



RIIRIS301D APPLY RISK MANAGEMENT PROCESSES PRESENTATION 1



1.1 INTRODUCTION

This training material is based on the unit of competency **RIIRIS301BD Apply Risk Management Processes**.

It covers the application of risk management processes in resources and infrastructure industries such as civil construction, mining and drilling.

The course content includes:

- Identifying hazards.
- Assessing risk and identifying unacceptable risk.
- Identifying and recommending risk controls.
- Contributing to the implementation of risk controls.
- Reviewing safety system documentation.



1.1.1 RISKS AND HAZARDS



A **RISK** is the chance of a hazard hurting you or somebody else or causing some damage.

A **HAZARD** is the thing or situation that causes injury, harm or damage.

If you can remove, or at least control, a **HAZARD** you can reduce the **RISK** involved.

1.1.2 RISK MANAGEMENT

Risk Management is defined as: The process of reducing or managing the risks when working with a hazard or in a hazardous situation. It should take into consideration the context of the organisation and worksite.



1.1.2 RISK MANAGEMENT

The risk management process involves 3 main stages:

1. **Risk/Hazard Identification** – to identify all the possible events and situations in the workplace where people may be exposed to injury, illness or disease.
2. **Risk/Hazard Assessment** – which comprises:
 - (i) **Risk/Hazard Analysis** – to develop an understanding of the risk, its causes and sources, their positive and negative consequences, and the likelihood of those consequences occurring.
 - (ii) **Risk/Hazard Evaluation** – to assist in making decisions, based on the outcomes of risk analysis, about which risks need treatment and the priority for carrying out the treatments. Evaluation can lead to a decision to undertake further analysis.
3. **Risk/Hazard Treatment** – to select one or more options for modifying risks and implement those options.



1.1.2 RISK MANAGEMENT



Monitoring and review through consultation and communication with others should be planned as part of each stage of the risk management process.

Risk management is most successful when it becomes fully integrated into the normal operating procedures, processes and systems of an organisation or site.

1.1.2 RISK MANAGEMENT

Like all good management practices, risk management should be driven from the top down and be recognised as the responsibility of everyone.

Senior managers and team leaders have a particular responsibility in demonstrating commitment to the implementation and use of the risk management process.



1.1.2.1 TAKE 5 RISK MANAGEMENT

A Take 5 is a quick and simple tool for use in the field to conduct a **HAZOB** (Hazard Observation).

The process allows individuals to consider the hazards and risks associated with a task.

The process of evaluation can be mentally undertaken and does not necessarily involve the completion of paperwork.



It can be used to identify hazards and assess the risks associated with activities where documentation or a procedure already exists or when conditions (such as weather) change.

1.1.2.1 TAKE 5 RISK MANAGEMENT

The Take 5 requires workers to review their workplace and identify any hazard.

Once identified, the hazard is controlled, where possible, and recorded in accordance with site procedures.



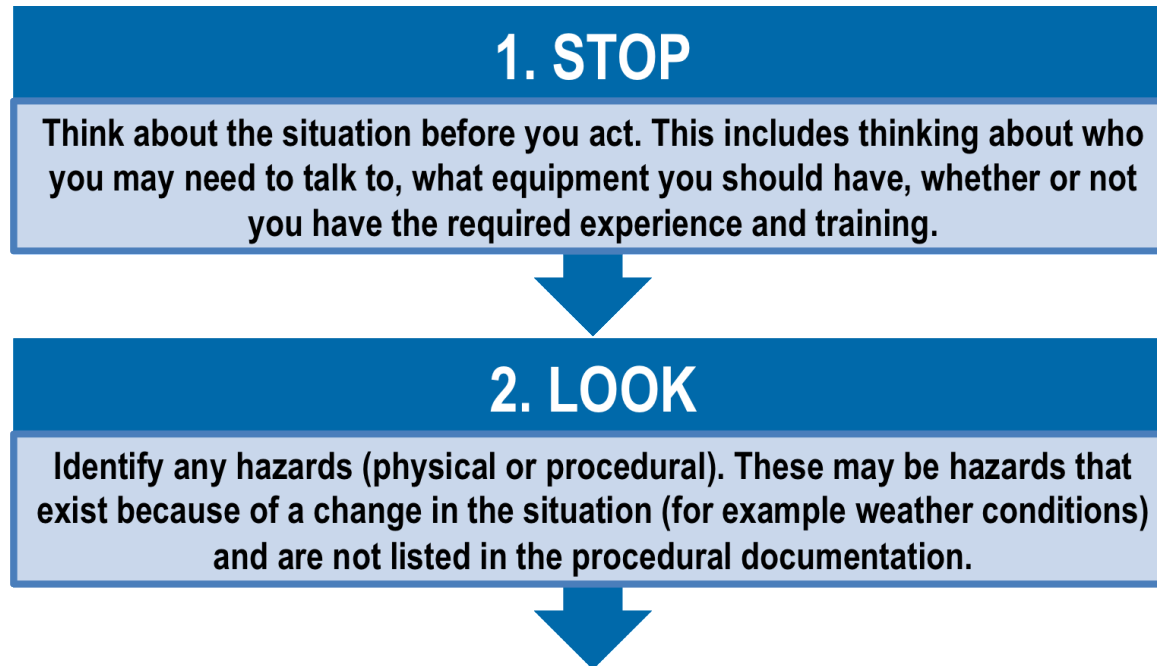
Sites generally have a Take 5 book, checklist or process that is used as standard procedure in line with documentation and processes such as SWMS/JSA/JHA/JSEA and the mine safety management system.

If books or checklists are used make sure you always have one with you.

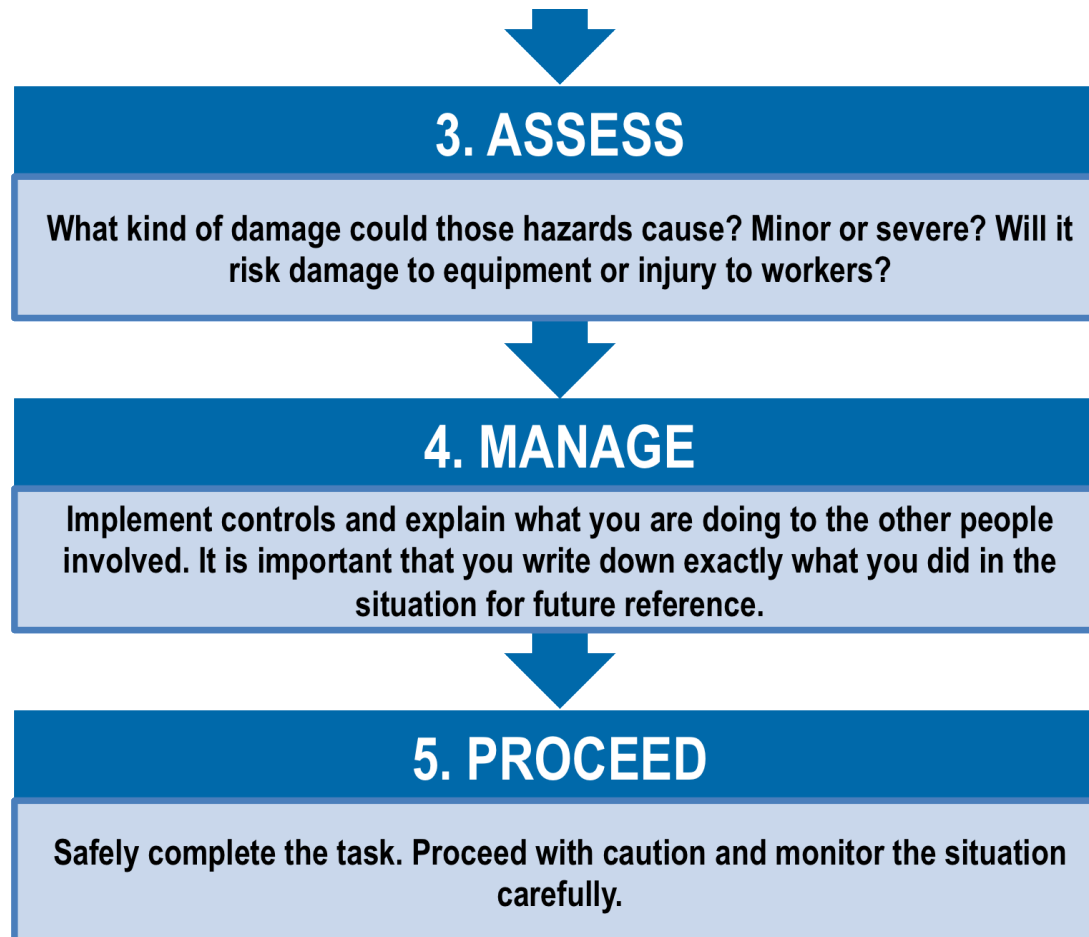
1.1.2.1 TAKE 5 RISK MANAGEMENT

The Take 5 system uses 5 simple steps to identify and deal with any hazards.

The steps are:



1.1.2.1 TAKE 5 RISK MANAGEMENT



1.1.3 CONSULTATION AND COMMUNICATION

Consultation and communicating with others is an essential part of risk management.

It should take place at all stages of the process.

Risk/hazard identification and coming up with ways of controlling or treating them involves talking to the people with knowledge of the situation, or who are directly affected by any action you take.



1.1.3 CONSULTATION AND COMMUNICATION



An important part of the risk management process is to demonstrate teamwork and consult with:

- All team members.
- Employers/PCBUs.
- Supervisors.
- The relevant Occupational Health & Safety/Work Health & Safety (OHS/WHS) representatives.

This will help to ensure that risks and hazards are not only effectively identified but that the people who are controlling and treating them are clear about their role and responsibilities in the risk management process.

1.1.3.1 BENEFITS OF CONSULTATION



Consultation can have the following significant benefits:

- Contribution to risk/hazard identification.
- Development/improvement of solutions.
- Team commitment to control.
- Ongoing evaluation.

1.1.3.1 BENEFITS OF CONSULTATION

Contribution To Risk/Hazard Identification

The following benefits arise when team members contribute towards the risk/hazard identification process:

- The work team has intimate knowledge of the work environment and will most likely be the first to identify hazards.
- Consultation should lead to team members feeling comfortable about reporting hazards without fear of intimidation or condemnation as a “whistle blower”.



1.1.3.1 BENEFITS OF CONSULTATION

Development/Improvement Of Solutions

Consultation with team members can help to develop a solution or improve it by:

- Having firsthand experience with equipment and processes which can often lead to efficient and innovative solutions and/or improvements to hazard control.



1.1.3.1 BENEFITS OF CONSULTATION

Team Commitment To Control

Consultation with team members instils within them a commitment to contribute and control the process.

- When the team members feel they are being consulted and listened to, they become stakeholders in the process and adopt ownership.
- This encourages cooperation and responsibility for actions.



1.1.3.1 BENEFITS OF CONSULTATION



Ongoing Evaluation

Consulting with team members when evaluating the effectiveness of controls is important because:

The work team can provide valuable feedback on the effectiveness of the risk management system, with insights on how things are operating “at the coalface”.

1.1.3.1 BENEFITS OF CONSULTATION

Risk management should be a team effort and it is important that everybody knows what they need to do and how or if they need to change their work processes to suit.



1.2 ACCESS, INTERPRET AND APPLY COMPLIANCE DOCUMENTATION



Documentation is essential to planning all aspects of the worksite, setting out the what, when, how and who of everything that needs to be done.

When a Risk Management Plan is developed, it must be guided by and comply with the relevant compliance documentation. These are documents that require you to undertake tasks in a particular way or to meet a given standard.

1.2 ACCESS, INTERPRET AND APPLY COMPLIANCE DOCUMENTATION

Worksites and organisations need to meet the requirements of a range of compliance documents, which may include:

- Legislative, organisational and site requirements and procedures, e.g. for OHS/WHs, environmental protection.
- Manufacturers' guidelines and specifications.
- Australian Standards.
- Codes of Practice.
- Employment and workplace relations legislation.
- Equal Employment Opportunity and Disability Discrimination legislation.



1.2.1 ACCESSING COMPLIANCE DOCUMENTATION

It is important to understand your obligations under the different types of compliance documentation, as follows:

Legislation/Acts	Acts of Parliament and laws to protect the health, safety and welfare of people at work.
Regulations	More details or information on particular parts of the Act.
Codes of Practice/ Compliance Codes	Practical instructions on how to meet the terms of the law.
Australian Standards	The minimum levels of performance or quality for a hazard, work process or product.

1.2.1.1 LEGISLATION

Legislation is made under Acts of Parliament and sets out legal requirements that must be followed in the performance of work.

All personnel/workers are required to comply with all legislation that applies to them.

Persons or organisations failing to comply with legislation can be prosecuted under the law.



1.2.1.2 REGULATIONS



Regulations are a form of "subordinate legislation" made under an Act.

They provide a lot of the detail that expands on the framework of the legislation.

Regulations are regularly reviewed and remade as appropriate to reflect current practice. They must be complied with.

1.2.1.3 CODES OF PRACTICE

Codes of Practice state ways to manage exposure to risks.

While you are not obligated to comply with a Code, if you take a different course of action you will need to be able to justify this in the event of an accident or incident.



1.2.1.4 AUSTRALIAN STANDARDS

Australian Standards are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they were intended to.

Standards are not legal documents but many, because of their rigour, are called up into legislation by government and become mandatory.

The standard covering risk management is:

AS/NZS ISO 31000:2009, Risk Management – Principles and Guidelines.



1.2.2 OHS/WHs LEGISLATION AND REGULATIONS

Occupational Health & Safety/Work Health & Safety (OHS/WHs) legislation is defined as laws and guidelines to help keep all personnel/workers on a worksite safe.

OHS/WHs requirements on any worksite include health and safety regulations, Material Safety Data Sheets (MSDS), hazardous substances and dangerous goods codes, and safe operating procedures.

Each state and territory has enacted OHS/WHs legislation and regulations that cover, among other things, hazard identification and risk assessment.



1.2.2 OHS/WHS LEGISLATION AND REGULATIONS

Regulations and Codes of Practice that apply in your state or territory can be provided by the relevant authority office:



WorkSafe ACT

www.worksafe.act.gov.au

SafeWork SA

www.safework.sa.gov.au

WorkCover NSW

www.workcover.nsw.gov.au

WorkCover Tasmania

www.workcover.tas.gov.au

NT WorkSafe

www.worksafe.nt.gov.au

WorkSafe Victoria

www.worksafe.vic.gov.au

Workplace Health and Safety Queensland

www.worksafe.qld.gov.au

WorkSafe WA

www.worksafe.wa.gov.au

Note: The National Work Health and Safety Act came into effect on 1 January 2012 and replaces legislation for various states and territories.

1.2.2.1 HARMONISATION OF WORK HEALTH & SAFETY LEGISLATION

In response to industry calls for greater national consistency, the Commonwealth, states and territories have agreed to implement nationally harmonised Work Health & Safety (WHS) legislation to commence on 1 January 2012.

While not all states and territories have actually implemented the model WHS legislation as of the start of 2012, it is important to be aware of these changes, as all states and territories will eventually implement them.



1.2.2.1 HARMONISATION OF WORK HEALTH & SAFETY LEGISLATION

Harmonisation aims to develop consistent, reasonable and effective safety standards and protections for all Australian workers through uniform WHS laws, regulations and codes of practice.



1.2.2.2 KEY ELEMENTS OF THE WORK HEALTH & SAFETY LEGISLATION

The following key elements of the WHS legislation will impact the way you do your job, and the responsibilities of your workplace:

1

There is a primary duty of care requiring **persons conducting a business or undertaking (PCBU)** to ensure, so far as is **reasonably practicable**, the health and safety of **workers** and others who may be affected by the carrying out of work.

2

A requirement that **officers** of corporations and unincorporated bodies exercise **due diligence** to ensure compliance.

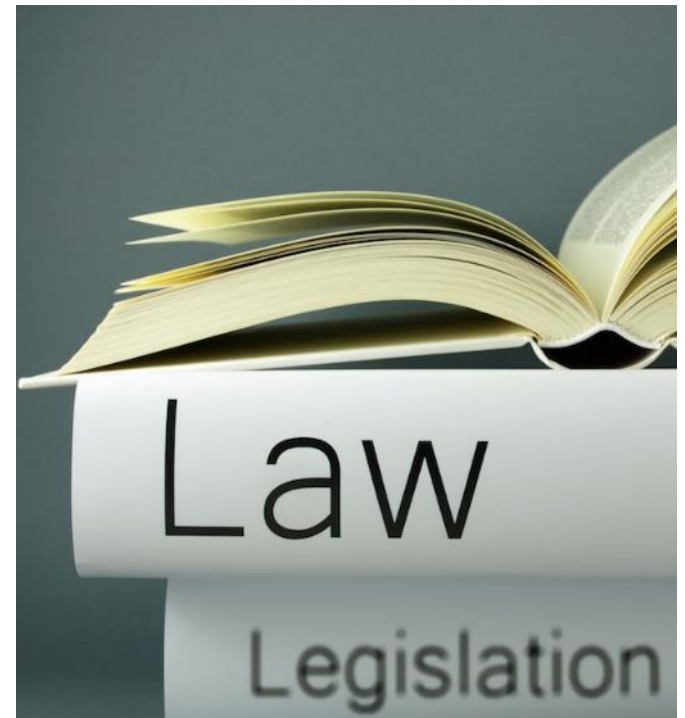
3

Workers must exercise reasonable care that their acts or omissions do not adversely affect the health and safety of persons at a workplace.

1.2.2.2 KEY ELEMENTS OF THE WORK HEALTH & SAFETY LEGISLATION

The legislation also outlines requirements for:

- The reporting requirements for notifiable incidents.
- Licences, permits and registrations (e.g. for persons engaged in high risk work or users of certain plant or substances).
- Provision for worker consultation, participation and representation at the workplace.
- Provision for the resolution of health and safety issues.
- Protection against discrimination.



1.2.2.2 KEY ELEMENTS OF THE WORK HEALTH & SAFETY LEGISLATION



Many specific details relating to WHS will be negotiated within the workplace in accordance with the legislation.

It is important that you speak with your Health and Safety Representative or supervisor for more information on how these elements will effect your day-to-day operations, or if you have any concerns relating to health and safety.

1.2.3 INTERPRETING AND APPLYING COMPLIANCE DOCUMENTATION

Being able to access, interpret and apply the requirements of the documents is vital to carrying out your responsibilities for applying risk management processes.

Interpretation of compliance documentation will allow you to make the right decisions for each situation or task.

It means understanding what is required of you and how you are expected to perform the tasks.



1.2.3 INTERPRETING AND APPLYING COMPLIANCE DOCUMENTATION

When interpreting documents it is vital that you understand the difference between words such as 'should', 'consider' and 'must'.

Should

Should indicates a preferred course of action. If you take a different course of action you will need to be able to justify this in the event of an accident or incident.

Consider

Consider means you have a choice of actions and need to select the action that will give the best and safest result.

Must

Must means the action is a mandatory or legal requirement and has to be complied with.

1.2.3 INTERPRETING AND APPLYING COMPLIANCE DOCUMENTATION

If you are in any doubt as to what you should do after reading the documentation, it is essential that you speak with your site manager or other designated person, for further instructions or clarification.



1.3 INSPECT THE WORK AREA FOR RISKS/HAZARDS

Risk/hazard identification means locating and noting all the possible events and situations in the workplace where people may be exposed to injury, illness or disease.

Each worksite has its own specific risks and hazards and these should be outlined in your site induction.



Some workplace hazards can be removed through staff training, better equipment and safe work methods. Talk to your workplace OHS/WHS officer for more information.

Inspecting and analysing your work area conditions regularly to identify potential hazards is crucial in maintaining a safe workplace.

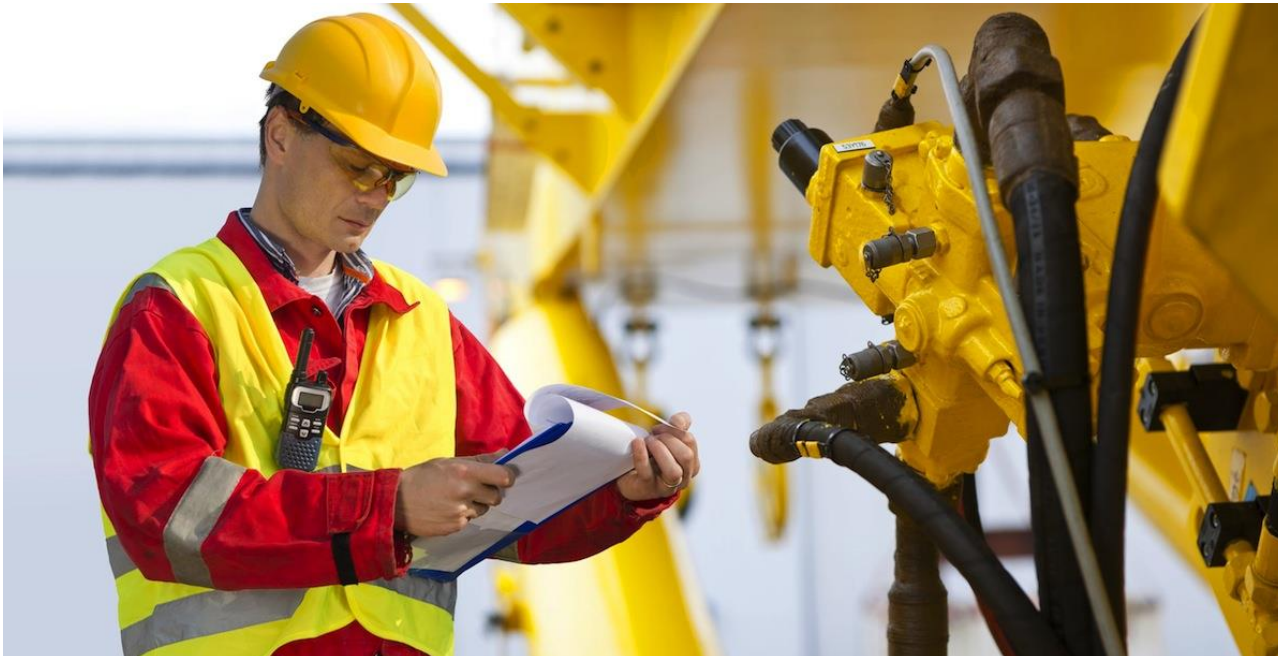
1.3.1 IDENTIFYING POTENTIAL RISKS AND HAZARDS

It is important that all potential risks and hazards are identified during the risk management process. A systematic approach is essential in identifying all risks and hazards in the workplace.



1.3.1.1 PLANNING AND ORGANISING

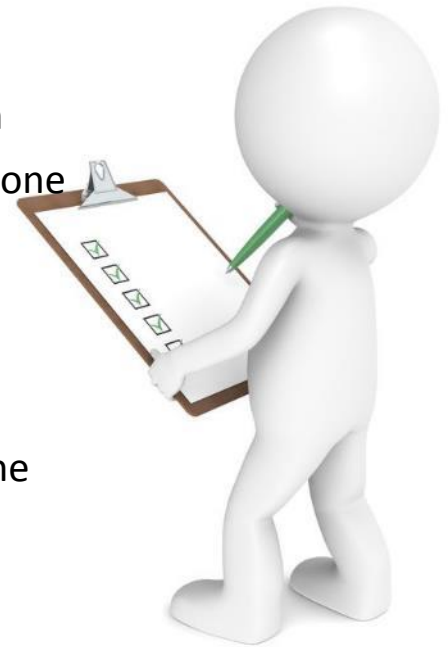
Carrying out risk/hazard identification for all existing plant, substances, processes and work practices in your workplace may require some organising and planning.



1.3.1.1 PLANNING AND ORGANISING

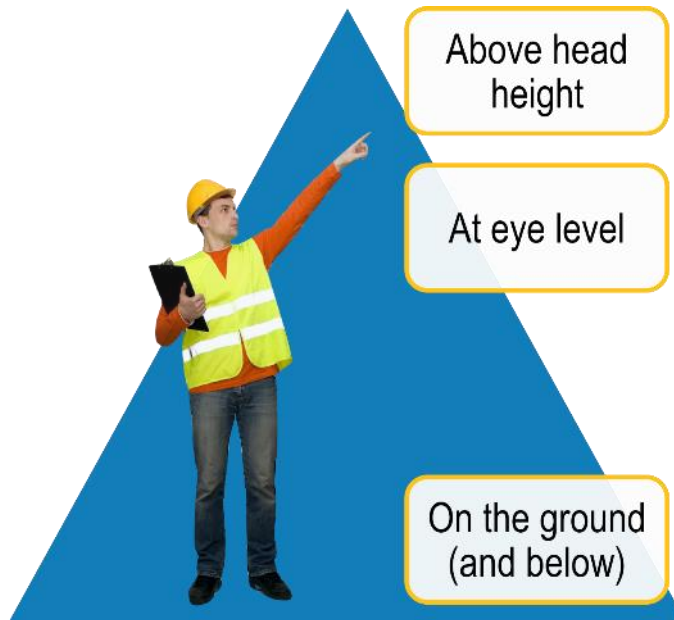
If you have a large workplace, it is a good idea to implement the following strategies in the risk/hazard identification process:

- Split the workplace into several separate areas and tackle one area at a time. Priority should be given to areas with hazardous plant, substances, processes or environment.
- Involve other workers to identify all sources of hazards in one particular area of the workplace instead of checking one hazard source (e.g. plant, hazardous substances etc.) at a time for the whole worksite. This will minimise the time involved.
- Develop checklists to assist people who are involved in the risk/hazard identification process. Your state or territory work safety authority can assist with guides, advice and templates for hazard identification and checklists.



1.3.1.2 INSPECTING AND ANALYSING THE WORKPLACE

Hazards and risks in the workplace can change from day to day. In order to effectively manage them, the work area and work conditions need to be inspected and analysed on a regular basis.



To identify possible risks and hazards, take a walk around the work area and check:

- **Eye Level** – Other workers, equipment, machines, hazardous materials, obstructions.
- **Up High** – Obstructions, power lines, trees, scaffolding, cranes.
- **Down Low** – Surface condition, spills, debris, underground services, weight-bearing ability.

1.3.1.2 INSPECTING AND ANALYSING THE WORKPLACE

Worksite hazards can also be identified by:

- Analysing a situation or the way a job is carried out by other workers.
- Looking at the equipment being used.
- Checking records of injuries and incidents.
- Checking safety tags.
- Reading Material Safety Data Sheets (MSDS).
- Talking to other workers.
- Staying informed about OHS/WHS trends and developments.



1.3.1.2 INSPECTING AND ANALYSING THE WORKPLACE

OHS/WHs legislation may require you to repeat the risk/hazard identification process:

- Before any alteration is made to plant or to the way it is used.
- Before any alteration is made to systems of work which include a task involving manual handling.
- Before plant is used for any other purpose than for which it was designed.
- If new or additional information about hazards becomes available.
- If an occurrence of a musculoskeletal disorder in your workplace is reported.



1.3.1.2 INSPECTING AND ANALYSING THE WORKPLACE

If you identify a hazard in the area, make a note of it and follow your workplace procedures for communication, reporting and record keeping.



1.3.1.3 POSSIBLE SOURCES OF RISKS/HAZARDS

Workplace hazards and risks can arise from a number of sources including:



1.3.1.3 POSSIBLE SOURCES OF RISKS/HAZARDS

Work Environment

- ▶ Poor workplace design.
- ▶ Nearby activities.
- ▶ Different conditions.



1.3.1.3 POSSIBLE SOURCES OF RISKS/HAZARDS



Methods/Plans

- Changeover.
- Hazardous tasks being performed in the workplace.
- People being exposed to hazardous substances, processes or environment.

1.3.1.3 POSSIBLE SOURCES OF RISKS/HAZARDS

Equipment

- Poorly designed plant being introduced into the workplace.
- Incorrect installation, commissioning, use, inspection, maintenance, service, repair or alteration of plant in the workplace.
- Uncontrolled energy.



1.3.1.3 POSSIBLE SOURCES OF RISKS/HAZARDS



A piece of equipment or a work process may have many different hazards, and each of these hazards needs to be identified. For instance, a conveyor belt may have:

- Mechanical hazards.
- Noise hazards.
- Electrical hazards.
- Dust hazards associated with the movement of materials.

1.4 ACCESS, INTERPRET AND APPLY EXISTING HAZARD CONTROL PROCEDURES



Once you have compiled a comprehensive list of workplace risks and hazards, you will need to access, interpret and apply any existing risk management procedures.

This will allow you to identify and eliminate those hazardous situations already covered by adequate procedures.

1.4 ACCESS, INTERPRET AND APPLY EXISTING HAZARD CONTROL PROCEDURES

Existing procedures may include regulatory and site procedures focused on hazards such as:

- Personal safety, e.g. personal protective equipment (PPE), medical standards, drug and alcohol use, stress management and evacuation.
- Equipment and machinery isolation.
- Protection and guarding.
- Hazard identification and monitoring.
- Chemical safety.
- Fire safety.
- Other potential emergency-related circumstances.
- Uncontrolled energy.
- Changeover.



1.4.1 INTERPRETING HAZARD CONTROL PROCEDURES

Where control strategies are already in place, it is your job to analyse whether they are appropriate and adequate. For example, are they based on existing Regulations, Codes of Practice and current standards?



1.4.1 INTERPRETING HAZARD CONTROL PROCEDURES

Many hazards and risks are well known and have well established and accepted control measures. A formal risk assessment is not required when:

- OHS/WHs laws and regulations for control of certain hazards or risks are implemented and complied with, e.g. gas and electrical safety and dangerous goods laws.
- A Compliance Code or other guidance sets out a way of controlling a hazard or risk and the guidance is applicable to the situation. In these instances, the guidance can simply be followed.



1.4.1 INTERPRETING HAZARD CONTROL PROCEDURES



Existing control measures and risk treatments should not be regarded as adequate simply because an incident hasn't occurred. This particularly applies where the existing control measures are only administrative controls (e.g. training, safety procedures, safety signs) or PPE.

These types of controls rely heavily on human behaviour, i.e. people always doing the right thing. Any deviation in behaviour (e.g. employees/workers not following the safety procedures) could cause injury, illness or disease.

1.4.2 APPLYING HAZARD CONTROL PROCEDURES

If an existing risk management procedure has been deemed both appropriate and adequate it should then be applied. Once a hazard control has been put into place it should be regularly assessed to ensure the risk level meets both legislative and organisational requirements at all times.



1.4.2 APPLYING HAZARD CONTROL PROCEDURES

The application of hazard controls, as well as the process of choosing them, should be documented thoroughly. If you are unsure of legislative or organisational documentation requirements, ensure that you talk to your supervisor.



1.5 RECOGNISE UNRESOLVED RISKS/HAZARDS

Your analysis of existing risk management systems may have identified hazards that are not covered by existing and adequate procedures.

These unresolved hazards need to be analysed in preparation for the risk assessment phase of the process.



1.5.1 ANALYSING RISKS/HAZARDS

It is a good idea to use a table where you can list the type and scope of each hazard and their likely impact.



This involves looking at the potential of the hazard and making an assumption that a person will be exposed to it when the harm actually occurs.

The possible levels of harm need to be understood.

1.5.1 ANALYSING RISKS/HAZARDS

For example, liquefied petroleum gas (LPG) cylinders may be stored in a room on site. One of the hazards of LPG is its potential to catch fire or cause an explosion. If the LPG escapes, one of the following can occur:

- The gas may disperse harmlessly.
- If the gas is ignited, the room could be set on fire, causing burns to anyone in the room.
- If enough gas escaped, there could be an explosion that could destroy the room, damage areas outside and kill or injure anyone nearby.



1.5.1.1 TYPE AND SCOPE OF UNRESOLVED RISKS/HAZARDS

Hazards may be classified into 5 different types to assist with targeting later assessment and control options:



1.5.1.1 TYPE AND SCOPE OF UNRESOLVED RISKS/HAZARDS



Mechanical/Electrical Hazards

May include:

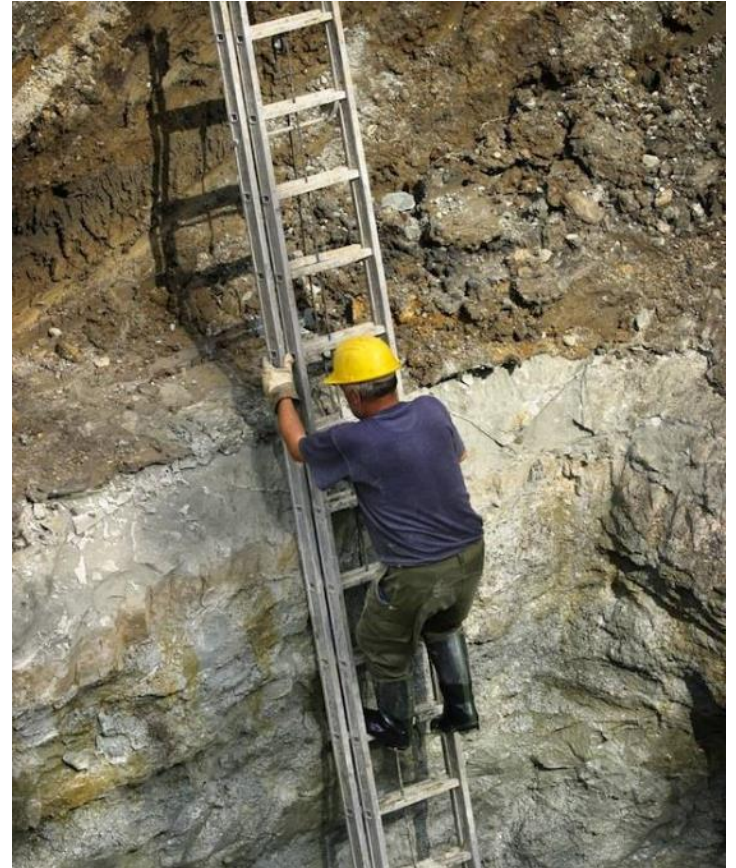
- Electricity.
- Machinery.
- Plant.
- Pressure vessels.
- Dangerous goods.
- Forklifts, cranes and hoists.

1.5.1.1 TYPE AND SCOPE OF UNRESOLVED RISKS/HAZARDS

Environmental Hazards

May include:

- Floors.
- Stairs.
- Work platforms.
- Steps.
- Ladders.
- Fire.
- Falling objects.
- Slippery surfaces.



1.5.1.1 TYPE AND SCOPE OF UNRESOLVED RISKS/HAZARDS



- Poor lighting, ventilation, air quality.
- Manual handling (lifting, pushing, pulling).
- Excessively loud and prolonged noise and/or vibration.
- Heat and cold.
- Radiation.

1.5.1.1 TYPE AND SCOPE OF UNRESOLVED RISKS/HAZARDS

Chemical Hazards

May include:

- Chemical substances, e.g. acids or poisons, others that could lead to fire or explosion.
- Cleaning agents.
- Dusts and fumes from various processes such as welding.



1.5.1.1 TYPE AND SCOPE OF UNRESOLVED RISKS/HAZARDS

Biological Hazards

May include:

- Bacteria.
- Viruses.
- Mould, mildew.
- Insects, vermin, animals.



1.5.1.1 TYPE AND SCOPE OF UNRESOLVED RISKS/HAZARDS

Psychosocial Hazards

May include events, systems of work or other circumstances that have the potential to lead to psychological and associated illness, e.g. work-related stress, bullying, workplace violence and work-related fatigue.





RIIRIS301D APPLY RISK MANAGEMENT PROCESSES

PRESENTATION 2



2.1 IDENTIFY RISK MANAGEMENT TRAINING NEEDS

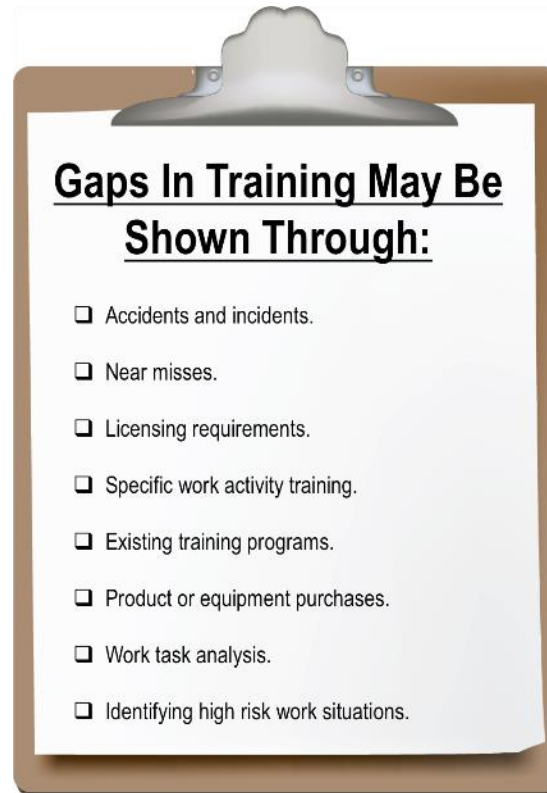
Training is important to ensure that each member of the workplace is able to complete tasks in accordance with risk management requirements.

It is important to ensure you have identified any gaps in the OHS/WHS risk management training of both individuals and departments.



2.1 IDENTIFY RISK MANAGEMENT TRAINING NEEDS

The following lists some examples of where gaps in training can be shown:



2.1 IDENTIFY RISK MANAGEMENT TRAINING NEEDS

Risk management training may be applied to:

- Statutory compliance.
- OHS/WHS.
- Environment.
- Quality.
- Property security.



2.1 IDENTIFY RISK MANAGEMENT TRAINING NEEDS



- Business risks such as;
- Credit management.
- Capital expenditure.
- Sales and marketing.
- Finance and accounting.
- Any other area of the worksite that requires risk management training.

At all times you will need to abide by your site and organisational training procedures and policies.

2.1.1 DOCUMENTING OHS/WH S TRAINING

OHS/WH S risk management training needs must be documented to ensure it is adequately provided and monitored.

Most organisations will create a skills or training matrix which outlines what training is needed and when any licensing or certifications are due for renewal.

It is advisable to appoint a designated training officer who is responsible for the management and documentation of all aspects of OHS/WH S training.



2.2 ARRANGE RISK MANAGEMENT TRAINING

Once you have identified a training need or knowledge gap, you need to organise training opportunities to overcome these gaps. A training opportunity will come in 2 main forms:



1. Accredited training.



2. Non-accredited training.

Accredited training is a form of training where an individual will be issued a recognised certification. Accredited training is provided by training organisations, which are approved and accredited by the government. These could include TAFE, or private Registered Training Organisations (RTOs).

2.2 ARRANGE RISK MANAGEMENT TRAINING



Accredited training could encompass an entire qualification such as the Certificate IV in Work Health and Safety or could be simply a statement of attainment for one particular subject.

For example if you are only studying this subject you will receive a statement of attainment because this is an accredited course.

2.2 ARRANGE RISK MANAGEMENT TRAINING



Unaccredited training is a form of informal training that is conducted in-house.

Normally unaccredited training addresses specific subjects or issues.

Common forms of unaccredited training could include how to implement a procedure for an item of machinery, or training in the use of company policies and procedures.

2.2 ARRANGE RISK MANAGEMENT TRAINING

Before determining the best solution for the identified training need, you will need to consult with a variety of people.

These people could be:

- Supervisors.
- Managers.
- Training officers, either in-house or specialist outside trainers.
- Individuals undertaking the training.



2.2 ARRANGE RISK MANAGEMENT TRAINING

Training cannot fix every problem. By consulting with affected personnel/workers you will be able to determine if the issue is one that can be fixed with a training opportunity or if the solution to the problem needs to come from a different direction.



2.3 PROVIDE LEARNING OPPORTUNITIES



Every workplace has a responsibility to provide learning opportunities for the members of the team who need training or support. These opportunities could come through:

- Coaching.
- Mentoring.
- Instruction activities.
- Practice of skills learnt.
- Assessment of skills acquired.
- Time to attend classes.

2.3 PROVIDE LEARNING OPPORTUNITIES

By providing these opportunities, you are assisting the team as well as each individual member to achieve identified goals.

It also helps ensure the skills of the team are current and usable and that team members are challenged and engaged.

With busy work schedules it can be difficult to remember to ensure learning opportunities are made available.

Having a regular schedule of learning opportunities is one way of overcoming this.



2.3 PROVIDE LEARNING OPPORTUNITIES



To maximise the number of training opportunities available to your work group, you will need to ensure that management 'buys-in' to the benefits of training.

Managers, other supervisors and senior staff will then be willing to provide time for staff to undertake the training.

2.3.1 COACHING AND MENTORING

Coaching and mentoring of colleagues is a process of providing support in an informal manner.

When working in a coaching or mentoring situation, you will need to be relaxed and calm with a good knowledge of what you are trying to achieve.



Coaching is generally thought to involve the teaching or demonstration of a skill or skill set. The development of the skill in the other person then allows them to complete tasks unaided.

2.3.1 COACHING AND MENTORING



Mentoring is a more long term process. It assists the other person by providing:

- A sounding board and someone to talk through problems with.
- Another person who is willing to assist them to achieve personal and professional goals and aspirations.

2.3.1 COACHING AND MENTORING

The ability to listen is essential as both a coach and a mentor.

Active listening is the process of concentrating on the speaker and listening to them, rather than just waiting for a break in the conversation for you to respond.



2.4 IDENTIFY AND REPORT TRAINING COSTS



Once all training needs have been identified and the training or learning opportunities have been arranged, it is necessary to report the associated costs to management for inclusion in the financial plans for the business.

You may need to report these figures to your:

- Site project manager.
- Site training manager.
- Other designated persons.

2.4 IDENTIFY AND REPORT TRAINING COSTS

These costs will usually be compiled into a written report so they can be conveyed to management easily. Hidden costs should be included where known.

Any funding options that may be available to your organisation should also be identified and included in your report.

These funding options could include traineeships, funded training places for skills shortage areas, apprenticeships and other government incentives.



2.5 IDENTIFY AND REPORT HAZARDS AND RISKS



The types of hazards will depend on the specific workplace and the activities conducted. To identify possible risks and hazards walk all around the work area and check:

Up High

Hazards may include:

- Power lines.
- Obstructions.
- Trees.
- Scaffolding.
- Cranes.

2.5 IDENTIFY AND REPORT HAZARDS AND RISKS

Eye Level

Hazards may include:

- Hazardous materials.
- Other workers.
- Equipment.
- Machines.
- Obstructions.



2.5 IDENTIFY AND REPORT HAZARDS AND RISKS



Down Low

Hazards may include:

- Underground services.
- Unsafe ground.
- Adjoining pit walls.
- Road conditions.
- Spills.
- Rocks and potholes.
- Debris.
- Weight bearing ability.

2.5 IDENTIFY AND REPORT HAZARDS AND RISKS

Make a note of any hazard you identify in the area. Remember, a hazard can also be a situation so keep an eye on how the people around you are working too.



2.5.1 IDENTIFYING AND ANALYSING HAZARDS AND RISKS

Hazards and risks in the workplace can change from day to day. In order to effectively manage them, the work area and work conditions need to be inspected and analysed on a regular basis. Hazards and risks may be identified in the following ways:

The way hazards and risks are identified can include:	
Workplace Inspections And Observation	Conduct personal 'walk-throughs', develop employee/worker surveys and carry out workplace inspections. Review the outcomes to identify any possible ineffective or non-existent controls. Also look for other factors such as inadequate training, working procedures, instruction, supervision, or lack of information about dealing with hazards. Use your knowledge of OHS/WHS legislation and workplace policies and practices to make sure employees/workers are following safe work practices.

2.5.1 IDENTIFYING AND ANALYSING HAZARDS AND RISKS

The way hazards and risks are identified can include:	
Consulting Work Team Members	The effectiveness of your workplace risk management is dependent on good consultation between managers, supervisors and employees/workers.
Housekeeping	Will assist in minimising hazards and will identify new hazards.
Risk Audits And Review Of Audit Reports	Look for immediate potential causes of injuries or illness, and make sure your information is complete and correct. Supervisors and employees/workers are your best source of information about what is taking place during work processes.

2.5.1 IDENTIFYING AND ANALYSING HAZARDS AND RISKS

The way hazards and risks are identified can include:	
Daily Informal Consultation And Regular Formal Meetings	This allows the identification of employee/worker concerns. A simple consultation process will assist you to comply with risk management requirements. Input of managers, OHS/WHS representatives, OHS/WHS committees and others through consultative processes can also assist in risk management.
Checking Equipment Before And During Work	Most equipment and machinery contain hazard identification checklists that you can modify for your workplace. These will sometimes need to be completed at numerous stages during the day.
Review	Examine health, safety, environmental quality and other risk-related records.

2.5.1 IDENTIFYING AND ANALYSING HAZARDS AND RISKS

The way hazards and risks are identified can include:	
Interviews	Use personal interviews with employees/workers to encourage them to identify hazards in the workplace. Some people are more likely to give information on hazards and risks in a private setting.
Investigations	Review any previous OHS/WHS investigations that have been conducted in your workplace to determine what major incidents have taken place, what corrective action was required and if that action has been taken.

2.5.1 IDENTIFYING AND ANALYSING HAZARDS AND RISKS

The way hazards and risks are identified can include:	
Simulations	Use modelling tools in your workplace, or access experts who can provide the tools, to simulate possible hazards and incidents in your workplace.
Timelines Of Actions And Events	Ensure your workplace has inspection routines, risk management practices and reporting systems in place and that employees/workers are aware of their responsibilities and reporting requirements. Hazard identification must be carried out regularly as well as whenever changes are made in the workplace, new equipment is installed, or new employees/workers start.

2.5.1 IDENTIFYING AND ANALYSING HAZARDS AND RISKS

Worksite hazards can also be analysed by:

- Looking in-depth at a situation or the way a job is carried out by other workers.
- Examining records of injuries and incidents.
- Checking safety tags.
- Reading Material Safety Data Sheets (MSDS).
- Staying informed about OHS/WHS trends and developments.



2.5.1 IDENTIFYING AND ANALYSING HAZARDS AND RISKS



A useful tool to use for analysing hazards is a table where you can list the type and scope of each hazard and its likely impact.

You can then look at the potential of the hazard and make an assumption that a person will be exposed to it when the harm actually occurs.

The possible levels of harm need to be understood.

2.5.2 REPORTING HAZARDS



Hazards, once identified, will need to be reported in accordance with workplace requirements.

These requirements will vary depending on the size of the organisation but could include:

- Written reports.
- Verbal reports.
- Checklist completion.
- Recording in a hazard register.
- A request for improvement form.

2.5.2 REPORTING HAZARDS

When hazard reports are created by team members make sure they include all details of the hazard such as:

- Location.
- The type of hazard.
- Number of people affected by the hazard.
- Risk category if possible, e.g. is it life-threatening?
- Who has reported it.
- When it was located – date, time.



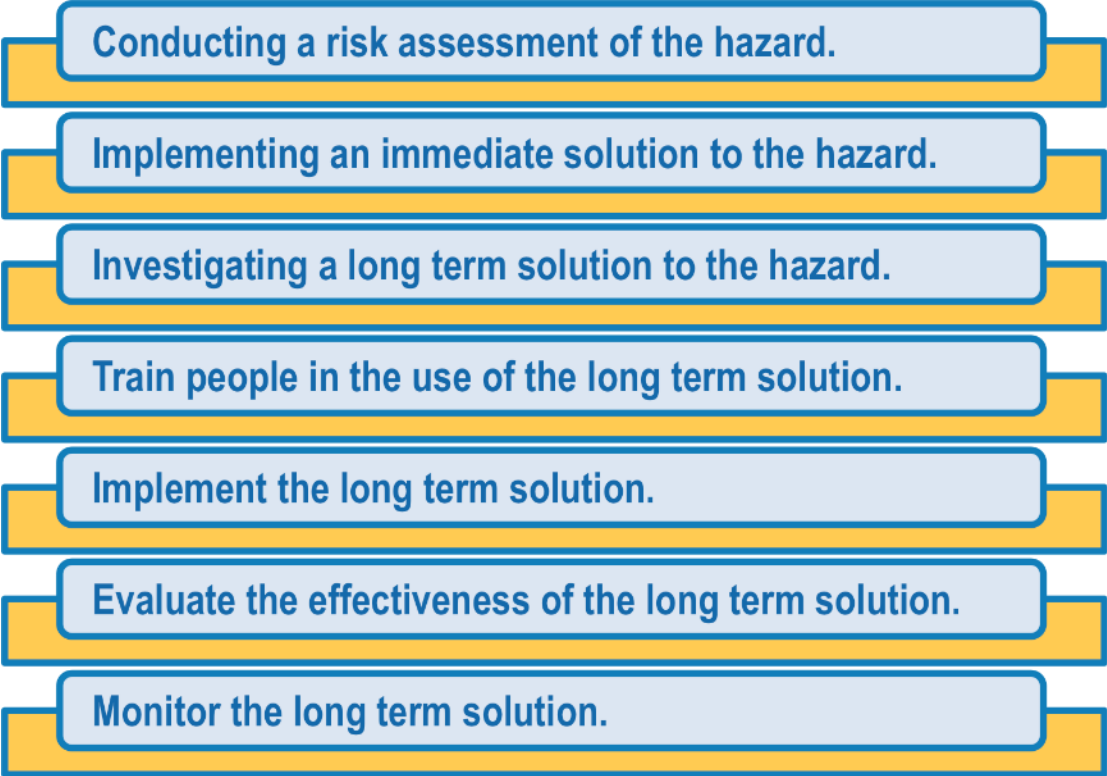
2.5.2 REPORTING HAZARDS



It is very important that hazards are identified, reported, assessed and acted on as quickly as possible and within organisational policies or procedures.

2.6 ACT ON HAZARD REPORTS

As a supervisor or risk management technical specialist, you need to ensure that you action team members' hazard reports quickly and in accordance with workplace procedures and policies. The action you need to take could include:



Conducting a risk assessment of the hazard.

Implementing an immediate solution to the hazard.

Investigating a long term solution to the hazard.

Train people in the use of the long term solution.

Implement the long term solution.

Evaluate the effectiveness of the long term solution.

Monitor the long term solution.

2.6 ACT ON HAZARD REPORTS

It is difficult to define how you should respond to reported hazards.

This is because each risk situation will need to be assessed individually and a tailored risk control measure created to meet the specific environmental and other factors that will impact the workplace.



2.6.1 ASSESSING RISKS

A risk assessment involves completing a risk analysis and a risk evaluation.

By assessing the likelihood and consequence of the risk, you are able to understand the situation better and respond by applying the appropriate risk control procedures.



2.6.1.1 RISK ANALYSIS

Risk analysis involves considering what are the causes and sources of risks and comprises 3 factors:

Consequence	What would be the outcome of the event occurring? How severe would the outcome be?
Likelihood	What is the chance of the event/consequence occurring? Has the event happened before? Is it likely to happen again?
Risk Level	The combined result of likelihood and consequence.

2.6.1.1 RISK ANALYSIS

Using a table similar to the one shown here you can apply your analysis skills to assess how high the risk is.

LIKELIHOOD	CONSEQUENCE				
	Insignificant	Minor First Aid Required	Moderate Medical Attention and Time Off Work	Major Long Term Illness or Serious Injury	Severe Kill or Cause Permanent Disability or Illness
Almost Certain	M	H	H	VH	VH
Likely	M	M	H	H	VH
Possible	L	M	H	H	VH
Unlikely	L	L	M	M	H
Rare	L	L	M	M	M

2.6.1.2 RISK EVALUATION

Risk evaluation is based upon the outcomes and results of the risk analysis.

Risk evaluation involves further assessment and analysis to make decisions about which risks need to be treated and the order in which it should be done.



2.6.1.2 RISK EVALUATION



Risk evaluation should take into consideration the context of the risks in relation to:

- The organisation.
- The worksite.
- The relevant laws.
- Regulations.
- Other policies, procedures and requirements.

2.6.1.2 RISK EVALUATION

Using a table similar to the one shown you can evaluate how soon you should act to remove or control the hazard to achieve an acceptable level of risk.

RISK LEVEL	ACTION
VERY HIGH	<u>Act immediately:</u> The proposed task or process activity must not proceed. Steps must be taken to lower the risk level to as low as reasonably practicable using the hierarchy of risk controls.
HIGH	<u>Act today:</u> The proposed activity can only proceed, provided that: 1. The risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls. 2. The risk controls must include those identified in legislation, Australian Standards, Codes of Practice etc. 3. The risk assessment has been reviewed and approved by the Supervisor. 4. A Safe Working Procedure or Safe Work Method has been prepared. 5. The supervisor must review and document the effectiveness of the implemented risk controls.

2.6.1.2 RISK EVALUATION

RISK LEVEL	ACTION
MEDIUM	<u>Act this week:</u> The proposed task or process can proceed, provided that: 1. The risk level has been reduced to as low as reasonably practicable using the hierarchy of risk controls. 2. The risk assessment has been reviewed and approved by the Supervisor. 3. A Safe Working Procedure or Safe Work Method has been prepared.
LOW	<u>Act this month:</u> Managed by local documented routine procedures, which must include application of the hierarchy of controls.

Any task with a Very High risk level is absolutely unacceptable to carry out. Steps must be taken to reduce the risk level.

2.7 APPLY RISK CONTROL PROCEDURES

Once hazards have been identified and risks analysed and evaluated, risk treatment options need to be considered and applied, in line with your site risk management system.



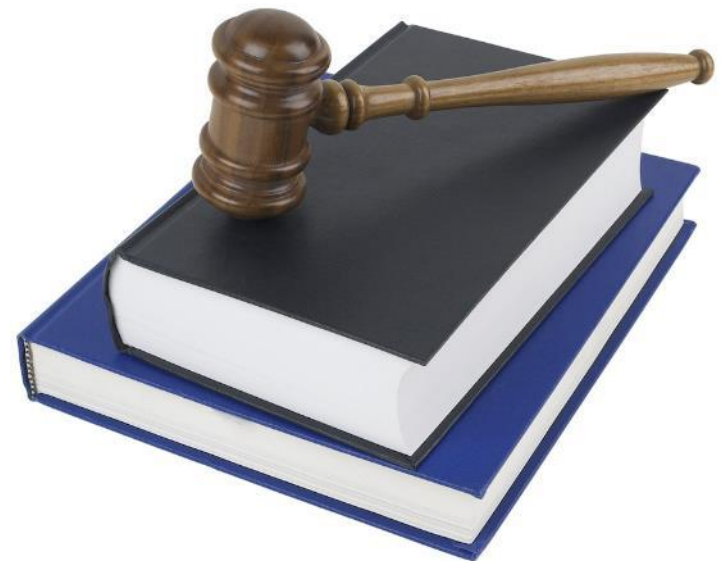
Risk treatment involves selecting one or more options to modify a risk and then implementing the selected option/s. Risk treatments should be recorded in a risk treatment plan.

Once an option has been implemented it may be referred to as a risk control.

2.7 APPLY RISK CONTROL PROCEDURES

Each organisation should have risk control procedures that reflect:

- State and federal legislative requirements, including relevant regulations, Codes of Practice and Australian standards.
- The nature of the risks on that worksite.
- The culture of the site.
- Industry standards and norms.



2.7 APPLY RISK CONTROL PROCEDURES



- Manufacturers' specifications.
- Community expectations or requirements.
- Environmental factors.
- Other requirements specific to the site or organisation.

Regardless of how a risk is controlled and managed it must be done in accordance with organisational requirements and the hierarchy of hazard control.

2.7.1 HIERARCHY OF HAZARD CONTROL

The Hierarchy of Hazard Control is the name given to a range of control methods used to eliminate or control hazards in the workplace.

It is widely used within OHS/WHS management systems in all industries.



2.7.1 HIERARCHY OF HAZARD CONTROL

The Hierarchy has 6 levels, shown below from most effective to least effective:



2.7.1 HIERARCHY OF HAZARD CONTROL

Hierarchy Level	Description and examples of controls
1. Eliminate	Removing the hazard will always be the preferred option but is often not possible. Simple ways of removing a hazard could include: ▶ Removing dangerous materials from the site. ▶ Repairing defective equipment. ▶ Ensuring there is adequate storage so boxes and debris are not left blocking doorways and passage ways. ▶ Ensuring adequate emergency lighting and signage. ▶ Provision of uninterruptable power supply units (UPS) to avoid the work loss due to power supply problems.

2.7.1 HIERARCHY OF HAZARD CONTROL

Hierarchy Level	Description and examples of controls
2. Substitute	Substitute the materials being used or that are causing the hazard. It could also mean doing the task differently or purchasing alternative materials
3. Isolate	Isolate the hazard or risk by restricting access to it through the use of barriers, fences or lock-out devices.

2.7.1 HIERARCHY OF HAZARD CONTROL

Hierarchy Level	Description and examples of controls
4. Engineering Controls	This involves installing equipment to minimise the hazard or risk, such as a ventilation system or hand rails on steps. It could also mean re-designing a task, work process or the workplace. The re-design could include: ▶ Providing mechanical handling equipment. ▶ Rearranging materials flows, timing, schedules. ▶ Changing the height of work platforms. ▶ Re-arranging furniture to make better use of available space. ▶ Creating different work schedules so that different tasks are completed at different times of day, e.g. cleaners doing their work before or after everyone else.

2.7.1 HIERARCHY OF HAZARD CONTROL

Hierarchy Level	Description and examples of controls
5. Administrative Controls	This involves using safe work practices to minimise risks, such as safe operating procedures, Safe Work Method Statements or rosters to spread the risk.
6. Personal Protective Equipment (PPE)	PPE is the equipment that can be worn by an individual to protect them from hazards. It may include hard hats, safety boots, eye and hearing protection. PPE is the least preferred method of controlling a hazard and should be used in conjunction with other methods, not on its own.

2.7.1 HIERARCHY OF HAZARD CONTROL

It is important to consider all of the options available when deciding on the best course of action.

Not all options are feasible or possible under some circumstances. You may need to use a number of control strategies in combination to reduce the risk to an acceptable level.



2.7.2 ASSESSING RESOURCES

As you are working your way through the hierarchy of hazard control, you need to be assessing the resources that are available in your workplace.

Check that the resources correspond with the selected risk control measures and that they are accessible and functional.



2.7.2 ASSESSING RESOURCES



Resources for implementing risk control measures could include:

- Time resources – a perfect solution that takes weeks to use or implement will not assist in immediate control of the risks.
- Human resources – personnel/workers to implement the controls.

2.7.2 ASSESSING RESOURCES

- Financial resources – to purchase anything required.
- Training resources – does your team have the training to implement the controls?
- All other resources.



2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL



Where control strategies are already in place, it is your job to analyse whether they are appropriate and adequate.

For example, are they based on existing Regulations, Codes of Practice and current standards?

2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL

Existing control measures and risk treatments should not be regarded as adequate simply because an incident hasn't occurred.

This particularly applies where the existing control measures are only administrative controls (e.g. training, safety procedures, safety signs) or PPE.



2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL



These types of controls rely heavily on human behaviour, i.e. people always doing the right thing.

Any deviation in behaviour (e.g. employees/workers not following the safety procedures) could cause injury, illness or disease.

2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL

Occasionally in applying the hierarchy of hazard control you will become aware of inadequacies in existing risk control measures.

These inadequacies need to be reported and acted upon in accordance with the established system of policies and procedures for your organisation.



2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL



A risk control measure could prove to be inadequate because:

- It is inappropriate for the risk.
- It has been out-dated by newer technology.
- It is creating additional risks or hazards that were unforeseen.
- It is complex and creating too many additional steps in the process therefore is not being used.
- It is being used incorrectly or inappropriately.

2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL

Inadequacies in risk control measures are the reason monitoring and review are an important part of a site risk management system and should be planned for at every stage.



2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL



Monitoring and review should:

- Ensure that risk controls are effective and efficient.
- Aim to improve risk assessment through obtaining further information.
- Be used to analyse events and changes that have occurred through the implementation of risk control measures and any lessons that may be learned from this.
- Be used to detect any changes, including changes to risks, which may require revision of control measures, or the emergence of new risks.

2.8 REPORT AND MONITOR INADEQUACIES IN RISK CONTROL

When reviewing risk control measures you should use the hierarchy of control from level 1 down to determine if any changes or improvements need to be made.



2.8.1 MONITORING OUTCOMES OF REPORTS

Having identified and reported any inadequacies in existing risk control measures, you need to ensure that senior management responds promptly.

Where possible you should formally monitor the organisational response to the reported inadequacy.

Monitoring means checking, supervising, critically observing or recording the progress of an activity, action or system on a regular basis in order to identify changes.



2.8.1 MONITORING OUTCOMES OF REPORTS



This may only be possible if it is part of your:

- Job role.
- Level of responsibility.
- Degree of autonomy.
- Job authority.

If you do not have the ability to monitor the outcome formally, you can still monitor the situation informally.

2.8.1 MONITORING OUTCOMES OF REPORTS

Informal monitoring of the progress of responding to an inadequacy can be done through:

- Repeated reporting of the problem.
- Daily checking for progress.
- Requesting assistance from the OHS/WHS representative in the workplace.
- Discussing the problem with a supervisor or manager and gaining support.



2.8.1 MONITORING OUTCOMES OF REPORTS

It is important to follow the processes, policies and procedures within your organisation to report and rectify any risk management issues. By using the correct processes and protocols, you ensure the problem is documented correctly and is actionable.



2.9 COMPLETE RISK MANAGEMENT RECORDS

Keeping records is important as they can help ensure that any risk management activities are traceable.

Records also provide a basis for improving methods and tools in the risk management process, as well as improving the overall risk management system for your site.



2.9 COMPLETE RISK MANAGEMENT RECORDS

Risk management records of incidents in the work area must be completed accurately and in a timely manner.

These documents will need to be completed for any situation, issue, incident or accident.



2.9 COMPLETE RISK MANAGEMENT RECORDS

Risk management records may include:

- Audit and inspection reports.
- Hazard registers.
- Risk analysis records.
- Minutes of meetings (risk management, OHS/WHS, environmental etc).



2.9 COMPLETE RISK MANAGEMENT RECORDS



- Induction, instruction, training and assessment.
- Manufacturers and suppliers information.
- Dangerous goods and hazardous substances registers.
- Plant and equipment maintenance and testing reports.
- Workers compensation and rehabilitation records.

2.9 COMPLETE RISK MANAGEMENT RECORDS

- First aid and medical records.
- Major incident and emergency response instruction.
- Emergency contact lists.
- Financial records.
- Contract documents.



2.9 COMPLETE RISK MANAGEMENT RECORDS



Risk management records, reports and other documents will need to be kept within the organisational and/or site records management system. This could be computerised or a smaller paper-based system.

Regardless of how risk management records are stored and managed it is essential that the system is appropriate both for the level of risks and hazards you are dealing with and the needs of the business and the government.

2.9 COMPLETE RISK MANAGEMENT RECORDS

Literacy skills are important when dealing with risk management records.

Your language and literacy skills will enable you to read, understand and interpret risk management information as well as to research and review a range of other useful documents.



2.9 COMPLETE RISK MANAGEMENT RECORDS



Your skills will help you to analyse information and organise it into a logical sequence when you are completing your own reports or writing clear, easy-to-follow instructions, if necessary.

If you need assistance with literacy and numeracy, speak with your supervisor or site training officer.

2.10 USE WORKPLACE INFORMATION

Information about workplace hazards and risks is invaluable in applying, maintaining and improving the site risk management system.

Supervisors, managers and OHS/WHS staff will be able to use the information to ensure that risk management policies and procedures can be implemented and/or adapted effectively. It will also allow them to respond appropriately when incidents or situations arise.

Workplace records can also help to identify hazards and implement risk controls before the hazards become obvious.



2.10 USE WORKPLACE INFORMATION

You will need to determine what information and data is needed to identify hazards and monitor the risk control procedures. This information and data could come from:

Existing information.

Policies and procedures.

Site inspections.

Procedural reviews.

Interviewing subject matter experts.

Interviewing staff members.

Any other worksite acceptable methods.

2.10.1 REVIEWING EXISTING INFORMATION

Reviewing your workplace practices by collecting information and conducting inspections is important and will allow you to identify valuable sources of further information. These sources of further information could include:

Information Type	Possible Information Sources
Performance Data	▶ Incident reports. ▶ Environmental and health monitoring results. ▶ Compensation statistics which will show anecdotal information on health and safety programmes within the organisation. ▶ Rehabilitation data (this data can show the success of the return to work scheme operated by your organisation). ▶ Absenteeism statistics (this can be used to determine the level of unacceptable stresses within the workforce).

2.10.1 REVIEWING EXISTING INFORMATION

Information Type	Possible Information Sources
Performance Data (continued)	▶ Workplace inspection statistics. ▶ OHS/WHS committee meeting data and information. ▶ Induction and training output data (this is the end of course and induction evaluations done by participants to show how relevant the information was). ▶ Lost time injury data. ▶ Classification of type of injuries / incidents e.g. Long term, Medium term, Short term, First Aid, disability, etc. Also, looking at the trends for particular types, frequency, etc.

2.10.1 REVIEWING EXISTING INFORMATION

Information Type	Possible Information Sources
Records And Reports	▶ Inspection reports. ▶ Investigation reports. ▶ OHS/WHS committee meeting minutes. ▶ Risk assessments. ▶ Job safety analyses (JSA). ▶ Task Instruction Method Statement (TIMS), a standard way of doing low risk tasks. ▶ Medical records. ▶ Certificates, registrations and licences. ▶ Correspondence. This could include general letters, bulletins, memos or other written information on hazards and risks.

2.10.1 REVIEWING EXISTING INFORMATION

Information Type	Possible Information Sources
Hazard Control Information	▶ Material safety data sheets. The information that comes from the manufacturer that details all relevant safety information. ▶ OHS/WHS manuals. ▶ Computer databases that contain information on risks and hazards. ▶ Hazard registers. ▶ Codes of practice that may outline minimum requirements. ▶ Previous risk assessments. ▶ Historical data. ▶ Trend over time graphs. ▶ Corrective and preventative actions.

2.10.1 REVIEWING EXISTING INFORMATION

Information Type	Possible Information Sources
OHS/WHS Requirements	▶ Legal databases. ▶ Subscriptions services. ▶ Company policy manuals. ▶ Standard operating procedures. ▶ Reporting forms. ▶ Schedules of changes or updates. ▶ Government websites.

2.10.2 RECORDING INFORMATION AND ANALYSING DATA



The information you collect can be recorded in a spreadsheet and used to help analyse the current risk management status of your site.

It is necessary to ensure you record all information on the types of hazards found and the risks these hazards pose.

If you don't enter these records into the recording system used within your workplace, you will not have an effective overview of what is occurring with the risks and hazards on site.

2.10.2 RECORDING INFORMATION AND ANALYSING DATA

Data analysis is the process of taking the raw information you have gathered and highlighting the sections that are useful to your purpose.

You can then interpret the information and use it to draw conclusions, make recommendations and support decision-making.



2.10.2 RECORDING INFORMATION AND ANALYSING DATA



Data that you may need to analyse could be contained in information gathered from:

- Incident monitoring.
- Environmental monitoring.
- Evaluation of the effectiveness of risk control measures.

Data and information that you have collected can then be used to develop risk management procedures and policies.

This will, in turn, allow you to manage the risk control process and ensure that all legislative, regulatory and organisational obligations are met.



RIIRIS301D APPLY RISK MANAGEMENT PROCESSES

PRESENTATION 3



3.1 IDENTIFY THE RANGE OF CONTROLS



Once risks have been identified, analysed and evaluated, control options need to be considered and applied.

Risk control involves selecting one or more options to modify a risk, and then implementing the selected options.

Once an option has been implemented it can be referred to as a control.

Controls should be recorded in line with organisational policies and procedures and the applicable standard.

3.1 IDENTIFY THE RANGE OF CONTROLS

Arriving at appropriate controls to eliminate or minimise the risk involves:

- Identifying the options for controls – a control option may be a single control or it may be made up of a number of different controls that together provide protection against a risk.
- Considering the control options and selecting a suitable option that most effectively eliminates or reduces risk in the circumstances.
- Implementing the selected option.



Note: Mandatory controls outlined in the OHS/WHS regulations must be implemented as specified.

3.1.1 HIERARCHY OF HAZARD CONTROL

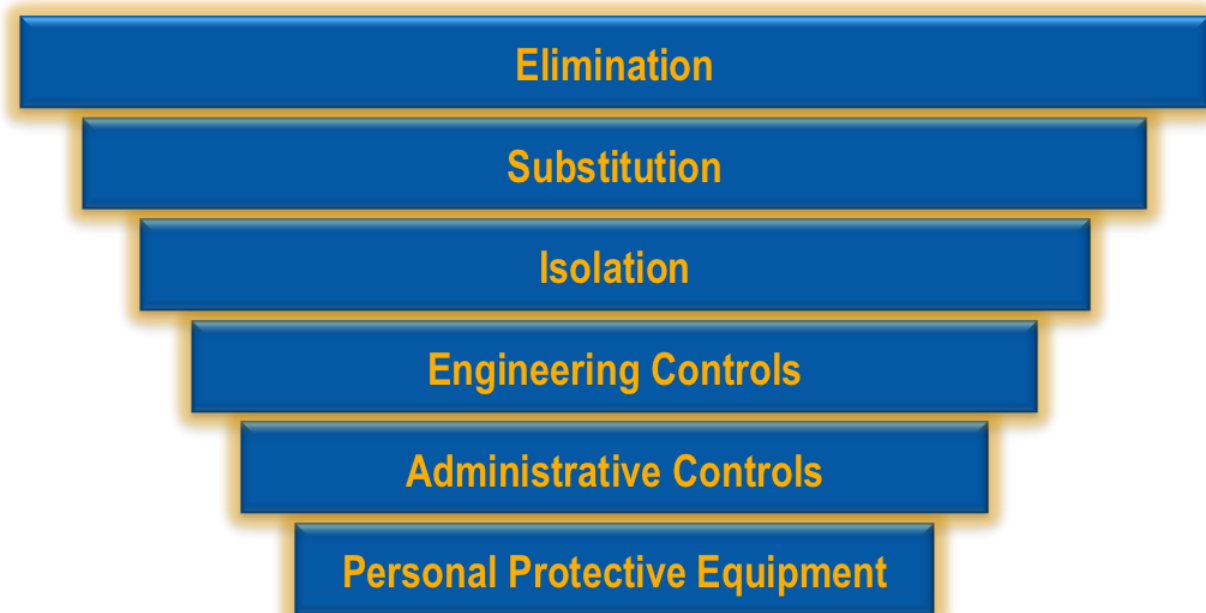


Hazard and risk controls may include option types ranked in order from the highest level of protection and reliability to the lowest.

This is known as the Hierarchy of Hazard Control, which is a range of control methods used to eliminate or control hazards and risks in the workplace.

3.1.1 HIERARCHY OF HAZARD CONTROL

The hierarchy has 6 levels:



3.1.1 HIERARCHY OF HAZARD CONTROL

The most effective form of control is to eliminate the risk, e.g. by eliminating a particular chemical or process. If that is not reasonably practicable you need to identify other effective measures to reduce the risk.

Administrative controls and PPE are the least effective controls.



3.2 CONSIDER CONTROL OPTIONS

When considering which options to adopt for dealing with risks, at first all possible options should be identified. A brainstorming session with the work group is one method you can use.



3.2 CONSIDER CONTROL OPTIONS

You may need to conduct some research to identify the possible options for dealing with particular risks. Information about controls may be obtained from:

- State or territory Compliance Codes and guidance material.
- Industry associations.
- Unions.
- Manufacturers and suppliers of plant, substances and equipment used in your workplace.



3.2 CONSIDER CONTROL OPTIONS



In some cases, published information will provide guidance to whole work processes. In other cases, the guidance may relate to individual items of plant or how to safely use specific substances.

The options can be implemented if they are appropriate to the situation and provide high levels of protection from the risk.

3.2 CONSIDER CONTROL OPTIONS

You should list the options in the order of the Hierarchy of Control.

Elimination

1. Where no hazard exists, no risk of injury or illness exists. A hazard can be eliminated if it is not really necessary to the delivery of the end product or service. For example:
 - Repair damaged equipment promptly.
 - Remove trip hazards in a cluttered corridor.
 - Dispose of unwanted chemicals.
 - Eliminate hazardous plant or processes.



3.2 CONSIDER CONTROL OPTIONS

If it is not possible to eliminate the hazards or all of the risks, steps need to be taken to reduce the likelihood or degree of harm of the hazards and risks that remain.



3.2 CONSIDER CONTROL OPTIONS

2. Substitution

If it is not possible to eliminate the hazard, substitute it with something – preferably of a lesser risk – which will still perform the same task in a satisfactory manner.



For example:

- Substitute manual handling for appropriate plant and equipment to move materials.
- Substitute a hazardous chemical with a less dangerous one.

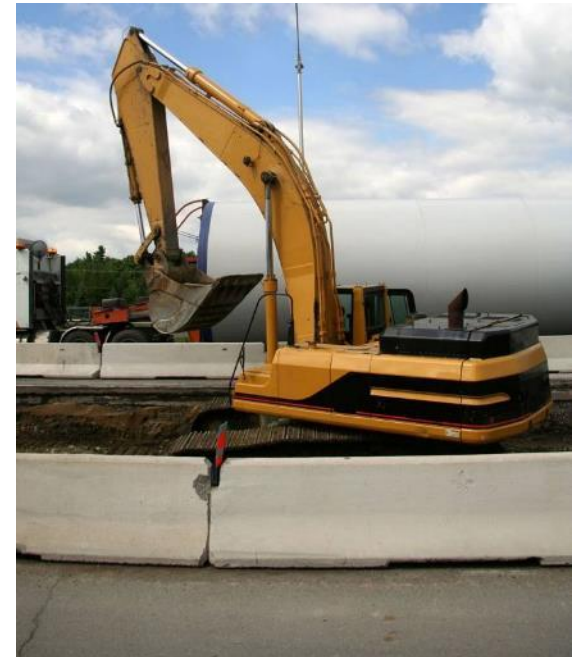
3.2 CONSIDER CONTROL OPTIONS

3. Isolation

Isolate the problem from staff. This is often done by using separate, purpose-built rooms, barricades, or sound barriers. This moves the hazardous process away from the main work area to a site where emissions can be controlled.

For example:

- Isolate and store chemicals properly by using a fume cupboard.
- Isolate copying equipment and other machinery in soundproof rooms to reduce fumes and noise.
- Use security measures to protect staff.
- Incorporate appropriate exclusion zones when operating plant and machinery.



3.2 CONSIDER CONTROL OPTIONS



4. Engineering Controls

Redesign equipment, work processes or tools to reduce or eliminate the risk.

For example:

- Ensure proper machine guarding is in place.
- Use anti-glare screens on computer VDUs.
- Use mechanical aids to minimise manual handling injuries.

3.2 CONSIDER CONTROL OPTIONS

- Use wetting down techniques to minimise dust levels.
- Change bench heights to reduce bending.
- Redesign plant to reduce noise levels.
- Install forced ventilation to remove vapours.



3.2 CONSIDER CONTROL OPTIONS

5. & 6. Administrative Controls And PPE

These controls are a 'back-up' to the other categories. They should not be relied upon as the primary method to control risk – until all higher-level options have been exhausted.

On its own, each of these methods of risk reduction is unreliable because it relies on people acting as expected. However, in combination with more effective controls, they can be used to further reduce risk.



3.2 CONSIDER CONTROL OPTIONS

Sometimes 'back-up' controls should be used as the initial control phase while elimination or minimisation are being evaluated and applied. For example:

Administrative controls such as:

- Training.
- Job rotation.
- Redesigning of jobs.
- Maintenance of plant and equipment.
- Limitation of exposure time.
- Provision of written work procedures.
- PPE – should only be used as a last resort or in conjunction with other control methods.



3.2 CONSIDER CONTROL OPTIONS



It is important to consider all of the options available when deciding on the best course of action. Not all options are feasible or possible under the circumstances.

You may need to use a number of control measures together to reduce the risk to an acceptable level.

The risk control plan should clearly identify the order in which to implement the individual risk controls.

3.3 IDENTIFY FEASIBLE OPTIONS

Once all options have been listed, the next step is to analyse them to see which ones are feasible.

A feasible control option must be:

Available

- ▶ Must be available to be purchased.
- ▶ i.e. it or its parts can be purchased, made to suit or be put in place.

Suitable

- ▶ Must be suitable for the circumstances in the workplace.
- ▶ i.e. it will work properly given the workplace conditions, work process and the people who do the work, and have the least impact on the delivery of goods or services.

Highest Level

- ▶ Must provide the highest level of protection for the people and is the most reliable.
- ▶ i.e. controls that are towards the top of the hierarchy.

3.3 IDENTIFY FEASIBLE OPTIONS

When deciding which types of control measure are feasible, you should consider the severity of injury, illness or disease that could occur.

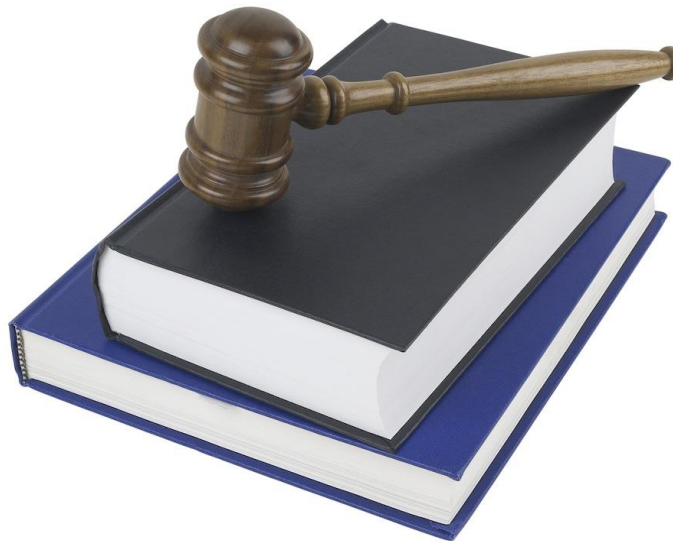
If the severity is high (fatality, serious injury), a higher hierarchy order of control (elimination, substitution, engineering controls, isolation) should be used.

Where there are options for control, those that have the most impact on the likelihood and/or the degree of harm (e.g. elimination) should be implemented in preference to options that have lesser impacts.



3.3 IDENTIFY FEASIBLE OPTIONS

The OHS/WHs legislation specifies that you must not depend solely on the use of administrative controls or PPE to reduce the risk unless you have established that the higher level, more effective, controls are not practicable.



3.3 IDENTIFY FEASIBLE OPTIONS



Where the hazard or risk has the potential to cause high levels of harm (e.g. death, serious injury or serious illness), more emphasis should be given to those controls that eliminate or reduce the level of harm, than those that reduce likelihood.

Controls must provide the highest level of protection that is reasonably practicable in the circumstances.

3.4 ANALYSE OPTIONS AND IDENTIFY RESOURCES

Once you have reduced the list of control options to those that are feasible, you will need to analyse each option to identify what resources are required for their implementation.

Resources may include:

- People (from within the organisation, contractors and external agencies) – human resources will be required to:
 - Provide advice.
 - Carry out physical modifications to plant or buildings.
 - Conduct staff training.



3.4 ANALYSE OPTIONS AND IDENTIFY RESOURCES



- Environmental/physical resources can include:
 - Traffic control.
 - New or different plant and equipment.
 - Buildings and facilities.
 - Barriers, fencing and signs.
 - PPE.

3.4 ANALYSE OPTIONS AND IDENTIFY RESOURCES

- Finance – financial implications of implementing the control options must be calculated, however cost is never a reason in itself for not implementing a control option.
- Technology.
- Information.



3.4.1 COSTS

Inability to afford the cost of a particular control option is not a factor in determining what is reasonably practicable.

The legislation expects a duty-holder to incur the cost of controls widely adopted in that particular type of enterprise.



3.4.1 COSTS



For example, in a spray painting workshop, the provision of canister respirators for workers involved with spraying isocyanate paints is an accepted means of controlling the risks that remain after engineering controls are implemented.

A duty-holder who provides gauze masks because canister respirators are too costly will not be doing what is reasonably practicable to control the risk.

3.4.1 COSTS

The cost of providing the highest level of protection should be borne unless it is unreasonable in the circumstances to do so.

A decision not to implement controls should only be made where the cost far outweighs the safety benefits that will be achieved.



3.4.1 COSTS

If two control strategies will result in the same levels of protection for people and have the same reliability, it is appropriate to adopt the least costly option.

Cost should not be used as a reason for adopting controls that rely exclusively on changing people's behaviour or actions when there are controls available that can change the risk through elimination, substitution, engineering or isolation.



3.5 SELECT THE MOST APPROPRIATE CONTROL



Selecting the most appropriate hazard/risk control involves balancing the costs and efforts of implementation against the benefits derived.

Essential things to consider are the legal, regulatory and other requirements such as social responsibility and the protection of the natural environment.

Decisions should also take into account risks whose control is not justifiable on economic grounds, e.g. severe (high negative consequence) but rare (low likelihood) risks.

Under the OHS/WHS legislation you are required to introduce treatments or control measures to eliminate the risk, or if that is not possible, to reduce the risk so far as is reasonably practicable.

3.5 SELECT THE MOST APPROPRIATE CONTROL

The term "reasonably practicable" has a particular meaning under the OHS/WHS legislation. It means practicable with regard to:

- The likelihood or probability of a person being exposed to harm.
- The potential seriousness of injury or harm that would result.
- What the person concerned knows, or should reasonably know, about the hazard or risk and any ways of eliminating or reducing that hazard or risk.
- The availability and suitability of ways to eliminate or reduce the hazard or risk.
- The cost of eliminating or reducing the hazard or risk.



3.5 SELECT THE MOST APPROPRIATE CONTROL

You must be able to show consideration of all the above factors in selecting the most appropriate control with regard to the legislation and the organisation.



3.6 PLAN THE SELECTED CONTROL

After decisions have been made about the most appropriate hazard/risk controls, you will need to take an organised and managed approach to ensure that they are put in place.



3.6 PLAN THE SELECTED CONTROL

Good organisational or business management practice should be followed. These include:

- Developing plans, including timelines and resource requirements.
- Applying the appropriate resources and infrastructure context and language.
- Allocating a budget.



3.6 PLAN THE SELECTED CONTROL



- Assigning responsibility and accountability for the various steps in the plan, including for resolving problems and issues during the planned work.
- Monitoring and reporting on the progress of the work.
- Testing the controls once they are put in place.

3.6 PLAN THE SELECTED CONTROL

The formality of the control plan and the extent of it will need to match the organisation and the extent of work to be done.



The plan should be developed in consultation with the relevant managers, health & safety representatives and employees/workers.

Those people who have been allocated responsibility for implementing actions should be adequately briefed on the expectations.

3.6 PLAN THE SELECTED CONTROL

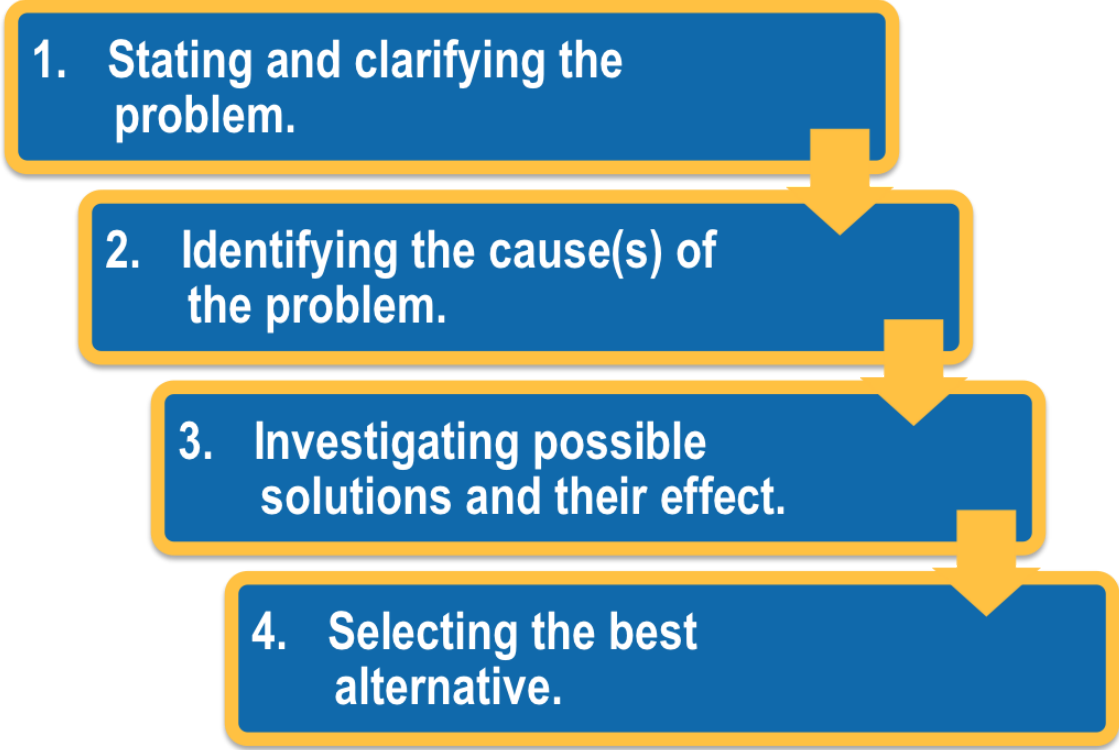
You need to make sure progress towards implementing the plan is monitored with enough lead time to take any corrective actions necessary to complete the plan on time.

If you discover a need for corrective action, document it in its own implementation plan in the same way as you have done for the overall plan.



3.6.1 APPLYING PROBLEM-SOLVING SKILLS

Problems and issues with technical resources and infrastructure may arise from time to time. In dealing with any problems you should adopt a basic diagnostic process of:



1. Stating and clarifying the problem.

2. Identifying the cause(s) of the problem.

3. Investigating possible solutions and their effect.

4. Selecting the best alternative.

3.6.1 APPLYING PROBLEM-SOLVING SKILLS

As noted above, your implementation plan should assign responsibility and accountability for resolving problems and issues during the planned work.



3.6.2 USING APPROPRIATE LANGUAGE

Implementing risk management involves a new way of thinking and a new language.

It is important to use precise, common terminology to ensure the effective communication and unambiguous description of the risks and controls within each area and across the whole of the organisation.

Most state/territory risk assessment guides include a glossary of common terms, e.g. www.vmia.vic.gov.au.



3.7 GAIN AUTHORISATION FOR SELECTED CONTROL

Before implementing the control plan you have selected it must be authorised by the appropriate manager or supervisor (or a competent person who has been delegated the authority to do this).

This means it will have to be reported and documented in accordance with site requirements.



A report on the risk assessment process and recommended outcomes should be prepared and submitted to the manager for endorsement of the recommended controls.

In some cases, OHS/WHS regulations will require certain records to be kept and this must be done.

3.7.1 WRITING REPORTS

A report is a write-up of an investigation and sets out:

- Why the investigation took place.
- How it was carried out.
- What the findings were.
- What actions are recommended.

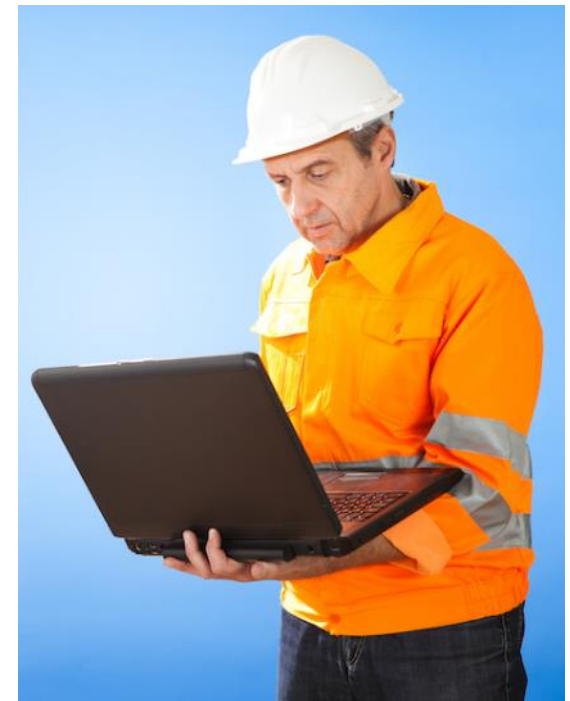
A report aims to convey information in a clear and concise manner. Sections should be headed and numbered for easy location of information.



3.7.2 REPORTING ON THE CONTROL PLAN

Your report should comply with site requirements for document control and might include the following information:

1. Why the Risk Assessment is being carried out.
2. All the actual and potential hazards in the workplace.
3. The measures that are already in place to control risks.
4. Risk rating for each hazard using the Risk Evaluation table, giving them a priority of VERY HIGH, HIGH, MEDIUM or LOW. Address extreme risks first, followed by high risks, medium risks and finally low risks.



3.7.2 REPORTING ON THE CONTROL PLAN



5. The measures recommended to control the hazard. You can use one, or a combination of controls.
6. A copy of the implementation plan.
7. Additional comments that:
 - Clarify or explain the risk rating or controls proposed.
 - Outline any special monitoring or other arrangements that will accompany any of the control measures.
 - Highlight any special feature or characteristic of the hazard.
 - Aid the implementation of the controls.
8. Your signature and the date of the report.

3.8 DOCUMENT AND REVIEW CONTROLS

Once the risk assessment process is concluded, it will be necessary to document and review the selected controls in accordance with site working instructions (or equivalent) for the job to ensure they are in line with the new or modified controls.

They must also comply with the organisational and site safety documentation.



3.8.1 OPERATIONAL INFORMATION AND PROCEDURES

Work instructions set out the steps the worker needs to follow to interpret and complete a task correctly and safely.

The relevant operational information will cover site working instructions which may include:

- Applicable Commonwealth/state/territory legislation and codes of practice relating to the industry, dangerous and hazardous goods, environmental protection and safety and health.



3.8.1 OPERATIONAL INFORMATION AND PROCEDURES



- Materials Safety Data Sheets (MSDS).
- Worksite safety management systems.
- Manufacturers' documentation and handbooks.
- Workplace Safe Operating Procedures (SOPs) and policies.
- Emergency procedures.
- Safety alerts.

3.8.1.1 PROCEDURAL DOCUMENTATION

There are a number of different procedural documents that may be used on site, which may include:

- Job Safety Analysis (JSA).
- Job Safety and Environmental Analysis (JSEA).
- Job Hazard Analysis (JHA).
- Safe Work Method Statement (SWMS).
- Work Method Statement (WMS).



3.8.1.1 PROCEDURAL DOCUMENTATION

Generally, all of these documents require you to carry out the same process and are used to identify hazards and treatments relating to different tasks or pieces of plant or equipment.

In some cases these documents will already exist for the work you are required to complete. In other situations you may need to be involved in the creation of these documents.



3.8.1.1 PROCEDURAL DOCUMENTATION

As a guide, these procedural documents are generally used where:

- Hazards relating to the work have been identified.
- Non-routine work is to be carried out.
- New plant or equipment is being used.
- Previously the task may have resulted in some damage or injury.
- Where there is an intrinsic risk involved in carrying out the task (e.g. work at heights, confined spaces, electrical work).



3.8.1.1 PROCEDURAL DOCUMENTATION

Depending on which specific form is being used on site there may be variations of layout and sequence, but they should all include the following details:

- 1** Title or description of the job being carried out.
- 2** The plant or equipment required for the job, including PPE.
- 3** The workers who will be involved in carrying out the job.
- 4** A description of each step in the task, in sequence from start to finish.

3.8.1.1 PROCEDURAL DOCUMENTATION

- 5** Any hazards that may occur or are related to each step in the task (or to the task as a whole).
- 6** The hazard controls/treatments that will be used to eliminate or minimise the hazards.
- 7** The risk level associated with each hazard (sometimes listed before the hazard control and after as well).
- 8** The workers responsible for maintaining the hazard controls throughout the job.
- 9** Signoff from all workers to be carrying out the work and a supervisor who is responsible for the task and workers.

3.8.2 PREPARING AND TESTING WORK INSTRUCTIONS

All relevant sources of operational information will need to be researched and analysed for content that can be applied to work procedures and processes.

Preparation of work instructions should not be a one-off activity, but should be ongoing and part of the process of continuous improvement.



3.8.3 REVIEWING WORK INSTRUCTIONS



Work instructions should be reviewed as part of standard safety management practice.

They will need to reflect any new or modified equipment, processes or procedures adopted as a result of the risk assessment process.

3.8.3 REVIEWING WORK INSTRUCTIONS

They should also be reviewed if there is a reason to suspect that the procedures are no longer appropriate or valid, for instance:

- After an accident, incident or near miss.
- When there is a change in the work process.
- Significant new information or techniques become available.



3.9 APPLY PROCEDURES TO CONTROL RECOGNISED HAZARDS



Once the control measure has been chosen, planned for and approved, it is time to implement the procedures to control the recognised hazards.

It is extremely important that all procedures are applied correctly and according to organisational policies – and in line with the reviewed work instructions.

If you have any concerns or questions about the application of procedures in your workplace, talk to your manager.

3.9 APPLY PROCEDURES TO CONTROL RECOGNISED HAZARDS

The method of applying procedures will be different for each workplace so it is important that you are aware of your organisation's requirements.

Depending on the control measures that are being used, the application of procedures could include:

- Communicating the updated procedure and relevant information to workers.
- Implementing new processes for work tasks.
- Purchasing new equipment or plant.
- Conducting training.



3.10 COMMUNICATE CONTROL INFORMATION



Information on the control and its implementation will need to be communicated to the relevant people.

All personnel/workers involved in the steps to control hazards and risks must have the necessary information and skills to contribute.

This may mean providing briefings on the approach adopted for the workplace or it may mean providing training.

3.10 COMMUNICATE CONTROL INFORMATION

You can promote the proposed risk management process throughout the organisation by:

- Conducting information sessions for managers, supervisors, unions and employees/workers.
- Establishing appropriate forums (e.g. Working Party, Steering Committee, etc.) specifically responsible for the development and implementation of the control.
- Tabling reports at workplace OHS/WHS committee meetings as part of an effective Safety Management System.
- Making information work in the relevant area.



3.10 COMMUNICATE CONTROL INFORMATION

Effective communication is crucial to the success of the program. Hazard controls are more effective where procedures are communicated in appropriate language, and signs and symbols are used.



Communications can take many forms depending upon the audience and the information, and may include:

- Face to face.
- In writing.
- By telephone or other electronic means.
- Formal.
- Informal

3.10.1 APPLYING COMMUNICATION SKILLS

Effective communication skills will help you to get your message across and build confidence and commitment to the program.

Express Yourself Clearly

- Focus on the objective – think about what you say before you say it.
- Speak clearly and concisely – don't waffle or speak in generalisations.



3.10.1 APPLYING COMMUNICATION SKILLS

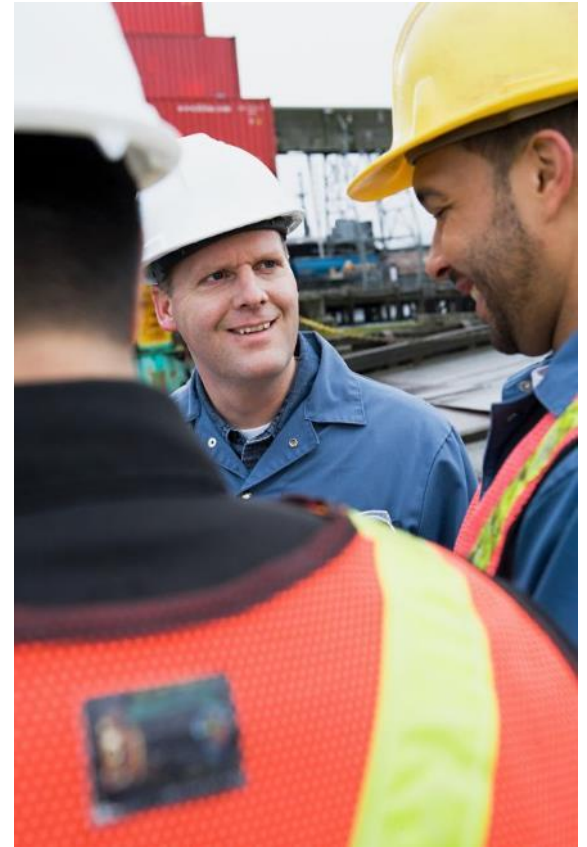


Actively Listen

- This means you listen with the intention to hear and grasp what someone is trying to communicate.
- Keep an open mind and open ears.
- Always give your undivided attention to the current speaker.

3.10.1 APPLYING COMMUNICATION SKILLS

- Show that you are interested in what is being said by:
 - Making eye contact.
 - Asking questions when appropriate.
 - Not rushing, interrupting, or finishing the speaker's sentences.
- Watch your body language – the following are signs that you don't care what the person is saying:
 - Too much fidgeting.
 - Tapping your pen or fingers.
 - Eye rolling and making faces.



3.10.1 APPLYING COMMUNICATION SKILLS

Give And Seek Feedback

- Be assertive – express your personal feelings about any issues – your colleagues deserve honest feedback.
- Specify why you agree or disagree – be descriptive and tactful.
- Give positive feedback – everyone appreciates positive reinforcement.
- Ask others for their feedback.



3.11 REVIEW WORK INSTRUCTIONS FOR COMPLIANCE

Work instructions should be monitored and reviewed to make sure they are in line with compliance documentation and site requirements.

Maintaining effective procedures and controls to comply with changed legislative requirements and site operating conditions requires a number of things to be put in place.



3.11 REVIEW WORK INSTRUCTIONS FOR COMPLIANCE

The following elements are necessary to maintain effective controls over time:



- Regular consultation – risk controls are more effective where there is initial and ongoing consultation with employees/workers and safety representatives.
- Allocated accountability for health and safety – accountability must be clearly allocated at various levels of management to ensure procedures are followed and maintained.

3.11 REVIEW WORK INSTRUCTIONS FOR COMPLIANCE

- Up-to-date hazard information and risk assessments – information about hazards, e.g. plant and substances, may be updated by manufacturers and suppliers from time to time. This needs to be checked to make sure controls are still relevant.
- Changes to operating conditions or the way activities are carried out may also mean that risk assessments need to be updated.



3.11 REVIEW WORK INSTRUCTIONS FOR COMPLIANCE

An important step in effective risk management is to establish and maintain systems which allow the opportunity for regular evaluation and review procedures.

Evaluation means examining control measures, including work instructions, to ensure risks are eliminated or reduced and have not caused new hazards presenting unacceptable risk.



3.12 ACTION AMENDMENTS TO WORK INSTRUCTIONS

After the risk control plan has been authorised and work instructions have been reviewed, you may find that some amendments are necessary.

You need to ensure a system is in place to make these amendments so that all tasks and activities still comply with worksite safety documentation.

This will also mean that all workers can be clear about what is now expected and that they have the skills to carry out amended instructions.



3.12 ACTION AMENDMENTS TO WORK INSTRUCTIONS



Large organisations may have many hazardous processes, large numbers of staff and layers of management.

Establishing formal processes will ensure consistency and certainty of results. This generally includes protocols for authorisation and document control.

For smaller organisations that do not have high risk processes, less formal approaches may be used that rely on a minimum set of procedures and documentation.

3.12.1 APPLYING AMENDED WORK INSTRUCTIONS

All personnel/workers must have the necessary skills to apply the work instructions for their various activities and tasks.

Changes in requirements and/or procedures may mean that you need to:

Conduct Briefings

To inform all workers of the approach adopted for the workplace.

Provide Additional Training

To maintain competencies of all workers and supervisors, and ensure new employees/workers are capable of working safely.

Refer To The Appropriate Party For Follow Up

e.g. Site manager, supervisor or OHS/WHS representative (If your work role does not require you to action the amendments to site working conditions yourself).