear of a small station wagon would suffer leg injuries in a rear end collision, because the occupant's legs are located in an area that will crumple as a result of the impact forces;
- additional seats must not impose any loads on existing seats, unless it is demonstrated that the original seats can carry the additional loads;
- access to and from all seats should be sufficient to allow a person to enter and exit the vehicle, operate door latches, folding seat controls, etc without assistance;
- the installation of seats in a vehicle's load space is not acceptable where the only access can be obstructed by the load;
- where existing seats are modified to improve access, eg by installing a folding mechanism, the modifier must demonstrate that the modified seats continue to comply with the latest edition of ADR 3/ ... ;

- fittings, including seat backs, should be padded to prevent injury where they intrude into the head space shown in Figure 1 of this Code;
- an assessment of the effect of the additional seats, head restraints (if fitted), and occupants on rearward visibility should be made
 - additional rear vision mirrors may be required in cases where rearward vision is restricted.

SIDE-FACING SEATS

Although side-facing seats may be fitted, front-facing and rear-facing seats are preferred because they provide a higher level of safety.

CHILD RESTRAINT ANCHOR POINTS

Child restraint anchorages must comply with the requirements of the latest edition of ADR 34/....

Child restraint anchorages must be provided in accordance with the latest edition of ADR 34/.... where an additional seat equipped with an adult seat belt assembly has been fitted.

Child restraint anchorages must not be installed to permit restraining devices such as baby capsules and child seats to be used on rear-facing or side-facing seats.

RELOCATION OF SPARE WHEEL

Where additional seats are installed in the spare wheel well of the vehicle, provision should be made for relocating and securing the spare wheel.

If the spare wheel is relocated within the vehicle, the spare wheel mounting should be of sufficient strength to withstand a deceleration of 20 times the weight of the spare wheel and its mounting in the forward, rearward or sideways direction.

The spare wheel and its mounting must not cause a hazardous projection for the vehicle's occupants.

INTERFERENCE WITH EXISTING SAFETY EQUIPMENT

The additional seats, relocated spare wheel, etc, must not prevent or restrict the use of existing safety devices such as seat belts and child restraint anchorages, unless complying alternatives are provided.

Note:

Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints.

LABELLING OF SEATS

A plate or label made of durable material must be fitted in a conspicuous place near the additional seat. The plate or label must be made of a material which is not easily removed or defaced in normal use. The plate or label must display the following:

All seats:

The name of the manufacturer/installer; and the statement:

**"This seat has been manufactured and installed
to comply with Code of Practice Ref No. VSB 5A"**

In cases where the manufacturer is not the installer of the seat, the necessary information may appear on more than one label.

For Category 2 and 3 seats the following warning labels must also be provided and must be affixed in a conspicuous place near the additional seat(s).

Category 2 seats:

The following warning with letters not less than 5 mm high:

WARNING

**THIS SEAT MUST NOT BE USED BY A PERSON
HEAVIER THAN 38 kg OR WITH A
SEATED HEIGHT GREATER THAN 780 mm**

Category 3 seats:

The following warning with letters not less than 5 mm, high:

WARNING

**THIS SEAT MUST NOT BE USED BY A PERSON
HEAVIER THAN 26 kg OR WITH A
SEATED HEIGHT GREATER THAN 700 mm**

Note:

The seated height is the vertical distance between a flat surface on which the person is seated and the top of the person's head.

SEAT CONSTRUCTION

Seat frames must be constructed so that there are no sharp edges or projections which can cause injury to occupants in an impact. Seat padding and upholstery must be securely attached to the seat frame to prevent movement during impact. Loose cushions must not be used.

PADDING REQUIREMENTS

Additional front-facing or side-facing seats must be covered with at least a 25 mm thickness of padding material within the '*Head Contact Area*'.

For front-facing seats:

The '*Head Contact Area*' is defined as that area forward of the seating reference point contained within a vertical longitudinal plane at each end of the additional seat(s) cushion, a horizontal plane through the seating reference point and an arc of radius R from the seating reference point, where R is 835 mm for Category 1 seats, 715 mm for Category 2 seats and 625 mm for Category 3 seats.

For side-facing seats:

The '*Head Contact Area*' is defined as that area towards the front of the vehicle from the centreline of the additional seating position(s) contained within a vertical longitudinal plane through the rearmost point (relative to the direction in which the seat is facing) of the seat back, a vertical longitudinal plane at the foremost point (relative to the direction in which the seat is facing) of the seat cushion, a horizontal plane through the seating reference point and an arc of radius R towards the front of the vehicle from the seating reference point at the centreline of each additional seating position, where R is 835 mm for Category 1 seats, 715 mm for Category 2 seats and 625 mm for Category 3 seats.

PADDING MATERIAL

Where padding is required by this Code then the following padding materials, or their equivalent, are acceptable:

- semi-rigid moulded polyurethane with a density of approximately 300 kg/m³
- self-skinning rigid moulded polyurethane with a density of approximately 300 kg/m³
- closed-cell polyethylene foam with a density of approximately 300 kg/m³
- closed-cell EVA foam with a density of approximately 300 kg/m³

Foams typically used for upholstery work are not acceptable for occupant protection padding.

INSTALLATION KIT

Seats supplied by seat manufacturers or suppliers for installation by others must include an installation kit which must contain the following:

- Installation Instructions

Comprehensive and easily understood installation instructions which cover all of the makes and models of vehicles that the seat is intended to fit. The installation instructions must be such that when correctly followed, the seat installation will comply with all the requirements of this Code of Practice.

- Installation Hardware

Installation hardware such as bolts, nuts, lock washers, spacers and backing plates sufficient to allow the seat, seat belts, etc. to be installed correctly.

- Seat Label

The seat label or plate as required by the section [LABELLING OF SEATS](#).

SPACE REQUIREMENTS

Head Space

No part of the vehicle body or component of the roof installation may project below the shaded zone shown in Figure 1.

The head space requirement must apply to each additional seating position.

The head space is to be determined using the template as shown in Figure 2. The template is to be positioned on the centreline of the seat with the point D located at the contact point of the template and the seat back. The centre of the radius A is to be located at the point C. Dimension A is shown in Figure 1 for the particular seat category.

The head space is limited by 45 degrees forward and 25 degrees rearward from the vertical, relative to the direction that the seat is facing.

If the seat back angle is adjustable, it is to be set at no more than 25 degrees rearward from the vertical, relative to the direction that the seat is facing. If the seat height is adjustable, it is to be set in the lowest position when the above measurement is taken.

Leg Space

No part of the vehicle body, vehicle equipment or another seat may project into the shaded leg space shown in Figure 1.

The leg space must extend not less than 35 per cent of the seat width on either side of the centre line of each seating position.

The leg space is to be determined using the template as shown in Figure 2. The template is to be positioned on the centreline of the seat with the point D located at the contact point of the template and the seat back. The centre of the radius B is to be located at the point C. Dimension B is shown in Figure 1 for the particular seat category.

The leg room zone is limited by:

- a line 45 degrees above the horizontal and passing through the point C; and
- a line 15 degrees rearward of the vertical, (relative to the direction that the seat is facing), and tangential to the radius B and extending down to the floor.

If the seat back angle is adjustable, it is to be set at no more than 25 degrees rearward from the vertical, relative to the direction that the seat is facing.

If the seat's position is adjustable, it is to be set in the rearmost position, relative to the direction the seat is facing, when the measurement is taken.

Seat Width

The minimum seat width per occupant for each category of seat must be:

Category 1 - 410 mm;

Category 2 - 300 mm;

Category 3 - 250 mm.

SEAT STRENGTH

Front-facing Seats

Front-facing Category 1 seats and their anchorages must comply with the requirements of the latest edition of ADR 3/...

Front-facing Category 2 and 3 seats and their anchorages must comply with the requirements of the latest edition of ADR 3/... with the exception that the 530 Nm moment about the seating reference point for each seating position is reduced to:

Category 2 Seats - 300 Nm;

Category 3 Seats - 205 Nm.

Rear-facing Seats

Rear-facing seats and their anchorages must comply with the requirements of the latest edition of ADR 3/....

In addition a rear-facing seat should withstand, without imposing any load on any other seat in the vehicle, a load equivalent to twenty times the weight of the seat and its occupant(s) applied in the forward direction relative to the vehicle.

Seats intended to accommodate more than one occupant should withstand the loads applied by all occupants simultaneously. This requirement should be demonstrated with the occupant test loads uniformly distributed over the backrest and head restraint of the seat.

The occupant mass to be used to determine the test loads must be:

Category 1 Seats - 68 kgs;

Category 2 Seats - 38 kgs;

Category 3 Seats - 26 kgs.

SEAT BELTS

Seat belts must be fitted to all additional seating positions to restrain the occupants under impact conditions.

All outboard seating positions must be fitted with lap sash or harness seat belts except where there is no permanent structure for mounting the upper sash or anchorages point, as set out in the latest edition of ADR 5/..., in which case lap belts must be fitted.

All inboard seating positions must be fitted with either a lap belt or a harness belt.

All side-facing seats must be fitted with lap belts only.

Seat belts must comply with the latest edition of ADR 4/....

SEAT BELT ANCHORAGES

Seat belt anchorages must comply with the latest edition of ADR 5/--- with the exception that the anchorage test loads for Category 2 and 3 seats are reduced to:

Category 2 seats - 50 percent of test load nominated in the latest edition of ADR 5/...;

Category 3 seats - 35 percent of test load nominated in the latest edition of ADR 5/....

For testing seat belts, body blocks which are scaled adult body blocks using factors of 0.85 for Category 2 seats and 0.75 for Category 3 seats must be used.

HEAD RESTRAINTS

Rear-facing Seats

All rear-facing seats must be fitted with head restraints which provide an impact surface which meets the dimensional requirements as shown in Figure 3 for the particular category of seat.

Head restraints on rear-facing seats may be provided with vertical and fore-and-aft adjustment, however, they should not be removable.

The testing of the strength of head restraints on rear-facing seats is included in the test to determine the strength of the seat. (Refer to the section on Seat Strength.)

Front-facing Seats

The fitting of head restraints to front-facing seats is optional, however, it is recommended that head restraints be fitted as they reduce whiplash injuries in rear end collisions.

Head restraints, where fitted, on front-facing Category 1 seats must comply with the latest edition of ADR 22/..

Head restraints, where fitted, on front-facing Category 2 and 3 seats must meet the following requirements:

- head restraints may be provided with vertical and fore-and-aft adjustment and they may be removable without the use of tools;
- head restraints must provide an impact surface which meets the dimensional requirements as shown in Figure 3 for the particular category of seat;
- head restraints must be constructed and contoured to decelerate horizontal movements of the occupant's head without concentrations of load on it;
- all solid structural members of the head restraint must be padded with high density foam of sufficient thickness to prevent injury to the occupant's head. Refer to Padding Requirements for the specification of a suitable high density foam;

- the strength of the head restraints on Category 2 and 3 seats must be tested using the test requirements for head restraints as set out in the latest edition of ADR 22/... for static test conditions with the exception that the 370 Nm moment about the seating reference point for each seating position is reduced to:

Category 2 Seats - 210 Nm;

Category 3 Seats - 145 Nm;

- to establish the displaced torso reference line the moment about the seating reference point may be applied directly to the seat back frame, ie a 3-dimensional manikin does not have to be used;
- the maximum load of 890 N applied to the head form at a point 635 mm along the torso reference line from the seating reference point is:

Category 2 Seats - a maximum load of 590N applied to the head form at a point 535 mm along the torso reference line from the seating reference point;

Category 3 Seats - a maximum load of 470N applied to the head form at a point 460 mm along the torso reference line from the seating reference point;

- the displacement of the rearmost point of the head form perpendicularly rearward of the displaced torso reference line shall not be more than:

Category 2 Seats - 142 mm;

Category 3 Seats - 130 mm.

Note:

The seat reference point is to be determined using the template shown in Figure 2. The template is to be positioned on the centreline of the seat with the point D located at the contact point of the template and the seat back. The seating reference point is located at point C.

The above displacements allow for:

- i. the 36 mm difference in the 'H-point to back of body' location for a child torso reference line relative to an adult torso reference line;
- ii. a nominal compression of the seat back upholstery under a body form 'displaced torso reference line' test of 20 mm; and
- iii. displacements of the head form for Category 2 and Category 3 head restraints, relative to the 102 mm displacement of the head form for adult head restraints, of:

Category 2 seats - 86 mm;

Category 3 seats - 74 mm.

The nominal displaced torso reference line from which the head form displacement is measured is the torso reference line parallel to the uncompressed seat back cushion location when the specified moment about the seating reference point for the particular category of seat is applied to the seat back frame.

OIR Disclosure Log

APPENDIX A - DEFINITION OF TERMS

Seat Reference Point

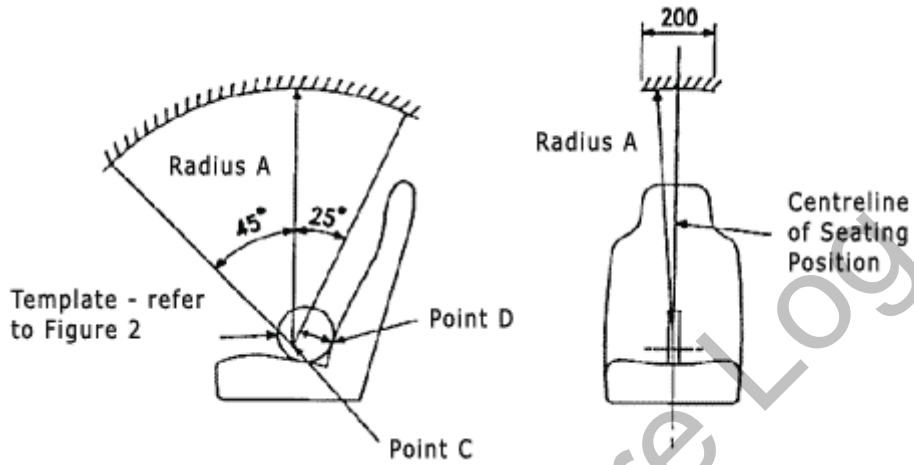
The seat reference point is to be determined using the template as shown in [Figure 2](#). The template is to be positioned on the centreline of the seat with the point D located at the contact point of the template and the seat back. The seating reference point is located at point C.

Torso Reference Line

A line passing through the seat reference point and parallel to the seat back. For fully adjustable seat backs, it is a line passing through the Seat Reference Point and at a maximum angle of 30 degrees to the vertical.

OIR Disclosure Log

FIGURE 1 - HEAD AND LEG SPACE



DIMENSION	CATEGORY OF SEAT		
	1	2	3
A	710 Min	710 Max 630 Min	630 Max
B	460 Min	370 Min	300 Min

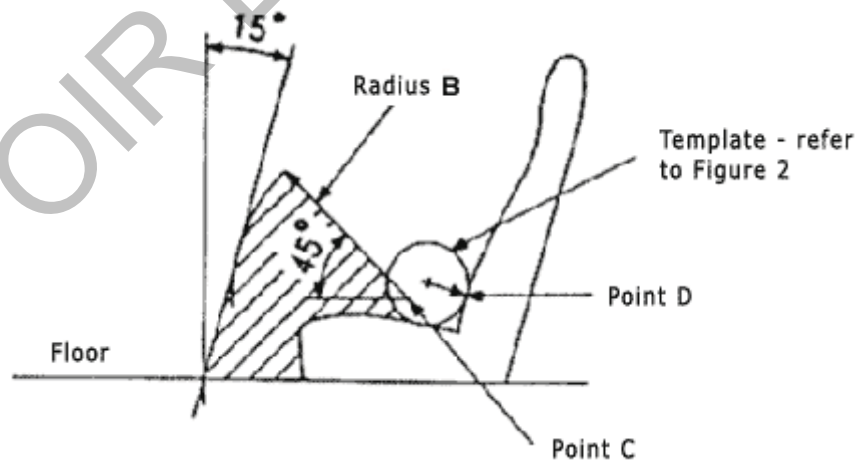


FIGURE 2 - TEMPLATE FOR DETERMINING HEAD AND LEG SPACE

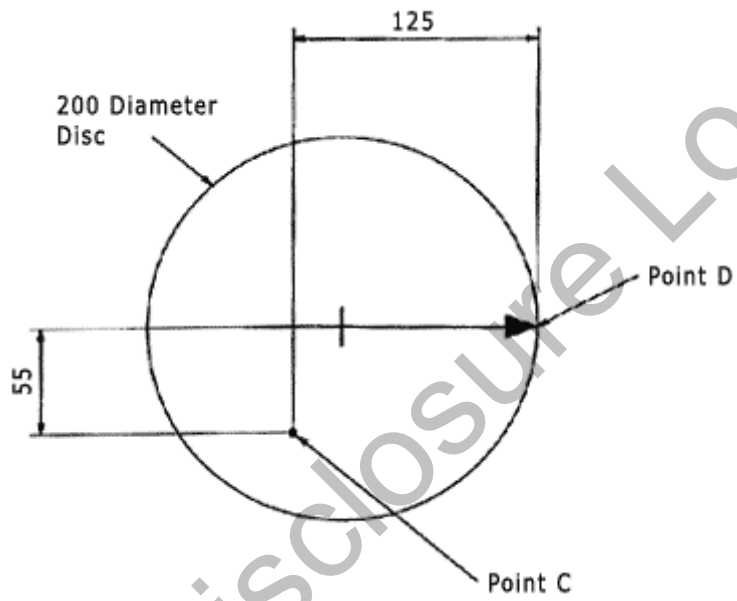
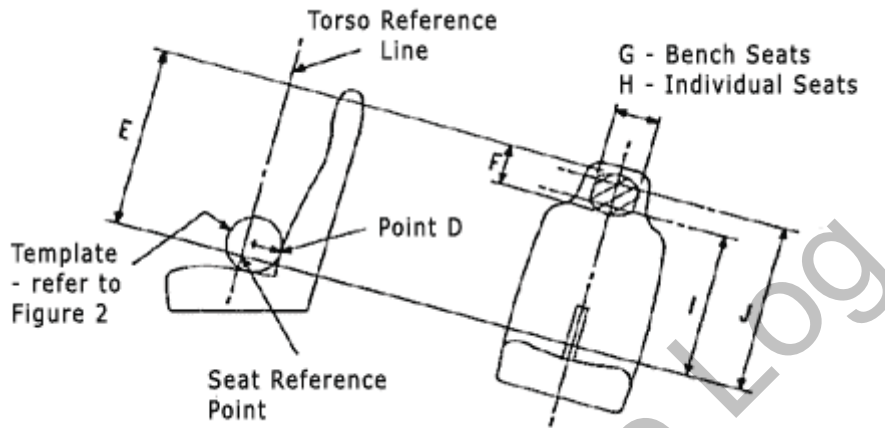


FIGURE 3 - DIMENSIONS OF HEAD RESTRAINTS



DIMENSION	CATEGORY OF SEAT		
	1*	2	3
E	700 Min	600 Min	525 Min
F	115 Min	115 Min	115 Min
G	250 Min	250 Min	250 Min
H	170 Min	170 Min	170 Min
I	585 Min	485 Min	410 Min
J	635 Min	535 Min	460 Min

* Applies to Rearward Facing Seats

SEAT REFERENCE POINT - Point C on the template shown in Figure 2 with the template positioned on the centreline of the seat with point D located at the contact point of the template and the seat back.

TORSO REFERENCE LINE - A line passing through the Seat Reference Point and parallel to the seat back. For fully adjustable seat backs, a line passing through the Seat Reference Point and at a maximum angle of 30- degrees to the vertical.



RTI 20059 of Industrial Relations