

# **Contribute to WHS hazard identification, risk assessment and risk control**

**Learner Guide**



# Table of Contents

<b>1. Access information to identify hazards, and assess and control risks.....</b>	<b>4</b>
1.1 - Identify sources of information and data .....	4
1.2 - Obtain information and data to determine the nature and scope of workplace hazards, the range of harms they may cause, and how these harms happen.....	10
1.3 - Obtain information and data to determine the nature and scope of workplace risks and risk controls .....	10
Collect information .....	11
Record your findings .....	12
<b>2. Contribute to compliance and workplace requirements .....</b>	<b>14</b>
2.1 Contribute to identifying and complying with requirements of workplace policies, procedures, processes and systems for hazard identification, risk assessment and risk control activities .....	14
2.2 Contribute to identifying and complying with requirements of WHS Acts, regulations, codes of practice and guidelines for hazard identification, risk assessment and risk control activities.....	14
Harm the hazard can cause.....	15
Risk Rating Matrix .....	18
2.3 Identify duty holders and their range of duties.....	19
<b>3. Contribute to workplace hazard identification .....</b>	<b>19</b>
3.1 Use knowledge of hazards to advise individuals and parties of workplace hazards, the harms they may cause, and how these harms happen .....	19
Harm the hazard can cause.....	22
3.2 - Apply knowledge of hazard identification to contribute to selecting techniques, tools and processes to identify workplace hazards.....	22
Under the WHS Act: .....	23
3.3 - Contribute to applying techniques, tools and processes .....	30
Definitions.....	30
3.4 - Contribute to documenting use of, and results of, hazard identification .....	33
Section 7.....	34
<b>4. Contribute to WHS risk assessment.....</b>	<b>35</b>
4.1 - Apply knowledge of risk assessment to contribute to selecting risk assessment techniques, tools and processes for workplace hazards.....	35
4.2 - Contribute to applying techniques, tools and processes to identified hazards .....	36
4.3 - Contribute to documenting the results of risk assessments .....	36
Fishbone Diagram .....	37
<b>5. Contribute to the development, implementation and evaluation of risk control .....</b>	<b>38</b>

---

5.1 - Apply knowledge of risk control to contribute to developing risk control options for workplace hazards using the results of risk assessments.....	38
5.2 - Contribute to developing and implementing a risk control plan.....	38
5.3 - Contribute to evaluating implemented risk controls .....	38
Risk Rating Matrix .....	39
Document method and outcomes of risk assessment.....	44

# 1. Access information to identify hazards, and assess and control risks

## 1.1 - Identify sources of information and data

*Using reviews, tools and techniques to source information from others can assist you in identifying possible risk or hazards in the workplace. To narrow down a hazard or risk and to identify possible causes of a problem you can source other organisation data such as WHS information and data.*

**Sources of WHS information and data** may include:

- **Audits** – On site inspections can be used to ensure that your organisation’s WHS goals and objectives are being met. In the case that a hazard and associated risks are found, corrective action can be taken to minimise or eliminate risk in the workplace. If you believe that your worksite is not meeting its legal requirements then you can download a Self Assessment to determine what issues need to be redressed in the Safety inspection.
- **Employer groups** represent a specific industry or type of business. The members of the employer group usually work with other businesses to build competitive to stimulate growth in Australia. Employer groups will ensure that their members are up to date with industry trends and will assist members in operating their business (industry) more effectively. Employer groups make sure that all employers have a opportunity to represent and promote their interests in the current and future markets.
- **First Aid Records** must be maintained to ensure that you have a record of how many workers have been trained in providing first aid (**Regulation 42 for the WHS Regulations**) according to the nature of the work being carried out. Many first aid kits will usually have a form that requires staff to monitor which staff is using the facilities, what they are using the facilities for and/or if there has been a variation in their usage. Variations in usage can assist in identifying possible causes of hazards or risk in the workplace if the staff members problem is not some identifiable illness.
- **Hazard, incident and investigation reports** All hazards and incidents in the workplace must be investigated in a timely manner to ensure that risk is eliminated or minimised in the workplace. This means that employees need to report risks and complete accident/incident reports as part of their legal duty or care as a worker under the WHS Act. Investigations can be raised:



- As a normal part of operations
  - Upon request to ensure that changes already implemented are meeting their goals and objectives; or
  - In response to an accident/incident report being raised.
- **Industry bodies** work with the government in the development of vocational education and training at both State/Territory and National Levels. The aim of industry bodies is to use experts who can assist on training needs and delivery to specific industries.

The five main industry bodies in Australia include:

- Australian Chamber of Commerce and Industry (ACCI)
    - <http://www.acci.asn.au/>
  - Australian Council of Trade Unions (ACTU)a
    - <http://actu.asn.au/>
  - Australian Industry Group
    - <http://www.aigroup.asn.au/>
  - Australian Institute of Training and Development
    - <http://www.aitd.com.au/>
  - Business Council of Australia
    - <http://www.bca.com.au>
- **Legislation, standards, manufacturers' manuals and specifications available at the workplace**

The aim of **manufacturer's manuals** will ensure that you are aware of how to operate your equipment safely. Otherwise known as an owner's manual, this manual will provide you with instructions on installation of the equipment or plant, set up instructions, installation instructions, safety instructions, how to program the equipment and maintain it, as well as any regulatory codes that you will need to follow to operate the equipment safely and within the correct legislative requirements.

A **specification** sets out the minimum standards that your product must meet to be legal. Specifications allow you to know whether a product is appropriate for



your needs and that it meets your requirements. Specifications will usually include a description of the product, its product code, which is responsible for maintaining a product, testing methods, acceptable performance testing levels and drawings of the product to ensure that you have the correct product.

- **Minutes of meetings from incident investigations** are used to keep a record of what was discussed during a meeting and can provide those who did not attend the meeting with information on the subject of the meeting, decisions made and the reasons for the decisions. Minutes will also allow personnel to know who was assigned a task and when that task should be completed. These minutes will be reviewed in the next meeting.
- **MSDS'S and registers** The register of MSDS's and MSDS's should be accessible to workers. They can be stored:
  - Physically on paper and made available to all workers; and
  - Computerised and internet MSDS databases.

The MSDS register is a tool that is used to ensure that everyone involved in managing hazardous substances exposures at the workplace.

- **WHS professional bodies** can give you industry advice regarding a specific industry. When your workplace does not have staff with the correct skills and knowledge, WHS professional bodies will be able to provide you with names of external consultants who can provide you with:

- Safe systems of work and their improvement
- Identifying, eliminating and controlling hazards
- Taking samples or measurements of workplace environments such as whether the workplace has a high level of air borne contaminants.

The type and source of advice will be determined by your needs and the need to ensure that you met your legal obligations under the WHS Act.



➤ **WHS specialists** may be found from specific Societies within a specific industry. Some of these societies include:

- Human Factors and Ergonomics Society of Australia for Ergonomist Specialists  
<http://www.ergonomics.org.au/membership/cpe/cpes-WHS-specialists.aspx>
- Toxicology in Australia for Toxicologist Specialists  
[http://healthengine.com.au/search\\_interest.php?q=Toxicology](http://healthengine.com.au/search_interest.php?q=Toxicology)
- Audiological Society of Australia for Audiologists  
<http://www.audiology.asn.au/>

**Regulatory authorities (for codes of practice, legislation)** Regulation in Australia is developed by government bodies. A list of regulatory bodies in Australia include:

- Australian Bureau of Statistics  
<http://www.abs.gov.au>
- Australian Competition and Consumer Commission  
<http://www.accc.gov.au/>
- Australian Industrial Relations Commission  
<http://www.airc.gov.au/>
- Australia New Zealand Food Authority  
<http://www.foodstandards.gov.au/>
- Australian Pesticides & Veterinary Medicines Authority  
<http://www.apvma.gov.au/>
- Australian Securities & Investment Commission  
<http://www.asic.gov.au>
- Australian Taxation Office  
<http://www.ato.gov.au/>
- Australian Workplace  
<http://www.workplace.gov.au/>
- Competitions & Markets Advisory Committee  
<http://www.camac.gov.au/>
- Consumer & Employment Protection, Governments of Western Australia  
[http://www.safetyline.wa.gov.au.](http://www.safetyline.wa.gov.au)



- Department of Employment & Workplace Relations  
<http://www.dewrsb.gov.au/>
- Department of Treasury  
<http://www.treasury.gov.au/home.asp?ContentID=521>
- Insolvency & Trustee Service Australia  
<http://www.itsa.gov.au/>
- Legislative Assembly for the ACT  
<http://www.legassembly.act.gov.au/>
- National Industrial Chemicals Notification and Assessment Scheme  
<http://www.nicnas.gov.au>
- National Occupational Health & Safety Commission  
<http://www.nWHSc.gov.au>
- Ombudsman  
<http://www.comb.gov.au>
- Productivity Commission  
<http://www.pc.gov.au>
- Reserve Bank of Australia  
<http://www.rba.gov.au>
- Superannuation Complaints Tribunal  
<http://www.sct.gov.au>
- The Takeovers Panel  
<http://www.takeovers.gov.au>
- Victorian Work cover Authority  
<http://www.workcover.vic.gov.au>
- Workplace Health & Safety, Queensland Government  
<http://www.whs.qld.gov.au>
- Workplace Standards Tasmania  
<http://www.wst.tas.gov.au>

The strategic role of regulation is increasing due to the effects of globalisation and technological development. Regulation may be local, national, international and global and regulation is important to public policy. Each State/Territory has a regulatory body that has a large impact on people, organisations and the environment.



- **Reports** play an important role in the internal operations of any organisation. They leave a historical record of the organisations WHS efforts and can be used to not only ensure that the organisation's legal requirements are met, but to ensure that:
  - Changes to the worksite is ensuring that risk is minimised or eliminated
  - The reasons for the change and why the decision was made
  - The different types of options available
- **Standards, from Australia or overseas**
- **Unions** such as the Australian Council of Trade Unions see the implementation of the new WHS laws as a chance to achieve the best standards in health and safety for the country. Trade unions played a large role in the development of WHS laws in place today and will assist in ensuring that standards are maintained.
- **Websites, journals and newsletters** Make sure that the information that you gather from these areas is valid and come from a reliable source. Reliable sources mean government work sites, trade and industry journals and newsletters. If you do not obtain information from a reliable source, you may find that the information you provide to the people you are trying to help is not correct. When information is not correct, then you run the risk of a bad decision being made that can put others at risk.
- **Workplace inspections**

Workplace inspections are planned events that can be used to identify hazards before an injury arises. Even though anyone can do an inspection, they should be completed by qualified personnel. Once a hazard is identified you should put in place steps to ensure that the hazard is controlled.



## 1.2 - Obtain information and data to determine the nature and scope of workplace hazards, the range of harms they may cause, and how these harms happen

## 1.3 - Obtain information and data to determine the nature and scope of workplace risks and risk controls

Research is an important part of any investigation into a WHS hazard and its associated risks. To ensure that you gather the correct information, it is essential that you clearly identify what information you need to ensure that you can minimise the hazard and the risks associated with the hazard.

Failure to systematically identify what you are researching could mean that you will not be able to identify what information that you need to gather. This in turn may mean that you will be gathering a lot of information that is not appropriate. Too much information may mean that you will be faced with information overload.



Information overload is when you have gathered so much information that you can become frustrated and confused as you will not be able to collate the information into any form of order. If you have trouble with defining what information you are required to gather, consult with personnel that work in the area in which the information will be gathered.

### To be systematic, you need to be able to:

- Identify hazards that can hurt personnel
- Assess how personnel can be hurt
- Minimising or eliminating the risk; and
- Reviewing the risk controls to ensure that they work.

You cannot however, be systematic if you are not sure about the information that you are required to gather. Incorrect data and information will not provide you with the correct information to resolve the issue.

Once you are clear on your research, you need to determine what information will provide you with the ability to identify the best way in which to minimise or eliminate the risk. Your organisation's policy and procedures can assist you here. For example; you are required to choose a piece of equipment that minimise risk to workers by ensuring that the repetitiveness of their tasks is minimised. You cannot rotate workers due to the precision required to perform their set task and

the level of training required for the worker to be skilled enough to perform the required tasks safely.

With this information in hand, you start to browse the internet for the appropriate equipment. Prices vary and you start to ask how much you will be able to spend. You go to the supervisor and they provide you with the feedback. Armed with this knowledge, you will now be able to assess each piece of equipment to determine the appropriate price. There are five pieces of equipment that are within your price range. Part of your job is to assess each piece of equipment and prioritise them. How will you prioritise them?

**You may:**

- Consult with other duty holders that will be impacted by the introduction of the equipment
- Clarify priority requirements with management and the personnel that the equipment is being purchased for.
- Determine whether there are any other options open and consult with appropriate personnel to determine if these options are appropriate. Do not just consult with one party. There are times in which your team members may use your research as a platform to get their point across. Confirm that the option should be considered by consulting with management. The idea may have already been considered and rejected. Do not waste your time researching and gathering information that does not assist you in making the appropriate recommendation/s.

Be aware that even though you are given strict parameters upon which to make recommendations, you will sometimes face facts that were not previously considered. Consult with the appropriate personnel to determine what stance you should take in regards to the unforeseen. It is important to make sure that you consider all of the relevant information that you need to make the appropriate recommendations.

Whenever you make a recommendation, it is essential that you support your recommendation with facts. Making a recommendation without facts will not assist the decision makers in making an informed decision.

### **Collect information**

Information as you now know can be gathered both internally and externally from the organisation. The information that you gather should support your recommendations and the recommendations that you have gathered from your team.

Remember to make sure that the information is supported and from a reliable source.



## Record your findings

If you have never written a report or recorded your findings, you should consider following the steps outlined below, which are:

### 1. Clarify purpose and expectations

Be clear on what you are trying to achieve. Know your audience, make sure information that you gather will support your recommendations. Be clear on your role and responsibilities. Make sure that you consult with others as your recommendations will impact on their job performance.

### 2. Decide on appropriate report structure

Many organisations will have a template in which to develop reports. In some instances, there is no standard format. Refer to previous reports to assist you in the development of your report.

### 3. Gather information to support your case

Always support your points with facts. If you do not provide facts to start with, they will be asked for later.

### 4. Circulate the report

Remember that this is part of the consultative process and feedback from appropriate personnel will allow you to clarify issues, ensure that your recommendations and the information used to support your recommendations are accurate. Discuss feedback with appropriate personnel and if necessary redraft the report.

When you circulate information, remember to make sure that the information provided is appropriate for the audience. A full report may scare workers so you may provide them with a meeting to discuss your findings. Make sure that you give the workers a chance to express their thoughts and ideas.

Once you have consulted with staff and included their feedback in the report, you should present the report or information to the appropriate personnel. However, one final area should be addressed before the final report is sent to the appropriate personnel.

You should ask yourself, what should I do when the information is outside my level of expertise?

No matter how much experience you have in gathering information, collating it and using it to make recommendations, you will always face that level where your level of knowledge and skills are exceeded.

Take heart. All is not lost.



When this happens, consult an expert or specialist to clarify information and provide you with the feedback that you require. You will need to research further to find an appropriate specialist or expert to assist you.

There are many ways in which to research for a specialist or an expert's name. One of the best ways in which to research for specialists and experts is by performing an internet search.

In the search browser, write the name of the type of expert or specialist that you require i.e. Toxicologist. Press Enter.

A list of possible websites will appear. It is important to make sure that you choose a professional website that is recognised by the industry. Look for websites such as employer associations, WHS/WHS experts, industry groups and government bodies.

Many of these websites will provide you with a list of recognised personnel. If you are not sure about the type of expert or specialist you are looking for, contact the website owners or business and ask for recommendations. In most cases, these personnel will be able to provide you with a list of personnel that you may consult with.



Workplace inspections are events that are planned as a pro-active way in which to identify hazards before they can develop into an injury or illness. There are no rules as to who can do a workplace inspection; however, it is recommended that the person who performs the inspection has experience in the work area. This person should be either a supervisor for that area or the Health and safety representative or safety officer.

As part of the harmonisation of work health and safety, it is important that whoever performs the inspection consults with team members in the area. One of the goals of the harmonisation program is to foster a co-operative, consultative relationship between duty holders and the persons who they owe duties and their representatives.



As part of this process, it is important that team members are provided with sufficient information to ensure that they can provide informed feedback to you. For example, a change measure has been put in place to improve productivity and ensure that the worker is not stressed due to the repetitive nature of their job. How can an improvement be identified if the worker is not aware of their previous work performance and whether the changes put in place achieve their goals if he does not know why the changes were made and the impact of those changes?

Checklists can be used during the inspection to identify hazards. Checklists can help you identify the area of concern. For example, you may need to check whether workplace changes that have been implemented have ensured that the goals set have been met.

Your organisation may have one type of checklist, or a series of checklists that are separate for each area, especially when job roles, equipment and plant are different. It is important to make sure that you use the correct checklist. This means that you should make sure that you are familiar with the location of the appropriate checklists on your organisations data base. If you do not have access to the data base and do not have a copy of the checklist, make sure that you obtain a copy of the appropriate checklist from the appropriate member of your team.

Where an appropriate checklist is not available, you may need to make modifications to existing checklists. Many organisations provide schedules for workplace inspections. However, an inspection may also arise out of a problem that may have been reported by workplace personnel.

Schedules are usually carried out according to the level of risk of an area. The higher the risk to the area, the more frequent the inspections should be. Variations to the frequency and detail of an inspection may arise out of the frequency of changes implemented in an area. Changes to an area may include new plant, equipment, refurbishments, projects and procedures.

Once a workplace inspection has been completed, any items that require corrective action need to be addressed. This may mean that any hazards that are identified should be assigned to the appropriate personnel for review and this assignment should be documented as per your organisations procedures.

## **2. Contribute to compliance and workplace requirements**

### **2.1 Contribute to identifying and complying with requirements of workplace policies, procedures, processes and systems for hazard identification, risk assessment and risk control activities**

### **2.2 Contribute to identifying and complying with requirements of WHS Acts, regulations, codes of practice and guidelines for hazard identification, risk assessment and risk control activities**

A hazard is something that can cause harm in the workplace and a risk arises from the harm caused by the hazards, how serious the harm can be and the likelihood of it happening. When assessing risk it is important to review the information that is current. It is not wise to always assume that a risk occurs because processes are incorrect in the performing of the task that could cause the hazard.

For example, you may presume that a hazard arose out of human error. However, was the human error caused due to negligence, lack of support or complacency leading to a worker not following the correct protocols and procedure?

Never try to resolve a problem without assessing the current procedures that are in place. Previous consultation may also provide a plethora of information. Previous views and concerns can

contribute to the current cause of a risk. They may not have been considered important before but may actually have an impact now.

**A risk assessment should be carried out when:**

- There is uncertainty about how a hazard may result in injury or illness
- The work activity involves a number of different hazards and there is an understanding about the hazards and how they interact to form greater hazards
- Changes in the workplace that may impact on the effectiveness of control measures

**Risk assessments should not be necessary when:**

- Legislation requires that specific hazards are controlled in a special way
- A code of practice or other guidance sets out the control measures applicable to your situation; and
- There are well-known and effective controls used in your industry and that they are suited to the purposes set out in the workplace. These controls can be simply implemented.

How to manage WHS Risks Code of Practice, p.10, 2011



At this stage, care should be taken to ensure that the established codes or recognised legislation is considered when assessing the risk. Check your exposure standards and provide workers with feedback in regards to the settings

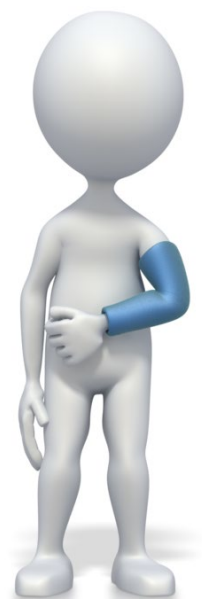
As part of maintaining a systematic approach to WHS Management, it is essential that the level of risk and organisational procedure will impact on the way in which hazards are prioritised. Hazards and associated risks are usually defined by their level of:

**Harm the hazard can cause**

It is recognised that the state of the global economy impacts on cash flow. This means that an organisation will need to change their priorities in the resolution of risk. Consultation with other stakeholders and key personnel will assist an organisation in determining the order in which a hazard can be resolved.

Your employer will set the parameters in which decisions shall be prioritised. It is important that stakeholders are aware of these parameters. By drawing on the pool of human resources available a more informed decision will be made to ensure that hazards are prioritised according to the level of harm within the parameters set.

The level of harm that workers will be exposed to; will usually place a high priority in the consultation process. However, at times cash flow and the availability of resources will impact the way in which WHS needs is prioritised.



**Cash flow** is the budget that has been allocated to resolve the risk. In a dynamic global economy, organisations must be cautious in the amount that they allocate for the resolution of a hazard. The budget will also be influenced on what the organisation deems as reasonably practicable and will include the amount that the organisation believes that the risk is worth.

**Availability of resources** relates to the amount of human resources are available to execute the change. Are there enough qualified personnel to execute the change? Are there enough personnel to relieve the personnel who are reassigned to work or be trained on the risk control measure? This will also be determined by cash flow.

**Organisations have different ways in which to prioritise the hazards and hazardous jobs and how they are managed. Hazards should be assigned the highest form of potential loss or injury when:**

- There is a likelihood that people will be exposed to the risk, the level of exposure and the amount; and
- The potential consequences of being exposed to the hazard, which relates to how serious an injury will arise when people are exposed to the risk.

A risk assessment must be performed when an activity is considered to be a high risk under WHS Regulations. All hazards have the ability to cause harm ranging from minor to serious injury and in some cases death.

**Risks should be assessed using a risk assessment. It is important that you:**

- Consult with stakeholders
- Remember the research findings that you have found; and consider the impact that they will have on your work environment.



**When performing a risk assessment, it is essential that you consider how severe the harm can be to workers or those exposed to the risk by asking the following questions:**

- What type of harm could occur? – How severe is the harm? Could it cause death serious injuries
- What factors could influence the severity of harm that occurs? = External or internal factors, whether the harm is immediate or gradual
- Could one failure lead to other failures?
- Could one event escalate into a serious event with more serious consequences?



It is also important to consider what type of harm a hazard may cause. One incident for example may lead to a series of problems. If one or more event can be stopped or changed then a risk may be eliminated or reduced. It is important in this instance to identify where the problem started and then consider the impact in each step of the process.

**When assessing the harm that a hazard can cause, consider:**

- The effectiveness of the control issue
- How work can be performed rather than relying on written manuals and procedures (Using the consultation process here can assist greatly in controlling harm)
- The situation and how they are normally meant to occur.

For example, if equipment is maintained through regularly cleaning and maintenance, how often will breakdowns and failure to controls occur?

**When determining the likelihood of someone being harmed, consider:**

- How often a task is performed
- How often are people close to the hazard?
- Has the incident occurred before – either in your workplace or elsewhere



Many organisations develop a risk rating matrix that assists personnel in assigning a priority to a hazard and will assist you in prioritising the order in which hazards are resolved.

**Risk Rating Matrix**

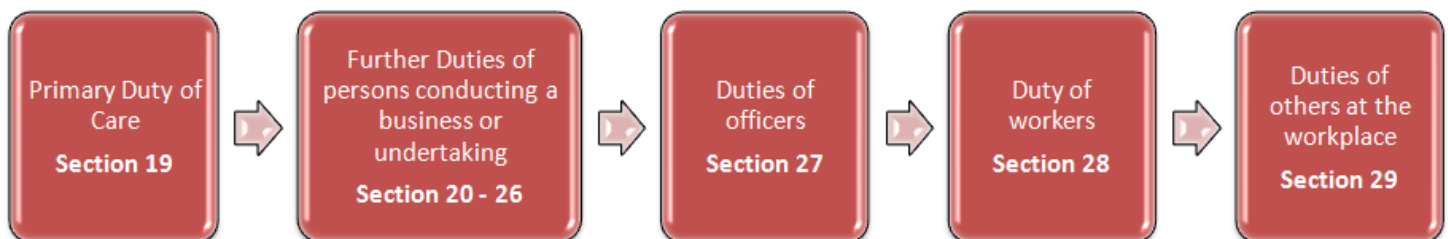
<b>How likely will someone end off work</b>	<b>Death or disabled</b>	<b>Several days off</b>	<b>First Aid</b>
<b>Very likely</b> Could happen a lot			
<b>Likely</b> Could happen occasionally			
<b>Unlikely</b> <i>Could</i> happen, but only rarely			
<b>Very unlikely</b> <i>Could</i> happen, but probably never will			

## 2.3 Identify duty holders and their range of duties

All duty holders must do everything that is “reasonably practicable” to protect the work health and safety of everyone at the workplace. This duty of care falls on all:

- Employers
- Company directors
- Managers
- Supervisors
- Employees
- WHS representatives and committees
- Contractors

The aim of regulations is to minimise risk of injury or illness at the workplace. The management and control of risk in the control of hazards and risks in the workplace and provide them opportunities to contribute and participate in the process. The Work Health and Safety Consultation, Cooperation and Coordination Code of Practice for example provides for workers to take a more proactive action in the decision making process through consultation. The more that workers and others participate and contribute to work health and safety, the more informed their decisions shall be.



Duty holders under the Common Law duty of care need to prove to the satisfaction of the court that the actions that they have taken to protect others from risk are reasonable and practicable. Duty holders need to clearly know what their duty is, what the implications are for each group and what happens if they do not comply.

## 3. Contribute to workplace hazard identification

### 3.1 Use knowledge of hazards to advise individuals and parties of workplace hazards, the harms they may cause, and how these harms happen

It is important that every day that you work, you are always on the lookout for any hazardous situations. Organisations will have procedures in place to document reporting on accidents,

incidents and near misses. This should be part of the continuous improvement process to ensure that companies are working towards making the processes better at all times, and that they are maintaining the level of commitment they need to making the workplace a safe and healthy one for its employees.

An effective continuous improvement process will allow everyone to get involved, thereby giving staff and managers a chance to take ownership and responsibility for the continual improvement within the organisation. This is particularly important when it comes to health and safety in the workplace, as this should be an area that is constantly being monitored and improved in all areas.

Reports need to be communicated to relevant industry bodies, and to management and stakeholders so that the organisation can prove it is following rules and regulations that pertain to the reporting mechanisms for WHS principles. For continuous improvement to work well, all departments in an organisation should become involved, take ownership for, and be responsible for changes that arise out of suggestions to improve practices.

Real results come from encouraging all staff, departments and managers to take ownership, responsibility and accountability of the improvement process. When all staff members are encouraged to take responsibility for their workplaces, and to ensure they are also responsible for maintaining records and a safe workplace, then they are likely to feel more empowered in the process.

**Some of the ways in which they can be advised of hazards in the workplace include;**

- Company meetings
- Emails
- Blogs
- Newsletters
- Teleconferences



**Managers need to be accountable for the identification of potential hazards.**

**Some of the ways in which they can do this include;**

- General Observations
- Inspections
- Reports from other staff members
- Newsletters
- Surveys and Questionnaires

**Managers are responsible for the following in relation to identifying potential hazards in the workplace;**

Conducting regular inspections of the work areas

Ensure all staff members are properly trained

Encourage staff to report any incidents or issues of concern

Investigate areas of concern immediately

Keep accurate records of incidents, accidents, near misses

Provide a safe working environment

Accurate reports should always be kept in relation to accidents, incidents and even near misses as part of the continuous improvement process.

If an organisation does not have a proper reporting procedure in place to keep track of these situations, a manager needs to develop and encourage the implementation of this procedure.

Staff members should all be aware of the relevant policies and procedures and expectations in relation to the reporting of these issues, and what follow up action is required from them from a legal perspective.

## Recap

### Harm the hazard can cause

It is recognised that the state of the global economy impacts on cash flow. This means that an organisation will need to change their priorities in the resolution of risk. Consultation with other stakeholders and key personnel will assist an organisation in determining the order in which a hazard can be resolved.

Your employer will set the parameters in which decisions shall be prioritised. It is important that stakeholders are aware of these parameters. By drawing on the pool of human resources available a more informed decision will be made to ensure that hazards are prioritised according to the level of harm within the parameters set.

The level of harm that workers will be exposed to; will usually place a high priority in the consultation process. However, at times cash flow and the availability of resources will impact the way in which WHS needs is prioritised.

## 3.2 - Apply knowledge of hazard identification to contribute to selecting techniques, tools and processes to identify workplace hazards

One of the most important responsibilities that you will perform under WHS is the Identification, minimisation and control of Workplace Health and Safety Hazards. This resource and the following resources will give a step by step understanding of WHS in your workplace and the tools that you can use to assist you in maintaining control of risks in the workplace.

To understand your legal requirements of risk Identification, control and resolution consult the How to Manage Work Health and Safety Risks Code of Practice, which can be found in any of the regulator websites for your State/Territory. The aim of this resource and the resources listed above is to provide you with tools that you may use to assist you in the performance of your duties. You may also find that some of these tools are a normal part of your organisations Work Health and Safety Procedures.



## Under the WHS Act:

### ➤ **Division One, Subdivision One; and**

As far as “reasonably practicable” in regards to WHS Hazard Identification, you should weigh up all options in regards to work health and safety by:

- Ensuring that you minimise or eliminate the chance of a risk or hazard arising
- That you determine the level of harm that may occur from the hazard or risk
- What each party that contributes to the process knows about eliminating or controlling the risk;
- The ways available to minimise or eliminate the risk; and
- The costs associated with the minimising or elimination of the risk.

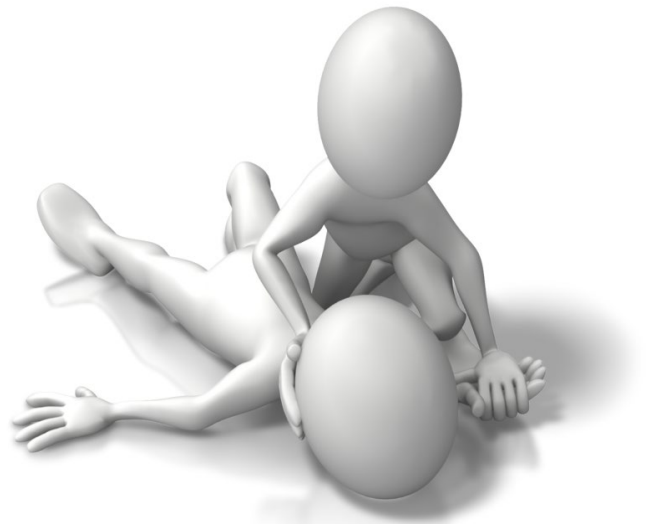
These options will be considered to determine whether you took the appropriate action in consideration of the procedures and controls (such as budgetary controls) put in place when you implemented steps to minimise or eliminate the risk.

### ➤ **Division Two**

Division two relates to duty of care. In working within an organisation, you are required to ensure that the health and safety of others is not placed at risk. As part of the responsibility of staff, any risk identified in the workplace must be reported to the organisation. Your organisation will have policies and procedures in place, usually in the form of an accident/incident form.

All incidents and accidents should be reported to the State/Territory regulator. The manner in which they are reported may vary for each State/Territory. Refer to the State/Territory Regulator for your area to determine the correct steps for the reporting of accident/incidents. Your organisation may also provide you with procedures which are followed in the generation of an accident/incident report.

There may be times in which you are completing a risk assessment. Conversely workers may identify a hazard and report the risk to you. Yet other times when a hazard is identified in the normal course of business. When a hazard is identified



you may be required to use hazard identification tools, techniques, processes and methods may include:

➤ **Analysis of injury and claims statistics**

An increase in claims or injury should be followed up with an analysis of work health and safety. Injury and claims statistics can assist you in identifying causes of injury in the workplace. It is important to make sure that all hazards identified and injuries are reported as per your organisational procedures.

Care should also be taken when a potential for an injury is identified. Near misses, such as tripping that do not lead to injury can end up being causes of injury. When a trend in a specific type of injury or near miss is identified, steps should be taken to ensure that follow up action is taken.

➤ **Audits**

Audits are part of any organisations quality assurance process. The aim of an audit is to measure all of your organisations system and identify where improvements to the system can be made, especially if any non-compliance issues arise. These issues may be found in Australian Standards and industry Standards such as AS/NZS 4801 and 4360.

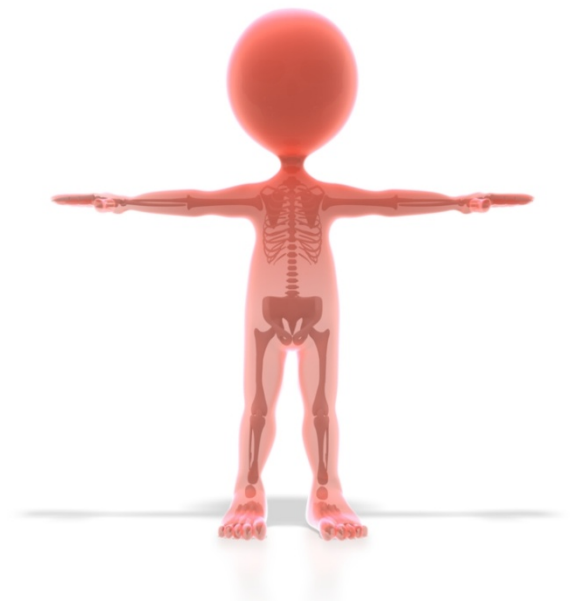
Continuously auditing your organisations work health and safety system will ensure that you meet your legal obligations of improving health and safety in the workplace. Action should be taken to minimise or eliminate any gaps that you identify in your WHS system.

➤ **Body mapping**

Body mapping is a tool used by many countries to identify the lay of the land. This means that all of your body is mapped over a period of time. At another designated time, your body would be mapped again. Changes to the body such as varicose veins, degradation to various body parts such as bowels and liver and changes in body mass are mapped. The systematic zoning of the body allows for identification of problems in the performance of a worker's duties. For example, if several staff members had a large increase in varicose veins, a risk assessment of all of the possible causes of varicose veins would be assessed.

As a result of the body map, the risk is identified and workers can be treated by minimising or eliminating the risk or hazard.

➤ **Checklists for hazard identification**





Checklists can be used to help identify hazards in the workplace and ensure that the risk is controlled. Checklists may be used to review previous changes for improvement or to identify other risks.

➤ **Consultation with workers, clients or other users**

The Work Health and Safety Consultation Cooperation and Coordination Code of Practice allow employers to ensure that your legal obligation in regards to WHS is maintained in the workplace. Consultation is not only a legal and essential part of managing health and safety in the workplace, it acts as a way to ensure that as much information is collected to ensure the best informed decisions are made.

**Refer to these documents to further review the:**

- Identification of employee concerns, such as through a hazard reporting system; and
- how you would obtain input of managers, WHS representatives, WHS committee and others through consultative processes.

➤ **Interviews**

Interviews are an excellent way of gathering information. Using questions to gather information can be enhanced with the knowledge of what different types of questioning hope to achieve. Different questioning techniques include:

- Open ended questions – What, where, when, why, which or how can be used to obtain an explanation, where as
- Closed ended questions can ensure that you obtain a one worded answer such as yes or no. Closed questions can be used to control the response that you obtain, while open ended questions give the other party a chance to provide you with more information.
- Clarifying questions can be used to clarify details to ensure that you have obtained a correct understanding of the information that you have been provided with. For example, did you mean to say, that the worker slipped on a dirty greasy rag? These type of questions allow the interviewee to respond in either a yes or no answer or to provide more information to ensure that you have a thorough understanding of the issue.

➤ **Investigations**

Investigations arise in work health and safety when an incident or accident arises. Investigations are usually performed by Workplace health and



safety officers, work place health and safety representative and their committees. You employer is encouraged to perform their own investigations internally and to ensure that they resolve any issues as they arise.

➤ **Job safety analyses**

Job safety analysis (can also be referred to as a Job Hazard Analysis or a risk assessment) is used by management to identify workplace hazards and then can assist you in determine ways in which you can control or eliminate hazards and then implement them. The aim of this document is to evaluate tasks, processes and procedures in a workplace to protect workers from injury or illness.

➤ **Material safety data sheets (MSDS)**

The Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice will provide you with a clear outline of what a MSDS is. The MSDS will provide you with information in regards to hazardous chemicals, how they affect your health and how to use them safely in the workplace.

**A Material Safety Data Sheet should contain the following information:**

- Hazards associated with the chemical
- What the chemical was made of
- First aid measures that should be taken if exposed to the chemical
- Storage and handling
- Toxicological, ecological, disposal, transport and regulatory information about the chemical.

All chemicals found on work sites should be accompanied by a Material Safety Data Sheet that should be stored in strategic positions around the website.

➤ **Monitoring and measurement**

An Organisation should ensure that continuous monitoring of the workplace is performed to ensure the safety of workers. To monitor a workplace, you need to have the ability to measure performance so you can identify where potential risks may arise. There are many ways in which you can identify the increase of risk in the workplace.

For example, while you are monitoring workers compensation claims and incidents in the workplace you identify that there are:

- An increase in claims in the last quarter



- That the number of days lost has increased; and
- There is an increase in claims costs, including public liability insurance.

These outcomes should identify that there is a work health and safety problem within the workplace. The type of incidents/accidents reported and the level of frequency of these reports can indicate to you where the problem in health and safety may be arising.

Variations such as increases in absenteeism and decreases in productivity can also be indicative of the health and safety issue within the work environment.

➤ **Observation**

**Observation of the work site can include:**

- Changes in work behaviour that may arise due to changes in work conditions
- Changes in the work environment that will impact on work health and safety
- Changes in plant and equipment that have a negative impact on worker productivity.

Observation may also occur when workers perform workplace inspections. Changes in productivity may arise from lack of maintenance in equipment and plant, or changes in the workplace such as in procedures should demonstrate a decrease or elimination of a hazard or a risk. If an increase in risk is identified when the change was supposed to Minimise the risk, then work personnel should review the changes implemented.

➤ **Review of past incidents, incident and hazard reports, hazardous substances and dangerous goods registers, plant and maintenance records**

Review of historical records can be used to identify hazards and workplace. For example, a new hazardous substance is introduced to the workplace and you identify that the substance has not been added to the dangerous goods register. Not only are workers place at risk, but your Organisation can be fined on the grounds of not following their duty of you care.

Your Organisation may have made variations to the maintenance of plant and equipment in an effort to save money. When you review the maintenance records, you might find that the level of repairs to plant and equipment have increased costs due to plant and equipment breakdown and lost work time.

➤ **Review of research and industry literature**

A literature review is a description of the literature that is available on a specific topic, industry or field. In industry,



examples of literature that you may use could include:

- Industry and government websites
- Industry journals
- Trade journals
- manufacturer's instructions or the owner's manual
- Trade books

When reviewing information from the Internet, make sure that the information that you are reviewing is valid and reliable. For example, many people will refer to Wikipedia when they are trying to find out information. This information is usually provided by personnel that may not be qualified thus making this information unreliable.

➤ **Review of technical standards and other information sources**

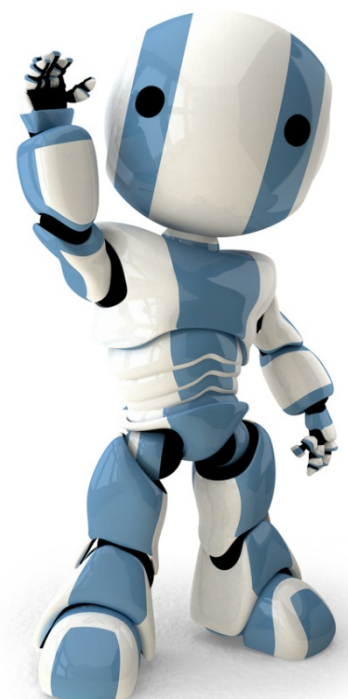
Different work health and safety standards that your Organisation may use include:

- Australian standards
- Exposure standards
- Guidance notes
- Industry standards
- International standards
- National standards
- Regulations

➤ **Simulations**

Simulations can be used by work personnel to learn how to operate safely in the work environment. Simulations give employees an opportunity to learn new skills, to identify ways in which they can improve and can also be used as a tool to improve workplace processes and procedures. For example to Minimise risk in the workplace, you plan to implement a change. This change could include the way in which to perform a task. The aim is to improve the quality of customer service by introducing human interaction, decision making and communication skills into the simulation to determine whether the simulation would operate successfully in a work place.

➤ **Timelines of actions and events**



Timelines are an essential part of WHS legislation in regards to hazard control and identification. The time between reporting and actioning an event may be constrained by law. Some variation in the reporting of incidents/accidents may vary from State to Territory regulators. The time for actioning an event will vary according to your organisations priorities in regards to how they respond to an event.

For example, your organisation may place a high priority in regards to resolving a hazard arising from a risk to worker health. However, when you consider the level of risk and the cost of resolving that risk, the organisation will prioritise the order in which hazards are resolved.

➤ **Use of incident models**

An incident model is the steps are followed to identify and report an incident. Reports of incidents can be communicated in many different ways including:

- Verbal reports to supervision;
- Accident/incident reporting.
- Worker's compensation claim forms

Once the incident is reported, the level of support and resolution should be addressed. Each level of support and action should be covered in the organisations policies and procedures.

➤ **Workplace processes such as 'walk through', surveys and inspections**

A walk through is a process in which the workplace environment is inspected and can be used:

- To answer questions in regards to the success or failure of a work health and safety issue
- Checking the companies WHS policy, emergency response, evacuation and records to ensure that they are correct and up to date.

**When a walk through is taking place:**

- Notes should be taken
- Answers to questions should be addressed
- Records of findings need to be maintained so a correct record of WHS is reviewed.

### 3.3 - Contribute to applying techniques, tools and processes

#### Definitions

**Hazard** means a situation or thing that has the potential to harm a person. Hazards at work may include: noisy machinery, a moving forklift, chemicals, electricity, working at heights, a repetitive job, bullying and violence at the workplace.

**Risk** is the possibility that harm (death, injury or illness) might occur when exposed to a hazard.

To understand what a hazard or risk is you need to identify the type of hazard your workers are exposed to. All hazards have the potential to harm workers and personnel in terms of injury, illness and to property, the environment or a number of these factors. Once a hazard is identified it is essential to identify the different types of hazards so that you can apply the appropriate techniques, tools and/or processes to address the hazard.

It is important to know the appropriate documentation to complete for each assessment and to ensure that you have access to this documentation. Most organisations used to have one type of risk assessment. However, changes to legislation and stricter guidance may mean many organisations will have different tools for different hazards to ensure that they comply with WHS legislation.

**The different types of hazards include:**



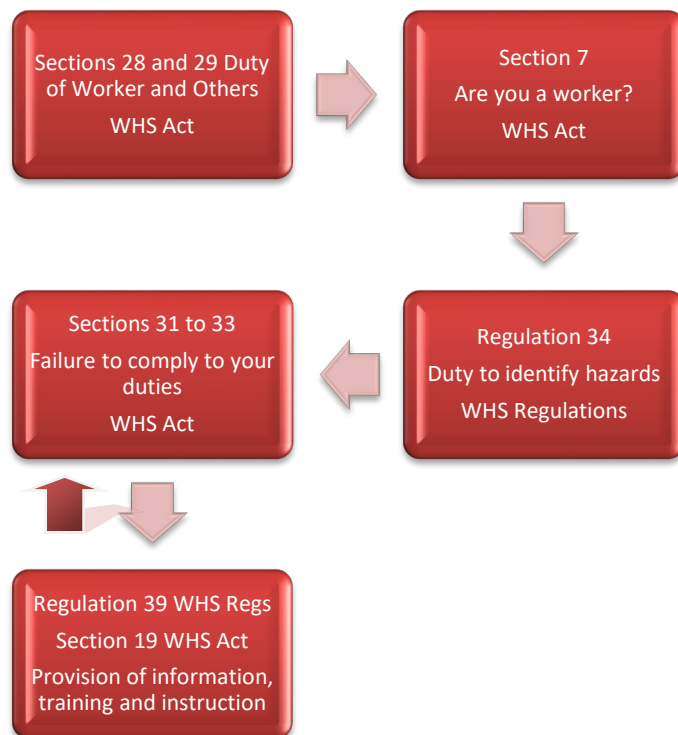
Hazard	Potential harm	Hazard identification tools	Code of Practice
<b>Manual tasks</b>	Overexertion or repetitive movement can cause muscular strain		Hazardous Manual Tasks WHS Regulations – Chapter 4 Part 4.2 Sections 60 & 61
<b>Gravity</b>	Falling objects, falls, slips and trips of people can cause fractures, bruises, lacerations, dislocations, concussion, permanent injuries or death		WHS Regulations – Chapter 3 Division 10 Sections 54 & 55
<b>Electricity</b>	Potential ignition source. Exposure to live electrical wires can cause shock, burns or death from electrocution,		WHS Regulations – Chapter 4 Part 4.7 Sections 144 & 166
<b>Machinery and equipment</b>	Being hit by moving vehicles, or being caught by moving parts of machinery can cause fractures, bruises, lacerations, dislocations, permanent injuries or death		WHS Regulations – Chapter 5 Sections 185 & 288
<b>Hazardous chemicals</b>	Chemicals such as acids, hydrocarbons, heavy metals and dusts such as asbestos and silica can cause respiratory illnesses, cancers, dermatitis		WHS Regulations – Chapter 7 Part 4.1 Sections 328 & 418  Schedule 7 - 18
<b>Extreme temperatures</b>	Heat can cause burns, heat stroke, fatigue. Cold can cause hypothermia, frost bite. This is covered in more detail in section 2.8 of the relevant code of practice		Managing the Work Environment and Facilities  WHS Regulations Chapter 3 Part 3.2 Division 2 Section 40

<b>Noise</b>	Exposure to loud noise can cause permanent hearing damage	Managing Noise and Preventing Hearing Loss at Work  WHS Regulations – Chapter 4 Part 4.1 Sections 56 & 59
<b>Radiation</b>	Ultra violet, welding arc flashes, micro waves, lasers can cause burns, cancer, blindness	
<b>Biological</b>	Micro-organisms can cause hepatitis, legionnaires' disease, Q fever, HIV/AIDS, allergies	The Biological Standard (see Safe Work Australia)
<b>Psychosocial hazards</b>	Effects of work-related stress, bullying, violence and work-related fatigue	WHS Act Part 6 – Discriminatory, coercive and misleading conduct Sections 104 to 115
<b>Physical</b>	The physical impact of working in an unsafe work environment is detrimental to the health of workers. By providing them with an environment that is safe physically you are building a rapport with your workers	Managing the Work Environment and Facilities
<b>Environment</b>	The work environment includes access and exit to the work area, housekeeping, floors and surfaces, work stations, lighting, air and hot and cold temperatures	Managing the Work Environment and Facilities  <b>Confined Spaces - COP</b>  WHS Regulations – Chapter 3  Division 3 Sections 65 & 77



### 3.4 - Contribute to documenting use of, and results of, hazard identification

As an employee, you have a legal obligation to recognise, document and report hazards to personnel. Now let us look at the sections covered in these performance criteria and explain in detail how each section impacts on you and your legal obligations for failure to comply with your duty of care.



Under **Sections 28 and 29** of the WHS/WHS Act, if you are a worker or other person you have a legal responsibility to:

- Their workplace safe for themselves and others
- Comply with reasonable instruction; and
- Co-operate with any reasonable policy or procedure of the person conducting or undertaking the business.

## Section 7

A worker may include a person who carries out work in any capacity, including work as:

- An employee
- A contractor or subcontractor
- An employee of a contractor or sub-contractor
- An employee of a labour hire company assigned to work
- An outworker
- An apprentice or trainee
- A student gaining work experience
- A volunteer
- A person of a prescribed task
- A police officer (when on duty and performing the tasks of a police officer)
- The person conducting the business or undertaking if the individual carries out work in that business or undertaking.



If you fall under this category of worker or you are another person then you have to comply with **Sections 28 and 29** of the WHS Act. If you are found guilty of not following the employer's instructions, you may have committed an offense and may be fined or jailed under **Section 31** of the WHS Act. There are three categories in which you may be fined or jailed under the WHS and they can be found in **Sections 31 – 33** of the WHS.

As a worker, under **Regulations 34** of the WHS Regulations, you must identify a hazard that you have identified and manage that risk (Regulation 35) by either:

- Eliminate the risk within your level of authorisation or
- Minimise the risk to the health and safety of workers and others within your work environment.

For example, if you are worker on a factory floor, you may minimise a wet floor by placing down signs and mopping the floor until it is dry. However, if the cause of the wet floor is a leakage to the plumbing system, you may not have the authority to arrange for a plumber to repair the leak.

In this instance, you should minimise the risk and report the hazard/risk to the appropriate personnel. The order in which you can eliminate or minimise risk should be found in the hierarchy of control measures, which will be discussed in detail in Section Three of this Learner Guide.

However, as a worker you may not be found guilty of Sections 28 and 29 of the WHS Act, if it can be established that your employer under **Regulation 19** of the Act or **Section 39** of the WHS Regulations/Act did not provide you with adequate information, training and instruction according to the nature of your job and the risks associated with the job.

It is also important to note that your previous work experience and training will also be considered in the case that a party is trying to establish that they were not provided with adequate training, information and instruction to minimise or control a risk within the workplace.

## 4. Contribute to WHS risk assessment

### 4.1 - Apply knowledge of risk assessment to contribute to selecting risk assessment techniques, tools and processes for workplace hazards

Remember under WHS Act, employers have a duty to ensure as far as practicable that the health and safety of workers is maintained while:

- They are engaged in work; and
- While their activities in carrying out their work is influenced or directed by another party while they are at the business or undertaking.

When a hazard is identified, it is essential that you perform a risk assessment to determine the level of risk and the impact the hazard has on the risk.

**Risk assessment tools may include:**

- **Legislation** – Under the WHS Act, a hazard or a risk needs to be controlled in a specific manner and that you must comply with the legislation.
- **Regulations** – WHS Regulations state that a risk assessment is essential for high risk activities such as working in confined spaces and electrical work.
- **Codes of practice and guidelines**, such as How to Manage Work Health and Safety Risks Code of Practice set out the way in which hazards and risks should be managed in a given situation. Controls should be chosen based on the guidelines.
- **Standards** ensure that products are made consistently. A guarantee of consistency can stimulate business growth. This consistency can be utilised to ensure that the standards of the product are consistent. It is only when a risk assessment is performed that you will have sufficient evidence that the product meets its minimum standards.



- **Or other relevant documentation** may include policies and procedures developed by the organisation. These policies and procedures have a direct impact on the decisions that you make in regards to the hazards or risks.
- **Checklists** can be used to ensure that all aspects of the hazard or risk are considered and that all of the questions pertaining to the risk assessment are answered.

## 4.2 - Contribute to applying techniques, tools and processes to identified hazards

### See 3.2 and 3.3

You will have already covered this at 3.2 and 3.3. If you have completed the Learning Activities both in the Learner Guide and Learner Workbook, you should feel confident contributing to and applying the correct techniques, tools and processes to both unidentified and identified workplace hazards. This may be a good opportunity to recap what you have learnt regarding this area and discuss any issues with the class to ensure everyone is happy with it.

## 4.3 - Contribute to documenting the results of risk assessments

A risk register is one way of documenting the results of risk assessments, it is a list of hazards, their associated risks (pre and post control) and controls that are sorted in order of the highest to the lowest level of risk. Appendix Number One is an example of a Risk Register from The How to Manage Work Health and Safety Risks Code of Practice. Control measures shall be discussed in the Learner Guide BSBWHS304B Contribute to WHS Hazard Control.

**Organisations may use a variety of different risk registers that may include:**

- **A list of hazards, their location and the people exposed to them**

Knowing where a risk can be found and the people exposed to the hazards can assist you in your consultation of the hazard so that you can actually make an informed decision in regards to minimising or eliminating risk. If you know the location of the risk, you will be able to determine if any external personnel have also had exposure to the hazard. Their experience with the work area and exposure to the risk may enhance the knowledge and skills that you have obtained.

- **A range of possible scenarios or circumstances under which these hazards may cause injury or damage**

Simulations and other tools can be used to consider the possible scenarios that may arise for any suggestions contributed by personnel in the consultation process. One



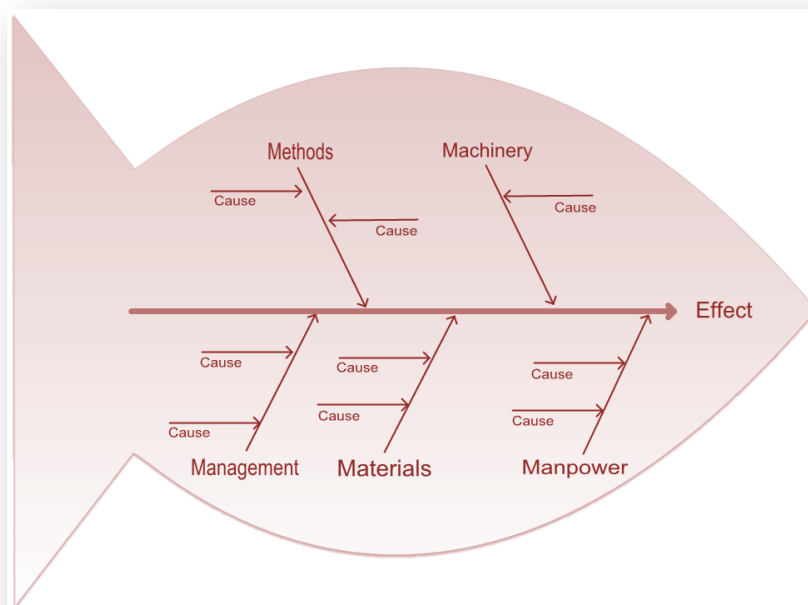
such tool that you may consider is the Cause and Effect Diagrams that will assist you to determine the causes of a hazard and allows you to consider all causes or potential impact that an action made will have on personnel.

## Fishbone Diagram

A fishbone diagram will provide you with a structured and systematic method of thinking through possible causes of a problem and will allow you to carry a thorough analysis of the situation, so that you can clearly consider a range of possible scenarios.

### Fishbone Diagrams include:

1. Use the risk assessment to write down the problem and draw a line horizontally across the centre of the page.
2. Determine the factors that contribute to the problem. Draw lines off the spine for each factor and label it. People, procedures, processes, external forces, etc should be considered and draw out as much as possible. You should consult with personnel at this point to identify if there is anything they could contribute to the diagram and possible resolution to the problem
3. Causes of the problem should also be considered and must relate to the possible factors identified in Step 2.
4. Analyse the diagram to determine all possible causes of your hazard. This allows you to make a better analysis of the different scenarios.



### ➤ Nature of injury or damage that could be caused

What damage or injury may the hazard cause. By identifying the consequences and likelihood of the risk you will be able to prioritise the order in which your risks can be resolved. The more severe the risk the higher the priority of the hazard being resolved should be.

### ➤ Results of a risk assessment

What were the results of the risk assessment?

➤ **Possible control measures for implementation**

How will you measure the success of the change implemented. You will be required to monitor these measurements to ensure that the change has achieved what you wanted it to achieve.

Now that you understand how to contribute to WHS Hazard Identification and the start of the Risk Assessment process, you will next learn how to contribute to WHS Hazard Controls.

## **5. Contribute to the development, implementation and evaluation of risk control**

### **5.1 - Apply knowledge of risk control to contribute to developing risk control options for workplace hazards using the results of risk assessments**

### **5.2 - Contribute to developing and implementing a risk control plan**

### **5.3 - Contribute to evaluating implemented risk controls**

**Risks should be assessed using a risk assessment. It is important that you:**

- Consult with stakeholders
- Remember the research findings that you have found; and consider the impact that they will have on your work environment.

**When performing a risk assessment, it is essential that you consider how severe the harm can be to workers or those exposed to the risk by asking the following questions:**

- What type of harm could occur? – How severe is the harm? Could it cause death serious injuries
- What factors could influence the severity of harm that occurs? = External or internal factors, whether the harm is immediate or gradual
- Could one failure lead to other failures?
- Could one event escalate into a serious event with more serious consequences?

It is also important to consider what type of harm a hazard may cause. One incident for example may lead to a series of problems. If one or more event can be stopped or changed then a risk may be eliminated or reduced. It is important in this instance to identify where the problem started and then consider the impact in each step of the process.

**When assessing the harm that a hazard can cause, consider:**

- The effectiveness of the control issue

- How work can be performed rather than relying on written manuals and procedures (Using the consultation process here can assist greatly in controlling harm)
- The situation and how they are normally meant to occur.

For example, if equipment is maintained through regularly cleaning and maintenance, how often will breakdowns and failure to controls occur?

**When determining the likelihood of someone being harmed, consider:**

- How often a task is performed
- How often are people close to the hazard?
- Has the incident occurred before – either in your workplace or elsewhere

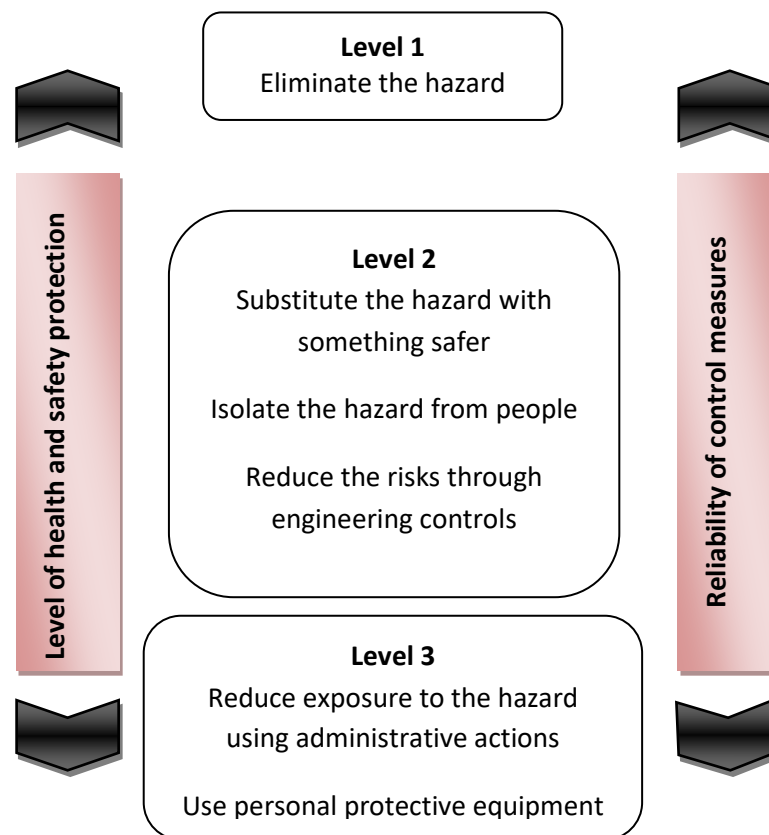
Many organisations develop a risk rating matrix that assists personnel in assigning a priority to a hazard and will assist you in prioritising the order in which hazards are resolved.

**Risk Rating Matrix**

How likely will someone end off work	Death or disabled	Several days off	First Aid
<b>Very likely</b> Could happen a lot			
<b>Likely</b> Could happen occasionally			
<b>Unlikely</b> Could happen, but only rarely			
<b>Very unlikely</b> Could happen, but probably never will			

Of those requiring more effort, you should prioritise areas for action, focusing first on those hazards with the highest level of risk.

The **hierarchy of risk control** is a tool that is used to assist organisations in ranking the level of protection and reliability a hazard control technique has in regards to eliminating risk.



**Chapter 2 General risk and workplace management, Part 3.1 Managing risks to health and safety from the WHS Regulations** provides you with the legislative requirements in regards to managing risk and the hierarchy of controls. **How to Manage Work Health and Safety Risks Code of Practice** will provide you with the guidance on how to determine which level of control a hazard has.

**Remember a code of practice does not need to be followed. A code of practice may be considered to be evidence by the courts to prove that the parties reacted reasonable practicable in regards to the circumstances that arose.**

Elimination is the most effective type of control. Consultation with worker and/or their representatives aims to draw on the experience of personnel which will then be used to influence your final decision. Consultation helps workers and stakeholders in accepting the changes to be implemented safely.

The control measure chosen must be specific to the risk. In some instances, two or more control measures may need to be implemented to ensure that the highest level of protection is obtained. When you complete the risk rating matrix, it is important to remember that staff perform short term fixes while the best method of resolving the risk is determined.



As highlighted above, cash flow and resources may impact on the priority of hazards. Both will influence the final decision when you are presented with the risk assessment that was used to control the risk.

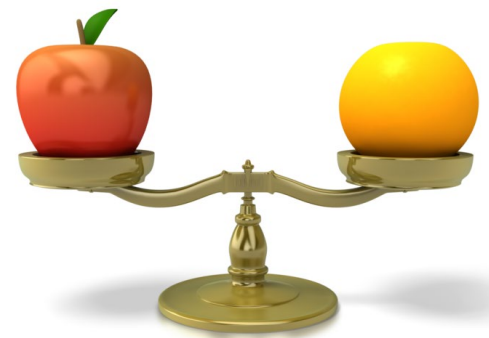
Risk assessments vary from organisation to organisation and from industry to industry. Irrespective of whether you perform or your managers perform the risk assessment, it is essential that you provide all parties with support and that you empower workers to take ownership of safety in their work areas.

Cash flow, resources and short term interventions may also need to be considered when you and other levels of management may need to consider when making a final decision in the resolution of risk.

### ***What is reasonably practicable?***

**Section 18** of the WHS Act defines reasonably practicable as a duty to ensure health and safety that in the performance of their work, which they assess:

- The chance of a hazard and risk happening
- The amount and level of harm that could arise from that risk.
- The amount of information a person may require in regards to the risk; and
- Whether there are suitable ways in which to minimise the risk based on the resources available and suitable in the control and minimisation of the risk.



For example, recent rains have caused pressure on the roof of your main entrance. Structurally the reception area is sound; however there are cracks in the walls that have allowed water to seep through. This water is seeping into the main entrance making the polished marble floors slippery. Severe cuts in budget due to the fluctuating interest rates have recently occurred in an effort to retain staff. This means that the amount of capital resources available to resolve WHS issues is low. Sealing the wall is expensive as the cracks in the roof have the potential of becoming bigger without further review.

The costs of replacing the roof to eliminate the risk may be too high. While you are attempting to resolve the risk you could ensure that the day cleaner would need to check the floor every hour when it was raining to mop up the floor. The amount of maintenance may vary according to the amount of rain. Signs have been strategically placed to let clients, the public and other workers know that workers are still working within the work area.

**Hierarchy of control** may include:

Control Measure Level	Control Measure	Explanation
One	<b>Actions taken to eliminate hazards entirely</b>	In most instances, eliminating a risk is more practical. However, elimination of a risk should occur when a process or procedure is developed during the planning stage. It will be cheaper to introduce elimination during the planning stage so that the control measures are aligned to the needs of the department. For example, a sound proof room will minimise a workers exposure to loud music if they work in a night club. This will minimise their exposure to risk while they are working for long periods of time.
Two	<b>Substitute another product or process to replace the hazard</b>	In this instance, you could review the processes in place and determine whether there is another way in which you can repair the roof without replacing the whole roof in the interim.
	<b>Isolate the hazard</b>	In what ways can you isolate the hazard? If there are any ways, what should/could you do? Isolation is separating the potential for harm against those exposed to the risk. There is only so long that signs and regular maintenance will work before the hazard becomes a risk.
	<b>Use engineering controls</b>	Could you capture the water before it hits the marble floors? Consultation with appropriate qualified personnel should occur to ensure that you have the information you require to make an informed decision. Re-diverting the water flow using engineering controls to make sure that the water flows away from the marble floors will minimise the risk. The resources available will influence the decision that you make. "Engineering controls are physical, meaning that they use a mechanical device or process" (How to Manage Work Health and Safety Risks Code of Practice).

Three	<b>Improve administrative controls such as changing policies, procedures or providing training</b>	The hazards are not controlled at the source. Risk is minimised through the behaviour of staff and their supervisors. Even though these are the least effective ways in which to minimise risk, staff should be trained on the procedures in place to control the risk. When a change process is implemented, it is important to make sure that staff are informed of the change, the type of change and when the change is officially implemented.
-------	--	---

**Administrative controls and PPE should only be used to protect workers from risk. They should only be used when:**

- The control measures that could be used are not practical for the given situation
- It can be used as an interim measure until a more appropriate control measure can be used; and
- To back up another higher control measure.

**Chapter Three, Part 3.2, Division 5, Sections 44 to 47 of the WHS Regulations provide strict instructions about the PPE that should be used at a workplace including:**

- Ensuring that PPE is chosen to minimise risk to the health and safety of personnel in the workplace
- That the PPE is appropriate to the nature of the work and hazards associated with the work;
- That the PPE fits the person wearing it;
- That the worker wears the PPE as far as is practicable; and
- That sufficient PPE is available in the case that PPE should be replaced, repaired or maintained so that risk is minimised

PPE must be worn by workers as far as reasonably practicable in accordance with the instructions training and information they receive. This includes training during the coaching and mentoring process, during formal or informal training or when they are provided with procedures that require the use of PPE.

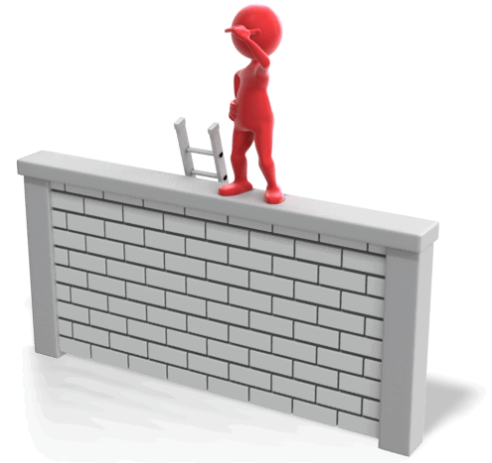
## Document method and outcomes of risk assessment

Care should be taken to ensure that you separate the main information that will influence the outcomes of the risk assessment. For example: decisions may be made based on cost. In a period of recession, there may not be as much cash flow throughout the organisation as consumers decrease spending on luxury items. The fewer consumers that you have, the less cash flow you will have. This means that you will need to consider a short term intervention until more funds are available to implement a high level on the hierarchy of risk control.

Before a final decision is made on the control measure implemented, make sure that you clearly state why you did not implement a specific control measure. This may mean that you should consider the organisations policies and procedures as they may influence your final decision. If you are not sure about the final control measure the final influence will be the control measure that is highest in the hierarchy of risk control

The steps within Section Three of this Learner Guide provide you with the steps involved in the completion of a risk assessment. Risk assessments will vary from organisation to organisation, however the basic steps remain the same and should include:

1. Establish goals
2. Identify risks
3. Analyse risks
4. Evaluate risks
5. Determine the treatment for risks
6. Monitoring and reporting on the effectiveness of risk treatments.



At this stage you are analysing the risks. As you complete each step of your research and analysis, information should be filed as per organisational procedures.

Documents are maintained as a historical record of the decisions that are made and why specific options were not chosen. This information can be used as part of the continuous improvement process. Change is a constant in business today. A risk control measure that is rejected today may become a resolution in the future. For example, a production process may be a hazard. The resolution for the process may be to become automated. If there is no automation to control the risk, then another control measure should be put in place to minimise or eliminate the risk.

If a new robot is developed in research and development or becomes available then as part of the review process; the new robot should be reconsidered as part of the continuous improvement process. This may mean that you should review the documents to determine whether the robot should be considered as part of the required control measures.

Documented records are also kept to provide evidence that the organisation has met their legal obligation of ensuring that the work environment is safe and that the organisation is consistently improving its processes.

**Records that may be kept until the analysis phase of the risk assessment may include:**

- A list of resources reviewed for the hazard
- Potential risks and control measures used to minimise, eliminate or control the risk
- How information was communicated which may include copies of the communications.
- The personnel consulted and feedback received
- An outline of the procedures followed
- Control measures and how they were prioritised.
- How the risk assessment was evaluated and the processes that will influence the decision.

**The method in which these records are kept will vary to the policy and procedures of the organisations. Records may be kept:**

- Paper based: Filed in the appropriate file
- Electronic based: filed on the intranet
- Both paper and electronic based.