

**BSBOPS403**

**APPLY  
BUSINESS  
RISK  
MANAGEMENT  
PROCESSES**

# **BSBOPS403**

## **Apply business risk management processes**

Release 1

## **Learner Guide**

Aspire Version 1.1



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## Before you begin

This Learner Guide is based on the unit of competency *BSBOPS403 Apply business risk management processes*, Release 1. Your trainer or training organisation must give you information about this unit of competency as part of your training program. You can access the unit of competency and assessment requirements at: [www.training.gov.au](http://www.training.gov.au).

### How to work through this Learner Guide

This Learner Guide contains a number of features that will assist you in your learning. Your trainer will advise which parts of the Learner Guide you need to read, and which Practice Tasks and Learning Checkpoints you need to complete. The features of this Learner Guide are detailed in the following table.

Feature of the Learner Guide	How you can use each feature
Learning content	Read each topic in this Learner Guide. If you come across content that is confusing, make a note and discuss it with your trainer. Your trainer is in the best position to offer assistance. It is very important that you take on some of the responsibility for the learning you will undertake.
Examples	These highlight key learning points and provide realistic examples of workplace situations.
Practice Tasks	Practice Tasks give you the opportunity to put your skills and knowledge into action. Your trainer will tell you which practice tasks to complete.
Summaries	Key learning points are provided at the end of each topic.
Learning Checkpoints	There is a Learning Checkpoint at the end of each topic. Your trainer will tell you which Learning Checkpoints to complete. These checkpoints give you an opportunity to check your progress and apply the skills and knowledge you have learnt.

## Foundation skills

As you complete learning using this guide, you will be developing the foundation skills relevant for this unit. Foundation skills are the language, literacy and numeracy (LLN) skills and the employability skills required for participation in modern workplaces and contemporary life.

The following table provides definitions for each foundation skill.

Foundation skill area	Foundation skill description
Learning	<ul style="list-style-type: none"> <li>Uses analysis and consultative processes to inform decisions about selection and implementation of risk control measures</li> <li>Evaluates effectiveness of plans and results to inform improvement decisions</li> </ul>
Reading	<ul style="list-style-type: none"> <li>Comprehends documents and texts of varying complexity to extract and analyse relevant information</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Uses specific, industry related terminology and logical organisational structure in workplace documents that identify and analyse risk and report management process outcomes</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Participates effectively in interactions with stakeholders by using questioning and listening to elicit opinions and clarify understanding</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Uses numerical tools to assess risk and uses numerical data to review plans</li> </ul>
Enterprise and initiative	<ul style="list-style-type: none"> <li>Complies with organisational and legislative requirements</li> <li>Takes responsibility for identification and management of risk within own work context and refers matters to others as required</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>Selects appropriate communication protocols and conventions when conferring with others to establish risk management requirements</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>Determines job sequence and works logically and systematically to undertake defined tasks</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Uses familiar digital technologies and systems to access information, prepare plans and communicate with others</li> </ul>

## What do you already know?

Use the following table to identify what you may already know. This may assist you to work out what to focus on in your learning.

Topic	Key outcome	Rate your confidence in each section
Topic 1: Identify risks	1A Identify the context for risk management	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1B Undertake required steps to identify risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1C Document identified risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 2: Analyse and evaluate risks	2A Analyse and document risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2B Categorise and determine the level of risk	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2C Document analysis processes and outcomes	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 3: Treat risks	3A Identify risk control measures	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3B Assess strengths and weaknesses of control measures	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3C Refer risks to relevant personnel according to policies and procedures	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3D Select and implement control measures	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident

Topic	Key outcome	Rate your confidence in each section
Topic 4: Monitor and review the effectiveness of the risk treatment	4A Review implemented risk treatments	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4B Use review results to improve the treatment of risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4C Monitor and review management of risks	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident



## Topic 1 | Identify risks

- 1A Identify the context for risk management
- 1B Undertake the required steps to identify risks
- 1C Document identified risks

# 1A Identify the context for risk management

A risk is the possibility of something happening that will affect objectives.

Risks are always around us at home, work, and everywhere in between. A risk is often measured in terms of the likelihood of it occurring and, if it does, the resulting positive or negative impact. If we manage risk effectively, we can avoid incidents that affect health, productivity and other objectives.

The Risk Management Institute of Australasia (RMIA) defines risk management as ‘the systematic approach to protecting the things that we care about and maximising our chances of success in all fields of endeavour.’

In an organisational setting, risk management is the development of a system of policies, processes and procedures that assess and manage all the risks that might occur. It provides practical, hands-on solutions to managing staff, clients and the general public, and to minimise the organisation’s exposure to risk.

There are a number of commonly used terms and phrases that you should be familiar with, such as those shown here:

<b>Risk identification</b>	The process of establishing the things that can affect an objective, and how and why they affect the objective.
<b>Risk analysis</b>	The process of understanding and evaluating the nature of the risk and its potential to affect the objective.
<b>Risk treatment</b>	The process of developing and implementing strategies to modify the effect of the risk.
<b>Risk management</b>	The systematic processes that are applied to increase the likelihood of meeting objectives.
<b>Risk inventory</b>	The documented results of risk management processes (also called a risk log or risk registry).

## Effective risk management

Every individual needs to learn about risk and how to live with it. In the workplace, being an effective risk manager requires you to develop a sound understanding of what risk management is; the benefits an organisation can gain by implementing a risk management system; the steps undertaken in a risk management process; and the various documents that are prepared to develop, implement, monitor and review the process.

Risk is everywhere. When crossing a road, driving a car, going shopping or taking a holiday, you could be injured, inflict injury on others, incur a financial loss or become unwell. In a business environment people are responsible for managing projects, purchasing equipment, making decisions, hiring staff and dealing with large amounts of money. These are all situations that contain elements of risk. Risks can have serious consequences for an organisation unless effective processes can anticipate and successfully manage them.

Well managed risks can lead to positive outcomes. For example, investing money wisely can result in a financial gain, and appointing a properly qualified staff member could prove beneficial in terms of the expertise, experience and networking opportunities that person brings to the position.

## Organisational risk management

An organisation's financial viability, reputation and success depend on the way it reduces exposure to risk, analyses potential risks, successfully manages unforeseen risks and implements a continuous process to monitor and review its performance in managing risks.

Risk management is a prudent and practical way to safeguard an organisation's legal, moral and financial accountability.

Individual's roles and responsibilities in a risk management process vary depending on the size and nature of the organisation and their particular function. For example, an employee might be part of a risk management team in a large corporate environment and be responsible for overseeing the identification, analysis and treatment of risks. Another employee might be a team leader responsible for applying risk management strategies within their team. Another might work for a small organisation where everyone contributes to the process.

Whatever their responsibilities, it is particularly important that team leaders, supervisors and frontline managers be familiar with all the components of a risk management process, and be able to apply the principles of risk management as advocated by the accepted Australian industry standard.

## Enterprise-wide risk management (ERM)

Enterprise-wide, or organisation-based, risk management addresses the problem of risk across a whole organisation in a structured and integrated way and should involve all employees. Enterprise-wide risk management (ERM) looks at all facets of an organisation, from strategic planning to everyday operations. There are guidelines for ERM overseen by the Committee of Sponsoring Organizations of the Treadway

Commission (COSO) and World Business Council for Sustainable Development (WBCSD). These organisations partnered to produce a guidance report titled *Enterprise Risk Management: Applying enterprise risk management to environmental, social and governance-related risks*. This guidance is designed to help organisations and managers around the world to better understand and apply environmental, social and governance (ESG)-related risk management across their enterprises.

When choosing to follow an ERM approach an organisation ensures that employees take responsibility for risks seriously, that risk control processes are embedded into all work practices, and that the process and structure of risk management is continuously reviewed, especially in relation to ESG risks.

#### Areas of an organisation's operations where risk management should apply:

- the strategic level involving the whole organisation (management)
- the operational level (teams) and specific activities (projects)
- specific risk areas (emergencies) and individual activities.

## Risk management culture

Risk management should be an integral part of workplace culture and all tasks undertaken should be assessed for their risk potential. All people in the organisation need to believe in its benefits and take responsibility for controlling risks.

A risk management process should be applied each and every time a decision needs to be made. This includes major decisions that have important financial or strategic implications for the organisation such as policy changes, relocating, new directions, purchasing new technology, developing a new product, changing suppliers and hiring new staff. It also includes basic day-to-day decision-making such as changing a roster or changing the way work is carried out.

This is because all decision-making involves an element of risk. To stay ahead in a competitive market organisations need to be prepared to take calculated risks. As risks are inherent in all business decisions, understanding these risks and managing them effectively is an important part of successful management. A risk management plan is a key document to help employees focus on important goals and actions.

Risk management is particularly relevant in the following areas of an organisation's operations:

Property-centred risks including:

- buildings
- assets
- products.

Personnel-centred risks including:

- human resources; for example, staff cutbacks or recruitment
- work health and safety.

Organisational-centred risks including:

- strategic operations and business planning; for example, mergers
- change; for example, new procedures or technology
- resource planning; for example, purchasing new equipment.

Market-centred risks including:

- feasibility studies
- product development
- project management.

Legislation-centred risks including:

- public risk and liability; for example, marketing activities.

Governance-centred risks including:

- ethical decisions
- security
- directors' and officers' liability.

## The impacts of not managing risk

Most people do not like significant disruption in their lives. They tend to see major disruptions as negative events and remember them for a sustained period of time. However, there is a basic legal requirement for organisations to identify and eliminate preventable hazards to their customers, staff, and the wider community. Common law and statutes are in place to prevent negligence, or even wilful disregard, for workplace health and safety. Safe Work Australia oversees laws and guidelines at the federal level, and each state and territory mostly mirrors them. Some industries with particular hazards (chemicals and heavy industries, for example) have their own specialised rules and guidelines to manage their unique risks.

Consider the Ruby Princess cruise ship and Melbourne hotel quarantine breaches during the 2020 COVID-19 crisis, or the discoveries of the 2018 banking Royal Commission about financial misconduct by some of our leading banks and insurance companies.

These events all contributed to high levels of customer dissatisfaction, financial losses and negative public relations for the organisations involved. People asked a variety of questions including:

- why was this event not foreseen?
- why were there no contingency plans?
- why were the public allowed to suffer for such a prolonged period of time without compensation?
- will the organisation learn from this event so it does not happen again?

## Standards for risk management

In Australia, organisations generally follow the international risk management standard (ISO 31000:2018). This is identical to the AS ISO 31000:2018, Risk Management – Guidelines, first published in 2009 (as AS/NZ ISO 31000) and revised in 2018. Along with the ERM guidelines discussed earlier, the AS ISO 31000:2018 standard provides practical advice on how organisations can develop, implement and improve the way they manage risk. The Standard helps organisations identify and treat risks effectively, improve risk controls, comply with relevant legal and regulatory requirements and improve overall operational effectiveness and efficiency. Organisations can use AS ISO 31000:2018 as a benchmark against which to compare their own risk management practices.

Check that your organisation has a copy of AS ISO 31000:2018. Make sure you stay up to date with any changes to the Standard or supplementary publications.

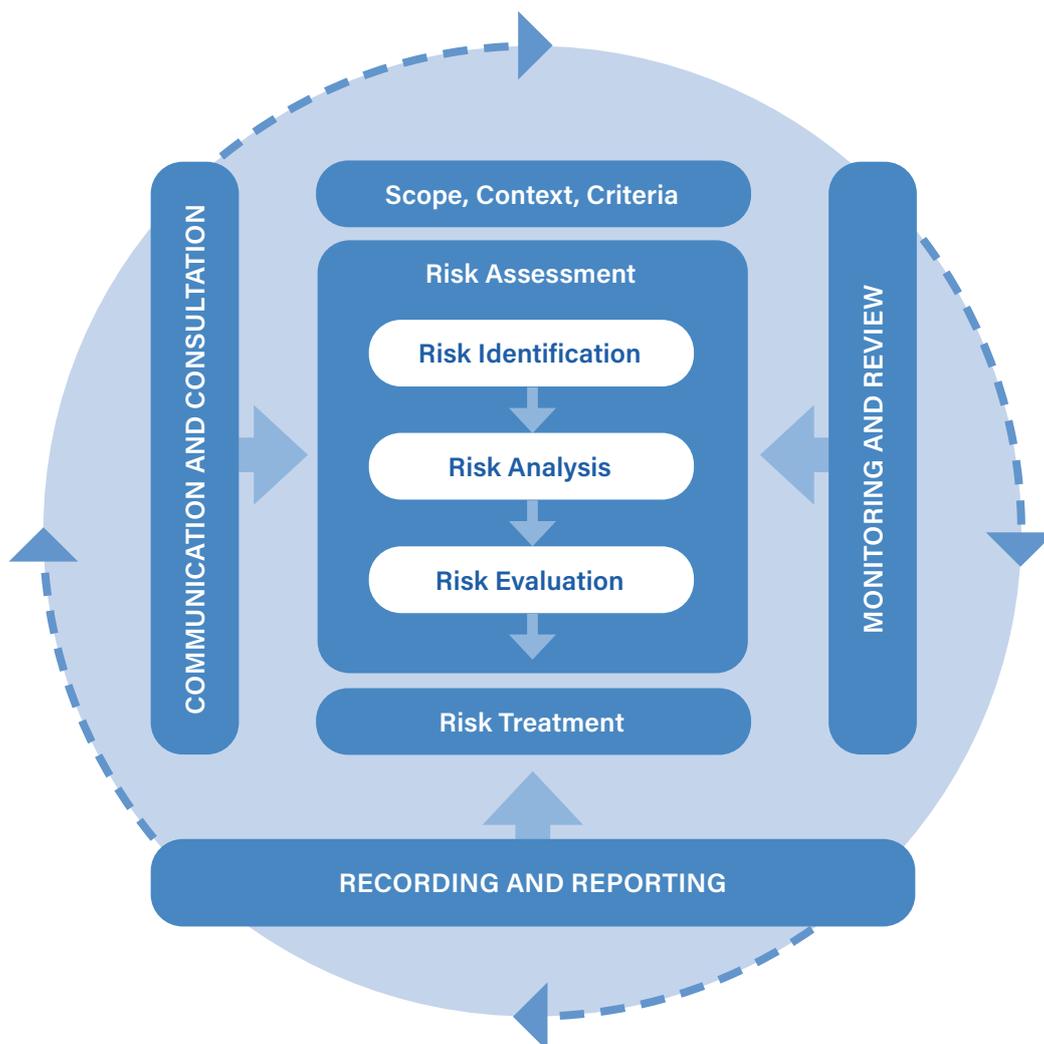
### Useful publications that support the Standard

- ISO 31000:2018 - Risk management – Guidelines
- IEC 31010:2019 - Risk management – Risk assessment techniques
- ISO Guide 73:2009 - Risk management – Vocabulary

## The risk management process

AS ISO 31000: 2018 highlights key parts in a risk management process. An understanding of each of these parts is crucial for all employees. This allows them to be integrated into existing practices and ensures all procedures followed are consistent with standards.

This diagram shows the various parts of the risk management process and illustrates how they work together.



Now consider each part of the risk management process in more detail.

Parts of a risk management process and key factors for each	
<b>Communication and consultation</b>	<ul style="list-style-type: none"> <li>Bring different areas of expertise together for each step of the risk management process.</li> <li>Ensure that different views are appropriately considered when defining risk criteria and when evaluating risks.</li> <li>Provide sufficient information to facilitate risk oversight and decision-making.</li> <li>Build a sense of inclusiveness, and ownership, among those affected by risk.</li> </ul>
<b>Scope, context and criteria</b>	<ul style="list-style-type: none"> <li>Objectives and decisions that need to be made.</li> <li>Outcomes expected from the steps taken in the process.</li> <li>Time, location, specific inclusions and exclusions.</li> <li>Appropriate risk assessment tools and techniques.</li> <li>Resources required, responsibilities and records to be kept.</li> <li>Relationships with other projects, processes and activities.</li> </ul>
<b>Risk identification</b>	<ul style="list-style-type: none"> <li>Tangible and intangible sources of risk.</li> <li>Causes and events.</li> <li>Threats and opportunities.</li> <li>Vulnerabilities and capabilities.</li> <li>Changes in the external and internal context.</li> <li>Indicators of emerging risks.</li> <li>The nature and value of assets and resources.</li> <li>Consequences and their impact on objectives.</li> <li>Limitations of knowledge and reliability of information.</li> <li>Time-related factors.</li> <li>Biases, assumptions and beliefs of those involved.</li> </ul>
<b>Risk analysis</b>	<ul style="list-style-type: none"> <li>The likelihood of events and consequences.</li> <li>The nature and magnitude of consequences.</li> <li>Complexity and connectivity.</li> <li>Time-related factors and volatility.</li> <li>The effectiveness of existing controls.</li> <li>Sensitivity and confidence levels.</li> </ul>
<b>Risk evaluation</b>	<ul style="list-style-type: none"> <li>Do nothing further.</li> <li>Consider risk treatment options.</li> <li>Undertake further analysis to better understand the risk.</li> <li>Maintain existing controls.</li> <li>Reconsider objectives.</li> </ul>

Parts of a risk management process and key factors for each	
<b>Risk treatment</b>	<ul style="list-style-type: none"> <li>Formulating and selecting risk treatment options.</li> <li>Planning and implementing risk treatment.</li> <li>Assessing the effectiveness of that treatment.</li> <li>Deciding whether the remaining risk is acceptable.</li> <li>If not acceptable, selecting further risk treatment options.</li> </ul>
<b>Monitoring and review</b>	<ul style="list-style-type: none"> <li>Monitoring and review should take place in all stages of the process. Monitoring and review include planning, gathering and analysing information, recording results and providing feedback.</li> <li>The results of monitoring and review should be incorporated throughout the organization's performance management, measurement and reporting activities.</li> </ul>
<b>Recording and reporting</b>	<ul style="list-style-type: none"> <li>Communicate risk management activities and outcomes across the organization.</li> <li>Provide information for decision-making.</li> <li>Improve risk management activities.</li> <li>Assist interaction with stakeholders, including those with responsibility and accountability for risk management activities.</li> </ul>

## Key challenges to implementing risk management

Implementing an organisational risk management system involves managers and staff meeting some key challenges to do with organisational risk assessment.

The key challenges include:

### learning the language of risk management

risk management terminology needs to be understood by everyone associated with the process. Without a common understanding of risk management language, misunderstandings may occur

### linking risk management to strategic planning

the organisation's strategic business plan must be linked to, and supported by, the organisation's risk management plan

## gaining support for implementing risk management

all the main people with a direct interest and involvement in the organisation (stakeholders) need to support risk management plans and take responsibility for their role in the risk management process. Communicating the savings, and other benefits, from preventive and proactive risk management is therefore crucial. People will usually support something that has lots of advantages for them and the organisation

## establishing criteria

risk management criteria are organisation-specific and can only be identified within the context of the organisation. Stakeholders need to agree on relevant standards or benchmarks that risk levels can be compared with.

## Types of risks

The types of risks an organisation encounters will depend on the industry that it operates in, the kinds of products and services it provides, its size and the nature of its business operations.

### Broad areas of risk relate to:

- commercial and legal relationships; for example: developing a new product
- economic circumstances; for example: interest rates, public spending, budgets
- human behaviour; for example: staff leaving, theft, injury, human error
- natural events; for example: floods, fire
- political circumstances; for example: change of government, new policies
- technology; for example: introducing new technology, purchasing new equipment
- management activities; for example: change of leadership
- positive risk; for example: a project that will generate benefits for the organisation.

Risks can be unexpected and varied, but they share common components that help us to analyse them. Understanding the various elements of risk improves your ability to better plan around them. Be aware that risks do not always have a negative impact, and sometimes bring benefits, such as potentially higher returns on investments.

The key components of risk are outlined here.

<b>The source of the risk</b>	<p>Risk can originate from a variety of sources, including:</p> <ul style="list-style-type: none"> <li>▪ the weather</li> <li>▪ competitors</li> <li>▪ toxic chemicals</li> <li>▪ employees</li> <li>▪ equipment</li> <li>▪ legislation</li> <li>▪ the economy.</li> </ul>
<b>The event</b>	<p>An event is when the source of a risk can affect the achievement of goals; for example:</p> <ul style="list-style-type: none"> <li>▪ the weather is unfavourable</li> <li>▪ competitors poach clients</li> <li>▪ toxic chemicals are spilt</li> <li>▪ employees perform better than expected (a positive risk)</li> <li>▪ equipment breaks down</li> <li>▪ laws change</li> <li>▪ the economy changes.</li> </ul>
<b>The consequences</b>	<p>The consequences are the results of the impact; for example:</p> <ul style="list-style-type: none"> <li>▪ unfavourable weather means business cannot be conducted</li> <li>▪ competitor poaching means the organisation's client base is reduced</li> <li>▪ toxic spills mean the environment is endangered</li> <li>▪ better performances mean the organisation has more resources</li> <li>▪ equipment failure means equipment cannot be used</li> <li>▪ changes in legislation mean that new laws affect business operations</li> <li>▪ changes in the economy affect the business the organisation expects to receive.</li> </ul>
<b>The causes</b>	<p>The causes are the reasons the risks occur; for example:</p> <ul style="list-style-type: none"> <li>▪ weather is unpredictable</li> <li>▪ competitors release superior products</li> <li>▪ environmental procedures are not followed</li> <li>▪ employee skills are unknown</li> <li>▪ equipment is not maintained adequately</li> <li>▪ laws are revised</li> <li>▪ world events trigger economic change.</li> </ul>
<b>The frequency</b>	<p>The frequency is how often the risk could occur and what factors might lead to this occurrence. For example, laws may not change very often but weather patterns are constantly changing.</p>

<b>The location</b>	The location describes where the risk could occur and what areas of the organisation might be affected.
<b>The controls</b>	<p>The controls are the procedures that are implemented to reduce the likelihood of the risk occurring. They may include:</p> <ul style="list-style-type: none"> <li>• preparing indoor alternatives</li> <li>• monitoring competitor initiatives</li> <li>• implementing environmental checks</li> <li>• conducting regular employee skills audits</li> <li>• implementing equipment maintenance procedures</li> <li>• monitoring legal projects</li> <li>• researching economic drivers.</li> </ul>

## Categorise risks

There are a number of ways that organisations categorise types of risks. Different systems use different criteria for categorisation, as shown in the example below.

You need to be familiar with the particular approach taken by your organisation and understand how its risk management plan was initially developed. If your workplace does not have a risk management plan, consider the categories that would be best suited to the organisation. For instance, can you pick suitable examples from this table that describe the most common risks to your organisation?

Criteria	Examples
Effect	Physical, legal, ethical, financial
Centre of impact	Property, personnel, market, operations, legislation, governance
Nature of impact	Economic, human, political, technological, natural
Size of impact	Community, organisation, department, project, individual

### Example

#### Identify, analyse and manage risk

A medium-sized corporate organisation used a 'centre of impact' model to produce a comprehensive plan by which risks could be identified, analysed and managed.

The identified categories of property, personnel, market, operation, legislation and governance help the organisation to identify risks and organise them into clear, and distinct, areas. When the organisation developed its plan, first it identified the areas of risk. The next step was identifying the issues that arose from these areas of risk, as shown in the table below.

The business manager said 'We used this approach because it is more comprehensive and structured than other methods of classifying risks. It is also quite easy to use. It addresses where the risk can occur and helps everyone to see where and how this affects their team. This model can be applied at an individual, team, department or organisational level.'

Category	Areas of risk
Property-centred risks	<ul style="list-style-type: none"> <li>▪ theft</li> <li>▪ poor asset management</li> <li>▪ building risks.</li> </ul>
Personnel-centred risks	<ul style="list-style-type: none"> <li>▪ personnel safety</li> <li>▪ travel/vehicle accidents</li> <li>▪ loss of personnel</li> <li>▪ costs of recruitment</li> <li>▪ professional development</li> <li>▪ inappropriate termination</li> <li>▪ professional indemnity</li> <li>▪ public liability.</li> </ul>
Market-centred risks	<ul style="list-style-type: none"> <li>▪ product liability</li> <li>▪ falling product demand</li> <li>▪ lack of diversity in products and services</li> <li>▪ changing economic conditions</li> <li>▪ sales and marketing management</li> <li>▪ competition.</li> </ul>
Operation-centred risks	<ul style="list-style-type: none"> <li>▪ suppliers</li> <li>▪ information technology</li> <li>▪ financial management.</li> </ul>
Legislation-centred risks	<ul style="list-style-type: none"> <li>▪ occupational health and safety</li> <li>▪ taxation/GST</li> <li>▪ equal opportunity.</li> </ul>
Governance-centred risks	<ul style="list-style-type: none"> <li>▪ poor oversight of risk management</li> <li>▪ failure to take opportunities</li> <li>▪ failure to provide policies and procedures</li> <li>▪ failure to provide strategic directions.</li> </ul>

## Understand the context of risks

Before identifying the risks in an activity you are undertaking, you should be confident that you understand the specific context in which risk management is being conducted. For example, is the risk related to a specific project, particular resources, key operational elements or the design of the organisation? Risk management strategies will depend on the context and type of risk identified. You will also need to consider your own role in relation to the overall project and to understand what your responsibilities are.

Prepare an outline using headings such as the examples that follow and document the relevant information. In this way you will be prepared when it is time to identify the risks that you will need to treat and manage.

<b>Operational elements</b> (the key operational elements and services of your organisation)	How is your organisation structured? How does it operate? What is the likelihood of risks occurring on a day-to-day basis?
<b>Area of risk</b> (the area your risk management applies to)	Is your risk identification plan for a project, your office area, your department, your team, yourself or the whole organisation? What area does it relate to; for example: property, personnel, market, operations, legislation or governance? Are there currently any related projects?
<b>Activity purpose</b> (the purpose and objectives of the activity)	Are you clear about the goal or objectives you are hoping to achieve? If so, it will be much easier to see the things that could jeopardise your success.
<b>Impact</b> (the place of the activity within the organisation's operations and goals)	How will the risk management activity specifically affect your organisation's operations? Operating procedures, time frames and resources may be affected.
<b>Task breakdown</b> (the distinct tasks that make up the whole activity)	By breaking down the activity into a number of discrete steps, including the types of decisions that have to be made, you will get a clearer idea of where risks may occur, avoiding the likelihood of missing any.
<b>People involved</b> (the people involved and their roles and responsibilities)	This helps identify who will be affected by any risks that occur. It helps identify how you will communicate to ensure everyone is aware of and accepts the processes in place, reducing the likelihood of risks occurring.
<b>Identify risks</b> (the way you will identify and manage risks)	Determine the elements or aspects of your activity that you will use to identify where risks are likely to occur (such as time, budget, personnel, resources). Identify possible consequences and determine the methods you will use to analyse the risks.

## Example

### The risk context of a new software system

A team leader who needs to introduce a customer management software program to their team has determined the risk context in this table.

Area	Context
The purpose and objectives of the activity	<ul style="list-style-type: none"> <li>The purpose is to introduce a new customer management procedure to the team.</li> <li>The goal is to implement the change successfully.</li> <li>This affects the areas of technology, personnel, finance and operations.</li> </ul>
The place of the activity within the organisation's operations and goals	<ul style="list-style-type: none"> <li>The activity matches the organisation's goal to streamline business support activities. The change will reduce the time spent on task and the number of staff involved.</li> </ul>
The distinct tasks that make up the whole activity	<ul style="list-style-type: none"> <li>Communicate the change to staff, the reason for the change and the benefits to be gained.</li> <li>Explain how the change will be implemented.</li> <li>Provide training in the new software.</li> <li>Implement the change.</li> <li>Monitor the new system.</li> </ul>
The people involved and their roles and responsibilities	<ul style="list-style-type: none"> <li>The whole customer management team will be involved in learning and implementing the new system.</li> </ul>
The way risks will be identified and managed	<ul style="list-style-type: none"> <li>Develop a set of elements to identify risks against; for example: timelines, budget, personnel, resources, training and implementation.</li> <li>Brainstorm potential risks with the team and develop a checklist to identify the severity of the risks, their consequences and the likelihood of them occurring.</li> <li>Develop a contingency plan to control risks.</li> </ul>

### Establish the risk context

Once you have identified the operational and organisational context in which risks can occur, you now need to focus on the risk itself.

To establish the risk context of an activity subject it to the following questions and document the responses. Make sure you consult with all those involved in the activity so that all different perspectives are taken into account.

After you have asked these questions of yourself and your team, review and evaluate your list to make sure the information you have documented is accurate, reliable and as comprehensive as possible. Have you found any gaps in your information that indicate further research is needed? Are you confident that all the appropriate people have had the opportunity to contribute?

<p><b>Risk source</b></p>	<p><b>What is the source of the risk?</b></p> <p>Take the elements you have identified in your context plan. The elements will vary depending on the nature, complexity and scope of your activity. For example, a simple low-level activity you are responsible for will include elements such as:</p> <ul style="list-style-type: none"> <li>▪ time</li> <li>▪ budget</li> <li>▪ personnel</li> <li>▪ resources.</li> </ul> <p>A complicated, or high-level, activity involving a risk management team can include elements such as:</p> <ul style="list-style-type: none"> <li>▪ government policies</li> <li>▪ fiscal management</li> <li>▪ consultants</li> <li>▪ external agencies</li> <li>▪ suppliers</li> <li>▪ security and confidentiality</li> <li>▪ timelines.</li> </ul> <p>Your organisation's business plan, strategic objectives or risk management plan will have identified areas of potential risk. So too will reports of previous activities. Reports should highlight what went wrong and why; how unforeseen risks were successfully managed. Experienced personnel can also make valuable contributions. Use as many avenues as you can to ensure you have identified all possible sources of risk.</p>
<p><b>Risk nature</b></p>	<p><b>What is the nature of the risk that might occur?</b></p> <p>Identify everything that could happen that might have a positive, or negative, impact on the outcome of your activity. For example, using personnel as the element of potential risk, you might list that:</p> <ul style="list-style-type: none"> <li>▪ key staff might become absent through illness</li> <li>▪ a member of the group may have relevant expertise you are unaware of (a potentially positive risk)</li> <li>▪ staff may not have sufficient knowledge or skills to complete their assigned tasks</li> <li>▪ key staff may resign during the activity.</li> </ul>

	<p>Using fiscal management as the element, you might list that:</p> <ul style="list-style-type: none"> <li>▪ the budget may blow out</li> <li>▪ the person who prepared the budget might miscalculate the amount of funds available</li> <li>▪ funds that are promised by partners might not eventuate</li> <li>▪ finances may be inadequate for the task</li> <li>▪ finances might be managed very successfully and bring in a profit (another potential positive risk).</li> </ul>
<p><b>Risk effect</b></p>	<p><b>What will the effect on the activity's objectives be?</b></p> <p>Define what the likely consequences are if the risk happens. For example, if any of the identified personnel risks occur:</p> <ul style="list-style-type: none"> <li>▪ the timelines for the activity might increase and the activity may not be completed on time</li> <li>▪ the activity might be undertaken and completed to a higher level of competence than originally planned</li> <li>▪ the activity might not meet quality assurance standards.</li> </ul>
<p><b>Risk triggers</b></p>	<p><b>Why is the risk likely to occur?</b></p> <p>List the reasons why the risk may occur. For example, staff are not trained sufficiently, the activity is not planned accurately or unforeseen circumstances such as a natural disaster might eventuate.</p> <ul style="list-style-type: none"> <li>▪ <b>When is it likely to occur?</b> Determine when the risks you have identified are likely to occur; for example: personnel risks might occur at any time throughout the activity.</li> <li>▪ <b>Where is it likely to occur?</b> List the areas where the risk is likely to occur; for example: within the team as a whole or with an external body.</li> <li>▪ <b>How is it likely to occur?</b> Think about how the risk might happen; for example: it might occur suddenly without warning, as in a natural disaster or a staff member becoming ill.</li> <li>▪ <b>Who might be involved?</b> List the people involved in the activity, those responsible for the risk and for managing it and all others who could be affected by the risk.</li> <li>▪ <b>What control measures are already in place?</b> List the existing controls across all areas such as checklists, policies and procedures, alarm systems, insurance cover, market research, anti-virus protection and legal requirements.</li> <li>▪ <b>What might cause the measures to be ineffective?</b> Check the control measures that are in place to confirm they are still effective. Existing measures might have been developed for a different set of circumstances. For example, the organisation may have grown since the measures were developed or new technology may have rendered old control measures obsolete.</li> </ul>

## Practice Task 1

### Question 1

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Which of the following categories can be used to establish the risk context? Tick all that apply.

- Risk of losing money, harming the environment and causing injury.
- Legal risks, personal risks, financial risks and social risks.
- Internal and external risks for the site of operation.
- The source of risk, the nature of risk, its effects and its triggers.
- How much the risks affect the head of the organisation.

### Question 2

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Which of the following activities are organisations legally required to undertake? Tick all that apply.

- Operate free of preventable hazards to their customers, staff, and the wider community.
- Avoid engaging in any activities with an inherent risk.
- Have a risk management element in their mission statement.
- Pay a tax if they cannot meet safety requirements.
- Sue anyone who prevents them from establishing a risk management plan.

### Question 3

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Which of the following does not apply to AS ISO 31000:2018? Tick all that apply.

- It is a legal requirement for international organisations.
- It is mandatory for risk management in all organisations in Australia.
- It conflicts with the purpose of Safe Work Australia.
- It helps organisations identify and treat risks effectively, improve risk controls, comply with relevant legal and regulatory requirements and improve overall operational effectiveness and efficiency.
- It is overseen by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and World Business Council for Sustainable Development (WBCSD).

# 1B Undertake required steps to identify risks

There are a range of approaches and tools you can use to identify risks depending on the complexity of the activity, the amount of time you have and the availability of other resources.

Identifying risks should be the responsibility of the whole team, and all other personnel who may be involved such as management, consultants, suppliers, government agencies and clients. It is important that all reasonable steps are taken to identify all possible risks.

Steps may include:

- looking at existing documentation
- using standard and customised methods to collect data
- using systems to identify and rate risks.

Review the following methods to ensure you have included all possible sources of information. A combination of these methods should ensure that you gather the most relevant information available and cover every possible angle.

## Existing documentation

Key organisational documents can provide a wealth of information on potential risks and risk assessment activities and can help confirm the risk context.

Your organisation will have various documents available that can assist you and your team in identifying risks and in providing context to your work activities.

Existing documents	
Business and operational plans	Stating the organisation's goals, policies and procedures and providing you with specific objectives that you and your team need to meet.
Risk management plans	Identifying the types of risks that are likely to occur and prioritising the risks according to their impact and likelihood of occurrence.
Reports	Documenting past activities and identifying the risks that were faced; how they were analysed and acted upon; what succeeded and what failed and recommendations for future activities.

Existing documents	
<b>Audits</b>	Identifying risks in key areas and the likelihood of these risks occurring. For example, an audit may highlight how the storage of dangerous chemicals is being handled.
<b>SWOT analyses</b>	Identifying the strengths and weaknesses, opportunities and threats of the internal and external environments. Risks associated with these areas can be easily identified. For example, if an opportunity was identified to develop a new product for a niche market, the risks of developing the new product might include lack of sales due to poor marketing, budget overruns, or increased sales due to correctly identifying the target market.

## Standard and customised methods of data collection

Sometimes the existing documentation does not contain sufficient relevant information about risks or might need updating for new circumstances. There are a few additional data collection methods that can be used. Some are standardised methods such as written or online questionnaires, or using sequenced interviews. Other methods are more customised to individuals such as focus groups and semi-structured interviews.

Ensuring that everyone is consulted and has an opportunity to provide input is essential when identifying risks. Giving people the opportunity to contribute and influence risk management processes also boosts engagement and motivation.

When collecting data that involves personal information and experiences, there are ethical and legal requirements relating to respect, privacy and confidentiality and security. For example, the National Statement on Ethical Conduct in Human Research is a guide to help researchers in Australia be aware of their ethical responsibilities when gathering, processing, storing and reporting data.

## Questionnaires and surveys

One way to get standardised data is by issuing questionnaires or surveys to a wide range of people. This can provide useful information as long as the questionnaire or survey is designed to get specific information, is easy to analyse and the analysis is completed accurately and quickly. Well-designed forms can be an efficient way of gathering data from a large number of people. Simply asking the questions in the risk identification process should provide you with sufficient information to enable you to move forward with the process. Social media and specialised online survey tools are widely available to make the survey construction and delivery tasks easy to complete.

## Interviews

Face-to-face, phone or online interviews can be helpful because they are more interactive and customisable than questionnaires. Interviewees might explain their answers in more depth or offer examples. Ensure your questions are prepared beforehand so that you do not waste anyone's time and be very clear about the type of information you are seeking from the person.

With interviews, and any other form of data gathering in a workplace, make sure it is completed only for specified risk management purposes. Data must be collected and securely stored according to workplace policies and procedures, and methods must comply with all legal and ethical requirements relating to privacy and confidentiality.

## Structured techniques

For complex projects that have multiple risks with potentially serious consequences, you could use a formal structure of instruments and systems such as flow charts, operational modelling or a systems analysis to help identify risks. Structured techniques condense complex information into a manageable form. The information produced will help you analyse and prioritise the risks.

## Checklists

Checklists are structured tools for systematically noting whether all aspects of the process have been covered. They are a valuable guide to the scope of an activity and to all the tasks and responsibilities involved. Using a checklist will show you what has been covered in the risk identification process and identify where process improvements might be made.

A typical checklist might look like the following.

Risk identification checklist	
Aspect identified	Check
1. The source of the risk.	
2. The nature of the risk that might occur.	
3. The effect of the risk on the activity's objectives.	
4. Why the risk is likely to occur.	
5. When the risk is likely to occur.	
6. Where the risk could occur.	

Risk identification checklist	
Aspect identified	Check
7. How the risk could occur.	
8. Who is involved.	
9. Existing control measures.	
10. Reasons that the measures might be ineffective.	

## Benchmarking

Another structured way to identify risks, and how they are managed, is to look at what other organisations do. Compare your organisation with a similar one and determine the types of risks it encounters and the methods it uses to avoid or control them. Identify the best practice for recognising risks in your industry and apply it to your organisation.

## Brainstorming

**Although structured methods of gathering data can produce reliable and comparable information, customised methods, such as brainstorming, can present in-depth information from multiple perspectives.**

Brainstorming is a customised method of gathering data and is an ideal medium for getting people involved. As long as the team understands the context of the activity and has a structured plan to conduct the brainstorming session, people will become engaged. Encourage people to use their imagination, expertise and experiences and to look at the elements of the activity from different perspectives. There should be no restrictions when brainstorming and all ideas and suggestions should be welcomed without any judgment being made. Spend as much time as possible on each question until ideas are exhausted.

For example, the hazard and operability (HAZOP) study is a type of brainstorming that brings people of varying backgrounds and expertise together to identify and analyse risks task by task. A HAZOP study is used to identify worst-case scenarios, suggest safeguards and make recommendations. Although originally developed for the petrochemical industry, this technique can be used in other sectors which have to deal with health and safety hazards.

## Focus groups

Another customised method of data gathering is a focus group. The aim of a focus group session is to obtain rich and deep insights into an issue that you and your team have identified as being a potential risk. The session brings together people who have expert information and who can help you determine whether the risk will have a positive or negative impact or outcome.

For example, an organisation might be considering developing a new product and identifies its timeline as a possible risk source. The risk identification process would ask 'What if something happened to delay the release of the new product? Would this matter to the market? Is it a risk?' The focus group might conclude that time was not an issue because the targeted market was a niche group and there were no competitors' products available. Other questions for the group might relate to the proposed cost of the product; for example 'Do you think the cost we have proposed will have a negative effect on the potential market?'

The focus group might consist of operational team members, section or department heads, clients or suppliers. The people that make up the focus group will be influenced by the risk and risk context. For example, if you wanted to identify the operational impact of an identified risk, such as 'Do you think the training required for the introduction of the new technology will have a negative impact on the budget?' or 'Will it matter if there is downtime in production while staff learn?' you would need to ensure that the focus group included section or department heads and area managers.

### Example

#### Collect data to identify risks

Ellie, the customer service manager for a large retail store, is responsible for ensuring online and in-store customers receive the highest possible level of customer service and support. For Ellie to achieve her objectives she needs to identify and manage potential risk. This requires collecting and analysing data from a variety of sources. It is also essential that she ensures that everyone in her team, as well as new and existing customers, are consulted and given the opportunity to provide input.

In order to collect comprehensive and reliable data Ellie ensures customers are emailed surveys to complete which seek to collect information about customer service. In-store customers are also surveyed about their shopping experience at the checkout by using an interactive touchscreen to rate the level of service received. Through this process Ellie has been able to identify the following risks:

- personnel - shortage of floor staff to assist with enquiries
- personnel - lengthy processing times for 'click and collect' orders
- professional development - in-store floor staff unable to assist with online purchases.

Ellie wants to understand why these risks exist so she schedules two separate focus groups; the first consists of in-store customer service team members, the second consists of the online customer service team. During each focus group Ellie asks the following questions:

- 'Do you think the in-store customer service team has sufficient knowledge of online services? What knowledge/training do they need?'
- 'How can processing click and collect orders be expedited? What affect will this have on current customer service workloads?'
- 'How can we make the in-store customer service team more visible to customers? Will this affect their ability to complete assigned tasks?'

Following the focus group sessions Ellie now feels confident in taking steps to mitigate each risk and ensure customer service standards continue to improve across online platforms and in-store.

## Practice Task 2

### Question 1

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Draw a line to match each step with the relevant example.

» Looking at existing documentation

» Questionnaires and surveys

» Using standard and customised instruments to collect data

» Checklists, flow charts, operational modelling and benchmarking

» Using systems to identify and rate risks

» Business plans, SWOT analyses and audit reports

## Question 2

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Which technique is best suited to gathering information on work health and safety risks?

- Questionnaires or surveys
- Checklists
- Benchmarking
- Focus groups
- Flow charts

## Question 3

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Which technique will produce detailed and insightful information relating to the risks associated with a proposed new product range?

- Questionnaires or surveys
- Checklists
- Benchmarking
- Focus groups
- Flow charts

# 1C Document identified risks

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Ensuring that accurate and detailed records of the risk management process are kept means greater compliance with WHS Act and Regulations.

As discussed previously, Australian organisations must comply with federal and state WHS/OHS laws and regulations. This includes maintaining up-to-date and accurate information about risk management processes and practices in the workplace.

Documenting the risk management process has various benefits, including:

- providing a point of reference for subsequent risk assessments
- demonstrating the decision-making process relating to controlling risks
- facilitating the review of risk controls following any changes to business activities or legislation
- allowing staff to understand risk control decisions
- showing others (e.g. regulators, board, customers) that organisational risks are being managed.

The detail and extent of information recorded will vary across workplaces and will be influenced by the size of the organisation, the sector it operates in, and the potential for serious work health and safety issues.

Generally, the following information should be documented:

- identified hazards
- assessed risks
- chosen controls
- how, when and the person(s) responsible for implementing, monitoring and reviewing control methods
- people or stakeholders consulted
- any contingency plans.

It is important to note that under WHS Regulations specific record keeping requirements are in place for certain activities and sectors. For example, records of handling and storing hazardous chemicals must be kept for a specified amount of time. In these situations it is vital that everyone in your workplace has an understanding of record keeping requirements, including which records they can access and where these documents are kept.

## Risk register

A risk register, also referred to as a risk inventory or risk log, is a workplace document used to identify and track organisational risks.

The purpose of a risk inventory is to:

- monitor potential risks
- track actions taken to mitigate risks
- provide contingency plans should the risk occur
- demonstrate that risk management processes have been completed (especially in audit situations).

It is important to keep the register up to date and regularly reviewed. When new risks are identified, they should be immediately added. As projects progress, or procedures change, the probability or severity rating of each risk should be adjusted accordingly.

Furthermore, a risk register may provide the following information:

- the date and the name of the person compiling the information
- the activity
- the identified risks
- how the risk might become an event
- the consequences of the risk
- the existing measures in place to control the risk
- the effectiveness of these measures.

### Example

#### Risk register

Here is an example of a risk register.

Risk register	
<b>Activity:</b> Launching a new product	
<b>Department/team:</b> Marketing	
<b>Department/team responsibility:</b> To prepare for and conduct a marketing campaign for the new product	
<b>Compiled by:</b> Adrian Johnson	<b>Date:</b> 5 October

Risk register								
Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Promotional material may not be ready in time	Supplier fails to deliver	Launch delayed	Firm contract with suppliers Intermediate progress checklists Preferred suppliers					
Poor quality of publication	Poor design Unskilled staff Inappropriate software	Reputation damaged	Proofs need to be approved and signed for Preferred suppliers					
Technology breakdown	System fails Equipment not serviced	Fall behind time	Backup hardware Regular servicing					
Key staff leave just prior to launch	Unexpected family event New job offer	Fall behind time Lose experience and knowledge	Have backup staff so we don't rely on one person Job sharing					
Team members not available	Fall ill On annual leave	Fall behind time Other members have to take on additional work	Have backup staff so we don't rely on one person Job sharing					

Risk register								
Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Can't deliver the launch	Media partner pulls out of contract	No media support	Have firm contract Organise backup media					
Idea stolen by competitor	Poor security Lack of confidentiality among staff Poor market research	Impact of launch decreased Sales affected negatively	Confidentiality clause in staff contracts Conduct consistent market research					
Project goes over budget	Poor planning Poor cost control	Reduction in the scope and impact of the launch	Milestone progress checks Obtain multiple quotes; select best value for price/quality					
Project goes over time	Poor planning Poor quality work that needs to be redone	Poor quality product The project becomes rushed	Prepare project brief Prepare project management plan Prepare contingency plans					

Risk register								
Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Marketing tools no longer appropriate	Electronic mail-outs considered spam	Need to quickly redesign and find alternative delivery methods May not meet some of the target audience	Have a range of distribution channels					

## Practice Task 3

### Question 1

Which of the following risks must be legally documented? Tick all that apply.

- The weather is unfavourable
- Competitors poach clients
- Toxic chemicals are spilt
- Employees perform better than expected
- Equipment breaks down

## Question 2

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What three pieces of information should be documented in a risk register?



## Summary

- To implement a risk management plan, you must be able to identify all of the risks that may be encountered within your area of responsibility.
- A systematic process must be used to identify and document all potential risks, rather than relying on random or untested arrangements.
- The types of risks faced by organisations are many and depend on the nature of the organisation, its products and services and the industry it operates in. In general, risks relate to commercial and legal relationships, economic factors, human behaviour, natural events, political circumstances, technology, management activities and individual activities.
- Understanding the various elements of risk improves your ability to respond to them. The key elements of risk are the:
  - source of the risk
  - event
  - consequences
  - causes
  - frequency
  - location
  - controls.
- Enterprise-wide or organisation-based risk management addresses the problem of risk across a whole organisation in a structured and integrated way and should involve all employees. Guidelines for ERM are overseen by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and World Business Council for Sustainable Development (WBCSD)
- In Australia, alongside the ERM, organisations generally follow the international risk management standard (ISO 31000:2018), identical to the AS ISO 31000:2018, Risk Management – Guidelines
- There are a range of tools that can be used to identify risks including existing documentation within the organisation, brainstorming, focus group discussions, questionnaires and surveys, interviews, checklists and benchmarking.
- Once risks have been identified, they should be documented in an appropriate format suitable for analysis.

## Learning Checkpoint 1

### Identify risks

#### Part A

1. Which of the following guidelines can help you and your organisation better understand and implement risk management? Tick all that apply.

- WHS legislation
- Risk register
- ISO AS 31000:2018 Standard
- Guidelines for ERM overseen by COSO
- IEC 31010:2019 - Risk management – Risk assessment techniques

2. Draw a line to match the following steps of the risk management process to the correct examples.

- |                               |  |
|-------------------------------|--|
| » Scope, context and criteria | » Sources of risk.<br>Threats and opportunities.   |
| » Risk identification         | » Consider risk treatment options.<br>Undertake further analysis to better understand the risk.                            |
| » Risk analysis               | » Communicate risk management activities and outcomes across the organization.<br>Provide information for decision-making. |
| » Risk evaluation             | » Time, location, specific inclusions and exclusions.<br>Relationships with other projects, processes and activities.      |
| » Recording and reporting     | » The likelihood of events and consequences.<br>The nature and magnitude of consequences.                                  |

3. Draw a line to match the different types of organisational risks to the correct example.

» Property-centred risks

» Staff cutbacks or recruitment; work health and safety

» Personnel-centred risks

» Public risk and liability

» Organisational-centred risks

» Buildings, assets and products

» Legislation-centred risks

» Mergers, introduction of new procedures or technology and the purchasing of new equipment

## Part B

Read the case study and answer the questions that follow.

### Case Study

Jeff, a warehouse manager, has just received training on manual handling techniques with new assistive equipment. He wants to introduce these techniques and machinery to his team and has determined the following risk context:

Area	Context
The purpose and objectives of the activity	<ul style="list-style-type: none"> <li>The purpose is to introduce new manual handling techniques with assistive equipment to the team.</li> <li>The goal is to implement the change successfully.</li> <li>This affects the areas of personnel, finance and operations.</li> </ul>
The place of the activity within the organisation's operations and goals	<ul style="list-style-type: none"> <li>The activity matches the organisation's goal to make the workplace safe and promote the health and safety of all staff. The change will minimise the risk of injury to staff and reduce leave days.</li> </ul>
The distinct tasks that make up the whole activity	<ul style="list-style-type: none"> <li>Communicate the change to staff, the reason for the change and the benefits to be gained.</li> <li>Explain how the change will be implemented.</li> <li>Provide training in the new assistive technology and manual handling techniques.</li> <li>Implement the change – assistive equipment to be used on the warehouse floor.</li> <li>Monitor use of the new equipment.</li> </ul>

Area	Context
The people involved and their roles and responsibilities	<ul style="list-style-type: none"> <li>The entire warehouse floor team will be involved in learning and implementing the new techniques using assistive equipment.</li> </ul>
The way risks will be identified and managed	<ul style="list-style-type: none"> <li>Develop a set of elements to identify risks against; for example: personnel, equipment, training and implementation.</li> <li>Brainstorm potential risks with the team and develop a checklist to identify the severity of the risks, their consequences and the likelihood of them occurring.</li> <li>Develop a contingency plan to control risks.</li> </ul>

Jeff's organisation follows AS/ISO Standard 31000 and enterprise-wide risk management (ERM) so all actions must be carefully considered and planned out.

- Which of the following statements about risk context are correct? Select yes or no for each one.
  - The introduction of new manual handling techniques with the use of assistive technology affects warehousing personnel, operations, finance and customer service. » Yes      » No
  - Risks to be identified for this activity are relevant to the areas of equipment, personnel, training and implementation. » Yes      » No
  - Brainstorming risks with other warehouse managers is the most effective way to gather information about the risk context. » Yes      » No
  - The introduction of new manual handling techniques with the use of assistive technology fits into the organisation's objectives for a healthy and safe workplace. » Yes      » No
- Which of the following will be used to collect information on risks? Tick all that apply.
  - Checklists
  - Surveys
  - Benchmarks
  - Focus group sessions
  - Brainstorming session

3. Which two actions can Jeff take to ensure this activity aligns with his organisation's ERM approach?







## Topic 2 | Analyse and evaluate risks

- 2A Analyse and document risk
- 2B Categorise and determine the level of risk
- 2C Document analysis processes and outcomes

## 2A Analyse and document risks

Risk analysis should be undertaken using measurement and rating scales to quantify the data to ensure it is clear and useful in the next stage: treating risks.

When you have identified a risk in the workplace, don't panic. Removing the risk might be your first instinct but maybe the organisation can still live with the risk, or even prosper because of it. You need to understand and document the risk before making decisions about it. Analysis should be undertaken in a systematic way using data and information from past records, previous experience, market research and other relevant sources.

With quantified data you can evaluate the risk and categorise it in terms of its severity, determining which risks should be treated as priorities and which can be accepted as low-level or as unlikely to happen. The following example summarises the steps in risk analysis and the types of qualitative scaling systems you can use. Each step will then be explored in more detail in the sections that follow.

Risk analysis steps	
<b>1</b>	<p><b>Analyse the cause of the risk</b></p> <p>Determine whether the cause of the risk is internal or external. Determine what factors contribute to the cause of the risk. Use existing records (secondary research) to pinpoint causes and determine their nature.</p>
<b>2</b>	<p><b>Determine the potential consequence of the risk</b></p> <p>A risk's potential consequence can be set in terms of:</p> <ul style="list-style-type: none"> <li>▪ high/medium/low</li> <li>▪ major/moderate/minor.</li> </ul>
<b>3</b>	<p><b>Determine the frequency of exposure to the risk</b></p> <p>How often is the organisation exposed to the identified risk? In other words is risk exposure expected, probable, possible, unexpected or rare?</p> <p>The organisation's past records should be examined for signs of exposure. Research can determine similar likely circumstances in the future.</p>
<b>4</b>	<p><b>Determine the likelihood of the risk occurring</b></p> <p>Express the likelihood of occurrence in qualitative terms of:</p> <ul style="list-style-type: none"> <li>▪ probable/possible/improbable/nearly impossible</li> <li>▪ likely/possible/unlikely.</li> </ul>
<b>5</b>	<p><b>Categorise the risk</b></p> <p>Combine the qualitative information from the preceding steps. Place the risk into a high/medium/low category, based on its possible consequence and likelihood.</p>

Risk analysis steps	
<b>6</b>	<b>Prioritise the risk</b> Assign the risk a qualitative priority value such as high, medium or low.
<b>7</b>	<b>Evaluate the risk</b> Based on the organisation's criteria, the risk may be evaluated as negligible/tolerable/acceptable (in that its advantages may balance its disadvantages)/unacceptable/intolerable.
<b>8</b>	<b>Document results of the risk analysis</b> Record all the information gathered and the determinations resulting from each step of the risk analysis. Include data sources.

### Step 1: Analyse the cause of the risk

What causes the risks you identified in the first stage of the risk management process? These causes will be as varied as the activities undertaken and will include obvious causes, such as not enough time being allocated to a project, as well as unforeseen circumstances such as unexpected staff illness, workplace safety incidents, or business restructures.

Some causes of risks are illustrated in this table.

Risk	Cause
Poor-quality work	Inadequate employee skills.
Theft of property	Poor security.
Customers seek other options	Increase in competitors in the market.
Inexperienced employees	High staff turnover.
Legal requirements are not met	Changes in government policy.
Deadlines are missed	Poor planning controls.
Demand is low	Economic downturn.
Staff do not perform well	Mismanagement of staff.

Causes can be analysed by identifying which ones are reasonably expected to happen, which ones you have control over and those that are generally beyond control. Analysing causes helps to minimise risks. If you can identify and understand the cause, you may be able to control, treat or even eliminate it to stop it becoming a risk.

## Note existing control measures

A good starting place in analysing causes is to find out the existing procedures to manage or eliminate causes. For example, if the cause of a property theft was poor security, you would want to know how the issue of poor security has since been addressed.

The organisation's risk management plan will include potential risks and their causes, existing prevention measures, and the causes and treatment (control) of positive risks, as illustrated in this example.

Risk	Cause	Risk prevention strategies	Control measures
Staff injury	Staff do not understand safety policies	<ul style="list-style-type: none"> <li>OHS policies implemented and monitored</li> <li>Staff training</li> <li>Regular building maintenance</li> </ul>	<ul style="list-style-type: none"> <li>Review OHS policies and staff training</li> <li>Amend and update policies and training as required</li> </ul>

The control and treatment strategies must comply with your organisational policies and procedures as well as with federal or state legislation. Ensure you are familiar with existing documentation outlining relevant processes and follow them accordingly.

## Use past records

Records of projects and activities that were previously conducted, whether by your organisation or by another organisation, are useful to see what causes were identified before the project or activity began, what risks occurred and how these causes were dealt with. You may recognise similarities with your own project and be able to learn from this previous experience. For example, an activity that runs over budget (the risk that occurred) may have failed to include a budget for incidentals (the cause of the risk). Being aware of this might ensure that you don't repeat the same mistake.

Similarly, you might read about a situation in which suppliers did not deliver on time. Knowing that this caused the activity to run over deadline should alert you to the potential for the same thing to happen to your project, particularly if you are using the same suppliers.

## Consult stakeholders

Speak with experienced colleagues and discuss how the causes you have identified could be foreseen and controlled. They may be able to mentor you or show you how to predict the cause and minimise its impact, especially if they have been at the organisation longer than you.

For example, an experienced colleague may tell you that certain equipment is unreliable for sustained periods of use. You might have identified equipment breakdown as a possible cause of bringing in a project behind the deadline. This information will help you ensure the equipment is well-serviced prior to beginning your project.

It is crucial that everyone involved in the project, program or organisation is consulted at all stages. This will help you determine how you could address a cause that is part of a circumstance beyond your control.

By using everyone's knowledge and skills, you can generate a range of innovative ideas and suggestions you had not considered before. For example, an unforeseen cause of risk might be staff absence due to stress. Therefore a team member might suggest that time is allocated for employees to address health concerns during work hours or that relaxation or exercise programs be put in place, thus minimising the risk of stress.

Stakeholders might include:	
<ul style="list-style-type: none"> <li>▪ managers</li> <li>▪ contractors</li> <li>▪ service providers</li> <li>▪ suppliers</li> <li>▪ employees</li> </ul>	<ul style="list-style-type: none"> <li>▪ financial managers</li> <li>▪ insurance agents</li> <li>▪ members of the public</li> <li>▪ unions</li> <li>▪ volunteers.</li> </ul>

## Survey

Use a questionnaire to survey experts to see what they have done in the past or what they would recommend for specific causes. For example, you can ask others why they think sales are falling. A customer survey might identify a number of causes such as more competitors, poor customer service, faulty or obsolete products or delivery difficulties.

You can then analyse these causes to see whether you can treat them. Increased competition is a cause that is largely beyond your control and results in the need to address the risk it causes. The other causes listed, however, are ones you could do something about.

## Example

### Analyse the cause of risk

Here are some examples of how to analyse the cause of risks.

Risk	Cause	How to analyse
Project may not meet the deadline	Insufficient time allocated (expect to happen)	<ul style="list-style-type: none"> <li>By looking at similar projects conducted in the past, you might reasonably expect this to happen.</li> <li>People involved in past activities might warn you that this is likely to happen.</li> <li>Your team might have ideas on how to deal with this.</li> </ul>
Equipment is stolen	Security alarm system insufficient or malfunctions (you have control)	<ul style="list-style-type: none"> <li>Your organisation's risk management plan should indicate the security measures in place.</li> <li>Measures may need to be reviewed.</li> </ul>
Key project members leave	Staff member becomes ill and resigns (beyond your control)	<ul style="list-style-type: none"> <li>See who can act as backup.</li> <li>Look at measures in place for reducing the likelihood of illness among staff.</li> <li>Seek advice from experts.</li> </ul>

### Multiple causes of risk

Remember that for each risk you have identified you may have found a number of causes that should be analysed. In the project example, other possible causes for a project not meeting its deadline might have been:

- staff are not sufficiently skilled
- equipment breakdowns
- a contractor falls behind schedule
- key staff are absent
- suppliers do not deliver on time.

## Practice Task 4

### Question 1

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A business is analysing its environmental risks related to waste minimisation. In this case list a possible risk and a potential cause of the risk.

### Question 2

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As part of analysing risk, the purpose of consulting with stakeholders is to:

- Help you determine how you could address a cause that is part of a circumstance outside your control.
- Engage people in friendly, sociable interaction.
- Help shareholders of the organisation to gain added value from risk minimisation.
- Share the risk with the stakeholders so its effect on the organisation is lessened.
- Find risks that have no causes.

## 2B Categorise and determine the level of risk

Knowing the cause of the risk is not enough. You also need to determine the potential impact of the risk, the frequency of exposure to the risk and the likelihood of the risk occurring.

### Step 2: Determine the potential impact of the risk

The next step in evaluating risks is to determine the potential impact of the risk. You will also need to apply a ranking to the impact of the risk. This might be expressed as high, medium or low, or as insignificant, minor, moderate, major or catastrophic. Sometimes a grade is also applied. This can help when documenting the impact so the ranking can be seen and understood quickly and easily.

To determine the potential impact of the risk occurring will the risk:

- have a detrimental impact on the budget?
- cause the activity to go well over the set deadline?
- mean that timelines have to be adjusted?
- mean that the outcomes of the project are not met?
- result in a legal matter?
- severely damage the organisation's reputation?
- put the project back a few days or weeks?
- result in injury?

### Example

#### Causes, consequences and impact of risk

Here are some examples of risks, their consequences and their level of impact.

Grade	Level of impact	Example
1	Insignificant	The photocopier needs to be serviced and this puts the project back a day.
2	Minor	A staff member is unexpectedly away for a week, calling for modification of timelines.

Grade	Level of impact	Example
3	Moderate	Bad customer service severely damages the organisation's reputation.
4	Major	Greatly increased production costs result in lower profit and lead to staff redundancies.
5	Catastrophic	Poor financial management causes a company to go bankrupt.

### Step 3: Determine the frequency of exposure to the risk

How likely is it that the organisation, team, individual, project or activity will be exposed to the risk? Frequency of exposure is usually expressed in terms that range from whether you are certain an area will be exposed to the risk or whether you believe it is unexpected, to whether it would be a rare occurrence if it did happen. To be able to assign an accurate ranking you need to complete the following requirements.

#### Requirements for assigning a risk ranking

Look at past records, including reports and the organisation's risk management plan, to see how often the organisation has experienced the risk and whether it is prepared for it.

Question relevant people who have had similar experiences to see what ranking they would give the risk.

Analyse market research that may predict future circumstances.

Conduct research into the relevant industry using the internet, industry journals and trade magazines, government policies and competitors' experiences to understand the nature of the risk and the likelihood of the organisation's exposure to it.

### Refinement of risk assessment

Your initial assessment of risk exposure could change if circumstances change. For example, identifying the frequency that accidents have happened to members of the sales team in the past can help you determine how often accidents might happen in the future. However, the organisation may employ more salespeople in the future, the staff might spend more time telephoning clients instead of travelling, the team may widen its geographic base, road conditions could decline or the condition of the company car could deteriorate. These changes will all affect the sales team's frequency of exposure to accidents.

When evaluating the frequency of exposure to risks, ask the following questions:

- How often do people encounter the risk?
- Has it ever happened before?
- How often has the risk occurred?
- Has the risk caused/nearly caused any problems?
- Is there any level of training required to perform the activity that would ensure exposure to the risk is minimised?
- Have people been adequately trained to lessen their exposure to the risk?
- Have people not been trained because the training is expensive or time consuming?

## Example

### Risk exposure

A typical grading system of possible risk exposure might look like the following chart. An alphabetical grade is often given as an easily identifiable marker that helps when documenting the potential frequency of exposure to a risk.

Grade	Ranking	Example	Potential frequency of exposure
A	Expected (will occur regularly)	Costs increase	Every project or activity.
B	Probable (will occur at some stage)	Deadlines are exceeded	A number of activities.
C	Possible (could occur)	Staff are injured	A couple of times in a year.
D	Unexpected (could occur but unlikely)	Property is stolen	Once in five years.
E	Rare (may occur but in limited situations)	A human-made disaster	Once in 10 years.

## Step 4: Determine the likelihood of the risk occurring

The likelihood of a risk occurring can be expressed as possible, probable (likely) or improbable (unlikely). An alphabetical grade is often applied to the level of likelihood.

This type of ranking is suitable for projects or activities that have a fixed time component.

The following example shows risk rankings.

Grade	Level of likelihood	Example
A	Expected (will occur regularly)	Staff take sick or holiday leave during the activity.
B	Probable (will occur at some stage)	Technology breakdown.
C	Possible (could occur)	Suppliers do not deliver on time.
D	Improbable (could occur but unlikely)	Security system fails.
E	Rare (may occur but in limited situations)	A staff member dies on the job.

### Example

#### How risk rankings are used

Bill, a business administrator at a publishing company, uses the same ranking for organisation-wide risk management that he uses for frequency of exposure to the risk.

'The first thing I do is look at what's happened before in our organisation to see the likelihood of it happening again. For example, we already have reliable data on staff absences and movement, technology breakdowns and occupational health and safety accidents.

'I then look to see what's happening in the organisation's business environment. For example, we're getting a new computer system that will be backed up by our old system. At the moment a breakdown is a possible risk. After we get the new system, the risk will be greatly decreased so we'll downgrade the likelihood to improbable or unlikely.'

## Step 5: Categorise the risk

Categorising risks involves perhaps the most crucial steps because you need to draw a connection between all the analyses you have conducted so far to determine the actual level of the risk. You need to analyse and differentiate the risks into categories, such as low, medium, high or extreme, according to the impact or consequence they will have if they occur, as well according to the likelihood of them occurring.

## Example

### Categorise risk based on level of impact

You identified a team member being away for one or two days during an activity as a potential risk. You then looked at the level of impact this would have on the activity. You labelled it as insignificant, meaning that an absence of one or two days would not disrupt the conduct of the activity.

Potential risk	Level of impact	Grade
A team member is away for one or two days during the activity.	Insignificant	1

However, if a team member was away for an extended period of time, the category would be different.

Potential risk	Level of impact	Grade
A team member is away for an extended period during the activity.	Major	4

## Example

### Categorise risk based on likelihood

You then looked at the likelihood of a team member being away for one or two days during an activity. You labelled the likelihood of this risk occurring as expected, meaning that it could be expected to happen.

Potential risk	Likelihood	Grade
A team member is away for one or two days during the activity.	Expected	A

However, if the team member was away for an extended period of time, you would have labelled the likelihood of this risk occurring as improbable, meaning that although situations like this do happen, you don't expect them to.

Potential risk	Likelihood	Grade
A team member is away for an extended period during the activity.	Improbable	D

## Step 6: Prioritise the risk

You need to prioritise risks by assigning them a value using indicative measurement scales such as high, medium or low. This means that you combine the two tables you have prepared: the level of impact and the level of likelihood, to determine the level of risk.

<b>Extreme</b>	Risks that may be imminent and have the potential to be devastating to the organisation or project. Require immediate action.
<b>High</b>	Risks assessed as likely to occur and severely impacting (either positively or negatively) on specific aspects of the organisation such as finance, property, personnel or governance. Require immediate action.
<b>Medium</b>	Risks assessed as being probable and needing treatment. Require monitoring and response procedures.
<b>Low</b>	Risks assessed as having a minimal likelihood of occurring and a corresponding low impact level if they do occur. Treated with routine procedures.

## Risk matrix

You can use a matrix for determining the level of risk. For this type of matrix you need to understand the alphabetical and numerical ranking system you have applied. Study the matrix so you are familiar with the way the ranking levels are used.

		<b>Consequences</b>				
		<b>1 Insignificant</b>	<b>2 Minor</b>	<b>3 Moderate</b>	<b>4 Major</b>	<b>5 Catastrophic</b>
<b>Likelihood</b>	<b>A (expected)</b>	High	High	Very high	Very high	Very high
	<b>B (probable)</b>	Moderate	Moderate	High	Very high	Very high
	<b>C (possible)</b>	Low	Moderate	High	High	Very high
	<b>D (improbable)</b>	Low	Low	Moderate	Moderate	High
	<b>E (rare)</b>	Low	Low	Low	Low	Moderate

## Example

### Use a risk matrix

This example matrix shows the risk at C4 is high. This means that the incident could possibly occur and, if it did, it would have a major level of impact. An example would be a member of the public being injured during an activity run by an organisation.

#### Consequences

	1 Insignificant	2 Minor	3 Moderate	4 Major	5 Catastrophic
A (expected)	High	High	Very high	Very high	Very high
B (probable)	Moderate	Moderate	High	Very high	Very high
C (possible)	Low	Moderate	High	High	Very high
D (improbable)	Low	Low	Moderate	Moderate	High
E (rare)	Low	Low	Low	Low	Moderate

## Example

### Categorise and prioritise the level of risk

The marketing team at an organisation specialising in energy drinks is beginning a major campaign involving a five member team. The team leader prepares a risk analysis for all aspects of the project including personnel, finance, resources, operations and legal-centred risks.

Here is the table that the team leader prepares for risks associated with personnel, assigning levels of impact ranging from insignificant, minor, moderate and major to catastrophic.

Risk	Level of impact	Grade
<b>Team member:</b> <ul style="list-style-type: none"> <li>is away for a short time</li> <li>disagrees with a decision.</li> </ul>	Insignificant	1
<b>Team member:</b> <ul style="list-style-type: none"> <li>performs poorly</li> <li>is regularly late to meetings</li> <li>is difficult to motivate.</li> </ul>	Minor	2
<b>Team member:</b> <ul style="list-style-type: none"> <li>goes on extended leave</li> <li>refuses training</li> <li>disregards instructions</li> <li>delivers excellent customer service (a positive risk)</li> <li>performs well (a positive risk).</li> </ul>	Moderate	3
<b>Team leader:</b> <ul style="list-style-type: none"> <li>resigns with minimal warning</li> <li>completes the campaign well under budget (a positive risk)</li> <li>completes the campaign well within the timeline (a positive risk)</li> <li>does not follow directives of senior management.</li> </ul>	Major	4
<b>Team member:</b> <ul style="list-style-type: none"> <li>causes major injury to other members</li> <li>becomes critically ill</li> <li>causes campaign to be cancelled.</li> </ul>	Catastrophic	5

## Example

### Categorise the level of likelihood

Here is the level of likelihood table the team leader prepares for the identified personnel-centred risks. In this project, the leader opts to use the expected/possible/probable/improbable/rare ranking scale.

Risk	Level of likelihood	Grade
Team member is away for a day or two.	Expected	5
Team member goes on extended leave.	Probable	4
Team member delivers excellent customer service.	Probable	4
Team member performs well.	Probable	4
Team leader completes the campaign well within the timeline.	Probable	4
Team leader completes the campaign well under budget.	Probable	4
Team member disagrees with a decision.	Possible	3
Team member performs poorly.	Possible	3
Team member is regularly late to meetings.	Possible	3
Team member is difficult to motivate.	Possible	3
Team member refuses training.	Possible	3
Team member disregards instructions.	Possible	3
Team leader resigns with minimal warning.	Possible	3
Team member becomes critically ill.	Possible	3
Team member causes campaign to be cancelled.	Improbable	2
Team member causes major injury to other members.	Improbable	2
Team leader does not follow directives of senior management.	Improbable	2

The team leader can now combine the two tables into a matrix to categorise the level of risk as low, medium, high or extreme.

Level of likelihood	Level of impact				
	1 (insignificant)	2 (minor)	3 (moderate)	4 (major)	5 (catastrophic)
5 (expected)	Medium (5)	High (10)	High (15)	Extreme (20)	Extreme (25)
4 (probable)	Medium (4)	Medium (8)	High (12)	Extreme (16)	Extreme (20)
3 (possible)	Low (3)	Medium (6)	Medium (9)	High (12)	High (15)
2 (improbable)	Low (2)	Medium (4)	Medium (6)	Medium (8)	High (10)
1 (rare)	Low (1)	Low (2)	Low (3)	Medium (4)	Medium (5)

Using this matrix, the team leader identifies the level of risk using a risk categorisation table.

Risk	Likelihood	Impact	Level of risk
Team member is away for a short time.	Expected	Insignificant	Medium
Team member goes on extended leave.	Probable	Moderate	High
Team member delivers excellent customer service.	Probable	Moderate	High
Team member performs well.	Probable	Moderate	High
Team leader completes the campaign well within the timeline.	Probable	Major	Extreme
Team leader completes the campaign well under budget.	Probable	Major	Extreme
Team member disagrees with a decision.	Possible	Insignificant	Low

Risk	Likelihood	Impact	Level of risk
Team member performs poorly.	Possible	Minor	Medium
Team member is regularly late to meetings.	Possible	Minor	Medium
Team member is difficult to motivate.	Possible	Minor	Medium
Team member refuses training.	Possible	Moderate	Medium
Team member disregards instructions.	Possible	Moderate	Medium
Team leader resigns with minimal warning.	Possible	Major	High
Team member becomes critically ill.	Possible	Catastrophic	High
Team member causes campaign to be cancelled.	Improbable	Catastrophic	High
Team member causes major injury to other members.	Improbable	Catastrophic	High
Team leader does not follow directives of senior management.	Improbable	Major	Medium

## Example

### Risk analysis

From this analysis the team leader can see that the risks are mostly medium or high. Relying on indicative views of the risk means it is important to consult with everyone involved to arrive at a common understanding. For example, a risk one person sees as high level may seem low level to another until everyone's views are collected in one place.

Some risks may not be as high or as low as originally thought. For example, a team member who refuses training might seem like a medium-level risk before the project starts but the quality of their work, and their innovative thinking during the project, may counteract the problem.

A more objective way to rank risks is to use a numerical priority ranking system that ranks likelihood and impact as a number from 1–5, with 5 being the highest level. The numbers are then multiplied together to give a score that ranks the level of the risk.

In this table, the cost of new technology is deemed to be a possible likelihood (3) and a moderate impact (3). This indicates a combined risk ranking of 9(3 x 3), which is in the moderate risk range.

Issue	Risk identification								
	Area of impact							Level of impact	
	Profits	Quality products	Business continuity	Delivery	WHS	Legal	Liability	Likelihood: Almost certain Likely Possible Unlikely	Consequence: Catastrophic Major Moderate Minor Insignificant
Over-capitalisation in IT	1							1	3
Cost of new technology	1							3	3
IT skilled staff		1	1		1			3	4

Issue	Risk control		
	Rank	Initial response	Done since last review
Over-capitalisation in IT	3	IT strategy in line with company strategy	Identified non-capital solutions for website update
Cost of new technology	9		Changed the digital printing and distribution mix
IT skilled staff	12	Training provided in Excel, graphic design	Regular training on IT issues to all staff

## Example

### Risk survey analysis

Another way of identifying a ranking is to conduct a survey of relevant people and display the risk priority as a percentage, as in the following chart. In this example staff within an organisation are asked to rank three risks in order of priority, according to their personal opinion. The results show that nearly 60 per cent of staff believe bad debts are the highest priority risk.



## Step 7: Evaluate the risk

Once you have prioritised the risks you need to study your analysis and decide how you are going to treat the risks according to the ranking you have assigned them. Risk evaluation is about deciding whether particular risks are acceptable or not.

The outcome from this is a list of risks with an agreed priorities rating. From this list, decisions can be made about acceptable levels of tolerance for particular risks and to determine where greater effort to control the risks needs to be focused.

If you determine that the level of risk is extremely high, you will need to put strict measures in place to treat the risk. On the other hand, you may find that the level of risk is negligible and as long as you are alert to it, there is no need for action. Sometimes you might find that the expected benefits of a high-level risk outweigh possible negatives. Alternatively, you might find that the risks are too great and that you should abandon the project altogether.

For instance, how do you distinguish between a risk that has a low probability of occurring but a high impact if it happens, and one that has a high probability of occurring but a low impact?

**When evaluating risk you need to take into account:**

- the controls already in place
- the cost consequences of managing risks or leaving them untreated (in terms of resources as well as health and safety)
- the benefits and opportunities presented by the risks
- the risks to be assumed by stakeholders.

To make appropriate decisions, be aware of your organisation's policies and procedures for handling risks, as well as your own role and responsibilities. You may be responsible for making your own decisions about a specific risk or you may need advice or guidance from a more experienced person. Make sure you check your organisation's risk management plan or other processes before making any decisions in relation to evaluating and treating risks.

Most organisations are limited in the extent to which they can deal with risks that could negatively impact them. Conversely, they are also limited in the extent to which they can take advantage of opportunities that may or may not prove beneficial in the long term. Resources may be limited, the organisation may be overseen by a board that manages conservatively or the organisation might be so small that only projects with very manageable risks can be tolerated.

## Tolerable risk

The concept of tolerable risk is used when deciding what to do with a risk. For example, an organisation may decide that the profits to be gained from a project are too small when balanced against the cost of undertaking the project.

However, the project could generate enormous benefits in relation to the organisation's reputation or in the networks it might establish. Weighing these positive outcomes against the financial risk might show that the risk for taking on the project is acceptable or tolerable.

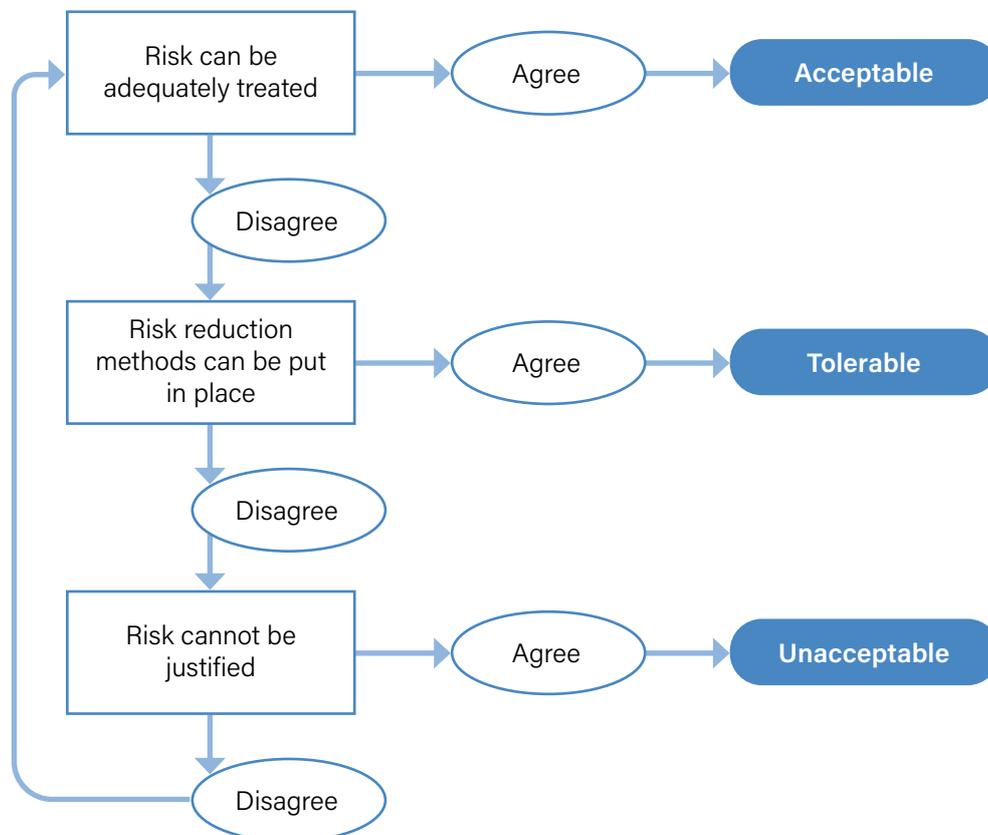
Criteria for evaluating the tolerability of the risk may be documented in the organisation's risk management plan or a set of criteria may be developed prior to commencing a particular activity.

Organisations use criteria or benchmarks to indicate levels of tolerability within the specific context of the organisation. Frequently, risks involving personal safety have a very low tolerability, meaning that everything within the power of the organisation must be done to treat the risk or minimise its potential impact. Highly tolerable risks are ones that are less noticeable such as small losses of time, so that the organisation might choose not to expend much effort in treating them.

## Example

### Tolerability criteria

Here is an example of an organisation's tolerability criteria. The flow chart provides statements about an identified risk that must be agreed or disagreed with. The risk's tolerability level is determined according to whether the statement is acceptable or not. If you disagree with the last statement, you need to rethink your risk evaluation.



The risk evaluation process ranks identified risks against set criteria to assess their tolerability so as to determine whether the risk is acceptable or unacceptable. In addition to set criteria, experience from similar projects undertaken by an organisation is often a guiding factor in deciding whether the risk posed by a project is tolerable or not.

The flowchart shows risks that might typically be deemed unacceptable by organisations. Some examples include:

- technology failure
- no financial return on investment
- injuries resulting in hospitalisation
- bad publicity
- legal action
- large losses of skilled staff
- lack of firm contract
- an industrial spill.

## Changing risk factors

Risks deemed acceptable by one organisation or industry may be unacceptable in another. For example a sporting organisation that participates in high-level risk activities such as abseiling may have a greater tolerance level for minor injuries than an organisation in an office environment.

The dynamics of change should be kept in mind. For example:

- your organisation may have recently introduced stricter control measures so a high risk that was tolerable or acceptable last year may not be tolerable now
- there may have been special circumstances in the past, such as a change of government, that severely impacted on the outcome of a project but that have no effect now
- a risk in one project may not be a risk in another.

## Decisions about acceptable risks

Various changing factors mean that you need to look at your risk analysis objectively and make decisions based purely on the data and information you have gathered for the specific activity you are planning. As with the analysis of risk levels, results can be relative. What seems a risk to one person may not seem such a risk to another. Your evaluation depends on your opinion, experience and knowledge as well as your thoroughness.

It is crucial to study documentation about previous activities; make sure you understand the nature, scope and parameters of the activity, and ensure that everyone involved in the proposed activity is consulted. Consultation is important. Risk managers have to ensure a number of people review the results and objectively assess each of the risks.

If you decide to accept a risk you need to do so based on informed and reasoned data. If the risk has a higher impact or more severe consequences than you first thought, you may be asked why the risk was deemed acceptable. Be aware of the potential consequences and monitor and reassess the risk regularly. As an activity evolves you may decide that circumstances surrounding a risk you initially considered acceptable have changed and the risk has become unacceptable.

## Practice Task 5

### Question 1

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Draw a line to match each risk to its likelihood category.

- |   |              |
|---|--------------|
| » Team member disagrees with a decision.            | » Probable   |
| » Team member goes on annual leave.                 | » Improbable |
| » Team leader resigns with minimal warning.         | » Possible   |
| » Team member causes major injury to other members. | » Possible   |

### Question 2

---

What impact category would you assign to the risk of a team member causing major injury to another member?

### Question 3

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Calculate the level of risk for the team leader resigning with minimal warning given the following: possible likelihood (3) x major impact (4)

### Question 4

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Which of the following statements are correct? Select yes or no for each one.

- |  |       |      |
|--|-------|------|
| a) Very often, risks involving personal safety have a very low tolerability.   | » Yes | » No |
| b) If you determine that the level of risk is extremely high, you will need to put relaxed measures in place to treat the risk.        | » Yes | » No |
| c) One way of identifying a ranking is to conduct a survey of relevant people and display the risk priority as a percentage.           | » Yes | » No |
| d) An objective way to rank risks is to use a numerical priority ranking system that ranks likelihood and impact as a number from 1–5. | » Yes | » No |
| e) Highly tolerable risks are ones that are less noticeable.   | » Yes | » No |

## 2C Document analysis processes and outcomes

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Organisations handle their data in different ways, yet each must keep a record of all data, procedures and outcomes of analysis. This includes sources of information, correspondence, existing controls, measurement charts and evaluation results.

Both paper-based copies and electronic files are recommended as a way of backing up data securely. The outcome of good record management is the ability to show fully maintained and up-to-date information to relevant managers, co-workers or external auditors. There may be occasions when you need to show your results to senior management, other people involved in the proposed activity, or as evidence in an external investigation. The material can prove useful to build on the knowledge of previous analyses when planning future activities.

The reasons risk assessment documentation should be completed include:

- to show risk assessment has been conducted properly
- to demonstrate that the organisation uses a systematic approach to risk identification, analysis and management
- to keep a record of all organisational risks in order to develop the organisation's knowledge database
- to provide decision makers with up-to-date risk analysis and management plans for approval and implementation
- as part of continuous improvement activities
- as evidence for audit, and
- to share, communicate and educate others.

### Step 8: Document results of risk analysis

The size, nature and structure of your organisation will determine the types of documents your organisation will need to complete and maintain. For example, banking and financial institutions will have different documentation needs to those of childcare centres or aged care facilities. This is due in part not only to the different legislative requirements of each sector but to the differing risks (and levels of risk) each sector may experience. There may also be documentation requirements of respective management systems in place in each sector.

As a minimum, your organisation will need to keep information on:

- identified hazards, assessed risks and control measures selected to mitigate each risk. Documentation may include hazard checklists, risk register or log and any assessment tools you used (e.g. risk analysis matrix)
- workplace hazards or risks, incidents, near misses and injuries reported by workers
- when, and how, control measures were implemented in the workplace, monitored and reviewed
- participants involved in consultations
- training and competency records of employees, including any licensing and refresher requirements
- continuous improvement plans for changes made, or soon to be implemented, in your workplace.
- revised or updated versions of any policy or procedure.

## Meet legal requirements

You must be aware of, and comply with, any legislative requirements regarding record keeping within your industry. These records must be accessible and available when required, especially for auditing purposes or workplace health and safety inspections.

Under the Work Health and Safety Regulations 2012, organisations are required to keep as a minimum:

- records of risk assessments conducted
- safe work method statements
- completed incident reports (for near misses, injuries, incidents)
- health monitoring results
- inspections, maintenance and modifications made to registered plant
- professional development records relating to health and safety training and licensing.

## Address documentation standards

There may be templates that your organisation uses for documenting risks, or you may need to create ones for your specific purpose. The AS ISO 31000:2018, Risk Management Guidelines make suggestions for how to plan and conduct the risk documentation process by taking account of:

- differing stakeholders and their specific information needs and requirements
- cost, frequency and timeliness of reporting
- method of reporting
- relevance of information to organizational objectives and decision-making.

## Where to store documentation

Depending on your organisation, risk assessment documentation may be stored manually or electronically. As more organisations move towards digitising their key documents it is imperative that access to these documents is restricted where necessary. Documents may be edited or deleted if access is not properly controlled.

Many organisations have non-editable versions of risk assessment documentation available to relevant staff, keeping access to editable versions restricted.

On the other hand, key safety documents such as hazard checklists or risk registers must be easily accessible to all employees in the workplace.

## Keep documents up to date

Out of date risk registers or risk analysis are useless.

Risk assessment documents should be reviewed annually as a minimum. Ideally, as projects or activities progress, risk assessment documentation should be updated accordingly. Not only is this to ensure that risk ratings remain relevant, but risks identified initially may no longer exist by the end of a project. You should also review your documents if:

- identified risks are not being effectively managed
- new hazards or risks have been identified
- there have been changes made to the work environment, organisation or key personnel
- new equipment or chemicals are bought and used
- consultation with stakeholders and workers reveal that risk assessment documents need to be reviewed
- an incident occurs in the workplace.

## Keep previous versions

When documents need to be updated do not delete or completely overwrite them, as there may be a legal requirement to keep them for a given period of time. Alternatively, many organisations want to keep previous versions for 'knowledge maintenance' purposes.

To maintain these records, you need to implement version control by:

- clearly marking previous versions as obsolete. This can be evidenced by stamping physical documents or inserting a watermark across the page that signals an outdated version
- moving outdated documents to an archive area, whether online or in a physical location
- if online, changing the file name to signal the document is outdated.

Inform all relevant staff that new versions of existing documents are now being used and include information about an overview of changes made and where these documents can be accessed.

### Example

#### Documenting risk analysis

Here is an example of part of a risk assessment documentation process that one organisation produced for their purposes.

Risk inventory								
Activity: Launching a new product								
Department/team: Marketing								
Department/team responsibility: To prepare for and conduct a marketing campaign for the new product								
Compiled by: Adrian Johnson				Date: 5 October				
Risk	How it could happen	Consequence	Existing controls	Likelihood	Impact	Level of risk	Priority	Action
Promotional material may not be ready in time	Supplier fails to deliver	Launch delayed	Firm contract with suppliers Intermediate progress checklists Preferred suppliers	C (possible)	3 (moderate)	Medium	1	

## Practice Task 6

### Question 1

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Which of the following need to be documented as part of risk management processes? Tick all that apply.

- Identified hazards, assessed risks and control measures selected to mitigate each risk
- Workplace hazards or risks, incidents, near misses and injuries that are reported by workers
- When and how control measures were implemented in the workplace, monitored and reviewed
- Leave applications of team members
- Training and competency records of employees, including any licensing and refresher requirements

### Question 2

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List three documents that demonstrate risk analysis processes and outcomes.

### Question 3

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Which of the following risk documents need to be kept under Work Health and Safety Regulations 2012? Tick all that apply.

- Records of risk assessments conducted
- Safe work method statements
- Completed incident reports (for near misses, injuries, incidents).
- Medical history reports of licensed staff (e.g. those operating plant)
- Inspections, maintenance and modifications made to registered plant

### Question 4

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Which of the following statements are correct? Select yes or no for each one.

- |   |       |      |
|---|-------|------|
| a) Digital risk management documentation is the most secure way to maintain records.  | » Yes | » No |
| b) Editable versions of risk management documents should have restricted access.  | » Yes | » No |
| c) PDF versions of risk management documents should be available to and accessible by staff, for example, uploaded on the intranet.     | » Yes | » No |
| d) Previous versions of risk management documents or risk-related policies and procedures should be deleted once expired or superseded. | » Yes | » No |

## Summary

- Once the risks associated with an activity have been identified, the organisation must analyse and assess these risks to determine how likely they are to occur and how severely they will impact on the business should they occur.
- Regardless of the nature of the business activity, risk analysis should be performed using measurement and rating scales to quantify the data to ensure its accuracy and usefulness for decision-making.
- After risk analysis data has been quantified you need to evaluate each risk based on your analysis as to the likelihood of it occurring and its impact level.
- The evaluation of risks should enable the organisation to categorise and prioritise risks to determine which should be treated and addressed with the highest priority and which can be accepted as low level or unlikely to occur.
- The process of risk analysis and evaluation should be systematic in nature rather than unplanned.
- Organisations use criteria or benchmarks to indicate levels of tolerability. Risks involving personal safety have a very low tolerability whereas highly tolerable risks are ones that are less noticeable, such as small losses of time.
- Organisations must keep a record of all data, procedures and outcomes of analysis, including sources of information, correspondence, existing controls, measurement charts and evaluation results.
- Under the Work Health and Safety Regulations 2012 organisations are required to keep various risk management records such as records of risk assessments conducted, safe work method statements and completed incident reports.

## Learning Checkpoint 2

### Analyse and evaluate risks

#### Part A

1. What are the three common categories of tolerability for an identified risk?
  - Tolerable risks are identified as treatable once they become incidents. Acceptable risks are identified as being preventable by some methods; and unacceptable risks are those which cannot be tolerated and should be removed.
  - Acceptable risks are identified as treatable once they become incidents. Tolerable risks are identified as being preventable by some methods; and unacceptable risks are those which cannot be tolerated and should be removed.
  - Unacceptable risks are identified as treatable once they become incidents. Acceptable risks are identified as being preventable by some methods; and tolerable risks are those which cannot be tolerated and should be removed.
  - Good, bad and neutral tolerability.
  - Green tolerability, amber tolerability and red tolerability.
2. Why use a numerical priority ranking system for risk analysis?
  - It is a more objective way to rank risks, helps to quantify likelihood and impact of risks and communicate risk effects more clearly to everyone.
  - Managers understand numbers better than opinions.
  - It is a more subjective way to rank risks, helps to qualify likelihood and impact of risks and communicate risk effects more clearly to everyone.
  - It gives a mathematical framework to risk treatment.
  - There is no other way to properly assess risk than by quantifying them.
3. When analysing and evaluating risk, why must you keep a record of all data and procedures of analysis?

4. Draw a line to match each risk priority to its definition.

- |           |  |
|-----------|--|
| » Extreme | » Risks assessed as having a minimal likelihood of occurring and a corresponding low impact level if they do occur. Treated with routine procedures.   |
| » High    | » Risks assessed as likely to occur and severely impacting (either positively or negatively) on specific aspects of the organisation such as finance, property, personnel or governance. Require immediate action. |
| » Medium  | » Risks that may be imminent and have the potential to be devastating to the organisation or project. Require immediate action.  |
| » Low     | » Risks assessed as being probable and needing treatment. Require monitoring and response procedures.  |

5. Which of the following are requirements for assigning a risk rating?

- |  |       |      |
|--|-------|------|
| a) Avoid past records and only focus on current and future predictions.  | » Yes | » No |
| b) Look at past records, including reports and the organisation's risk management plan, to see how often the organisation has experienced the risk and whether it is prepared for it.  | » Yes | » No |
| c) Question relevant people who have had similar experiences to see what ranking they would give the risk.   | » Yes | » No |
| d) Analyse market research that may predict future circumstances.  | » Yes | » No |
| e) Conduct research into the relevant industry using the internet, industry journals and trade magazines, government policies and competitors' experiences to understand the nature of the risk and the likelihood of the organisation's exposure to it. | » Yes | » No |

6. Which of the following actions demonstrate effective stakeholder consultation during risk management? Tick all that apply.
- Stakeholders involved in the project, program or organisation are consulted during all stages of risk management, i.e. identification, analysis, categorisation, evaluation.
  - Consultations can involve face to face interactions, such as focus groups, where questioning and listening techniques are used to elicit opinions.
  - Consultations can involve questionnaires or surveys, completed online or in person.
  - Only department heads, managers or team leaders are consulted in face to face interactions.
  - Consultations should involve the use of closed questioning so detailed explanations are kept to a minimum and only straightforward responses are elicited.

## Part B

Read the case study and answer the questions that follow.

### Case Study

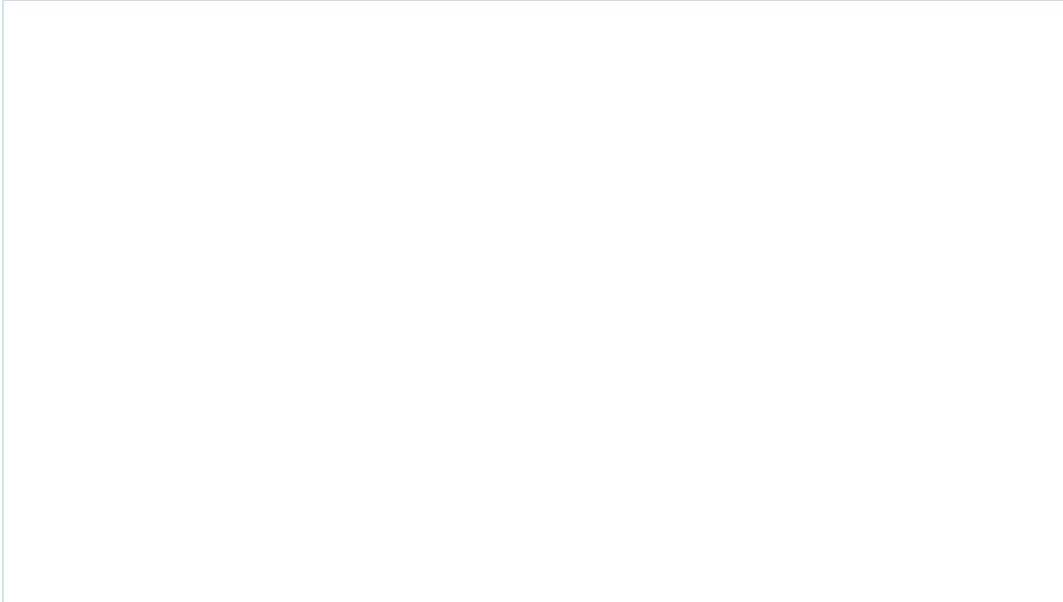
A small financial and taxation advisory firm has been growing steadily over the year because it introduced a retirement planning service that is proving extremely popular. It currently carries out its business in an up-market shopping centre in an affluent suburb; however senior management believes moving the business to a three-storey office would enhance the firm's image.

The task of overseeing the feasibility study to determine whether the move would be beneficial has been given to Majeeda, a frontline manager with the firm. She conducts research to identify possible new premises and then prepares a risk analysis to identify potential risks in moving offices. She needs to establish how likely it is that these risks will occur and what can be done to neutralise them. Two other staff members are helping her gather data.

Some of the results are surprising. For example, the analysis shows that the cost of relocating – identified as high likelihood/high impact, plus the new rent – also identified as high likelihood/high impact, does not compare favourably with the risk of a possible rent increase at their current location, identified as medium likelihood/medium impact. Moreover, market research indicates that relocating away from their customer base would have a high likelihood/high impact risk level.

A business associate of Majeeda's moved offices in similar circumstances last year and tells her that although the move was initially seen as positive, the hidden costs involved have shown the move to be a poor financial decision. He advises Majeeda to think carefully before making recommendations to senior management.

1. What are some of the likelihoods in Majeeda's risk analysis that seem to support the warnings given by her business associate?



2. Majeeda needs to assess the tolerability of the identified risks. Which of the following are recognised ways to determine risk tolerability? Tick all that apply.

- Accept the business associate's warning as evidence of risk intolerability.
- Rank identified risks against set criteria to assess whether the risk is acceptable or unacceptable.
- Identify and benchmark experience from similar projects.
- Go with intuition on this one.



## Topic 3 | Treat risks

- 3A Identify risk control measures
- 3B Assess strengths and weaknesses of control measures
- 3C Refer risks to relevant personnel
- 3D Select and implement control measures

## 3A Identify risk control measures

The aim of risk treatment is to convert the analysis and evaluation you have conducted into actions, or control measures. These will minimise negative risks and capitalise on opportunities that are deemed likely to have positive outcomes.

There are numerous possible control measures and some are more suited to major projects while others are appropriate for smaller-scale activities. Many organisations have a number of control measures they use on a regular basis. These may have been identified as appropriate for the organisation's business activities and will be documented within their policies, procedures or risk management strategies. For example, an organisation may have decided that any project with a time frame of less than three months for a specific outcome is too risky given the available resources and therefore will never be considered. Other control measures are set down in legislation; for example, environmental and work health and safety measures.

Options if positive outcomes have been identified

There are several options organisations can take if the outcomes of identified risks are deemed positive. These may involve risks that have low impact, low probability or are considered acceptable by the organisation.

The following are options to consider if positive outcomes have been identified.

### Seek the opportunity

This option involves accepting any risks you have identified and making a decision to begin or continue with the activity. You would choose this option if the risks you had identified were low impact/low probability or if the moderate or even high-level risks are deemed acceptable. For example, if you identified that there was minimal risk and positive outcomes attached to hiring a new staff member you would accept the risks (for example, the risk that they would not fit into the organisation) and continue with the appointment. Or if the organisation considers that the benefits of investing money outweigh the risks of possible losses involved, then it will go ahead with the investment opportunity.

<p><b>Increase the chance</b></p>	<p>This option means that you change or control the likelihood or the consequences of the opportunity to increase the chance of a positive outcome.</p> <p>Changing the likelihood can help maximise the outcome. For example, if you identified that the activity would result in a financial gain, you might provide further training for staff. This would ensure the result is even higher quality than was initially planned thereby increasing the likelihood of making a profit.</p> <p>Changing the impact or consequences of the opportunity means that you identify ways to increase the extent of the proposed gains. For example, if an organisation has identified their market growth as steady but wants to increase consumer awareness, they might decide to expand into a new market or conduct a comprehensive marketing campaign to increase sales growth.</p>
<p><b>Share the opportunity</b></p>	<p>Sharing the opportunity you have identified means that you enter into a partnership, alliance or joint venture with other parties to improve the chances of having a positive outcome. For example, this may:</p> <ul style="list-style-type: none"> <li>▪ improve the opportunity of making a financial gain</li> <li>▪ capitalise on the opportunity to enter a new market</li> <li>▪ demonstrate the skills and expertise of your organisation.</li> </ul> <p>Joining with others combines available expertise and resources and can ensure a project is completed within a set time frame. For example, an organisation might decide to be part of a consortium to bid for a major project. By entering into a partnership with experts, the opportunity to make a profit is increased. Measures to control associated risks with ventures of this type include contracts, royalty agreements and regular monitoring.</p>
<p><b>Retain the opportunity</b></p>	<p>This option is related to an opportunity that has been shared in the form of a partnership or joint venture. It means that even after the opportunities have been shared with other parties, there remain extra opportunities for the organisation that require no action. For example, being a member of an alliance may increase an organisation's networks or improve its reputation. These outcomes may not have been forecast in the contract.</p>

## Options if negative outcomes have been identified

There are several options organisations can take if the outcomes of identified risks are deemed negative. This may involve risks that have high impact, high probability with low gain or are considered unacceptable by the organisation.

The following are options you can consider if negative outcomes have been identified.

<p><b>Avoid the risk</b></p>	<p>This option entails avoiding the risks you have identified by cancelling the activity. Such a decision needs careful consideration. Some assessors may be overly conservative in their approach to risks and be reluctant to pursue any activity that does not have a low-impact/high-gain outcome. Risk aversion can result in making decisions to avoid risks regardless of a positive evaluation and identified benefits and opportunities.</p> <p>A decision to avoid an activity can be made if the outcome is identified as high impact/high likelihood and low gain.</p>
<p><b>Change the likelihood</b></p>	<p>Changing the likelihood of the risk occurring means that you put measures in place to reduce the chance of the risk becoming an event, although this doesn't necessarily mean the risk will disappear. For example, if you have identified suppliers not delivering on time as a risk you can reduce the chance of this happening by ordering well in advance, maintaining an oversupply or changing suppliers. On an organisational level, the risk of a virus infecting the computer system could be reduced by updating the virus protection software.</p> <p>Measures to reduce the likelihood of a risk occurring might include:</p> <ul style="list-style-type: none"> <li>▪ conducting further research into the risk</li> <li>▪ ensuring project management strategies are in place</li> <li>▪ ensuring timelines are realistic</li> <li>▪ using inspection controls and quality assurance measures</li> <li>▪ implementing tighter control of contract conditions</li> <li>▪ monitoring the preventive maintenance system</li> <li>▪ ensuring staff are adequately trained.</li> </ul>
<p><b>Change the impact</b></p>	<p>Changing the impact or consequences of the risk if it occurs means that you are prepared with a contingency plan to avoid events that can seriously impact on the activity. Sometimes you can reduce the expected impact before the activity begins; at other times you may need to make adjustments during the course of the activity. Having a contingency plan means that an organisation can react quickly and calmly to anything that threatens the activity's progress and ensure disruptions are limited.</p> <p>For example, if you expect a team member to be away during the activity, you can ensure that other team members have the skills needed to take over uncompleted tasks.</p> <p>Measures to reduce the impact of a risk occurring might include contingency planning such as:</p> <ul style="list-style-type: none"> <li>▪ disaster recovery planning</li> <li>▪ fraud control planning</li> <li>▪ pricing controls</li> <li>▪ public relations</li> <li>▪ minimising exposure to risks.</li> </ul>

<b>Share the risk</b>	Sharing or transferring the risk to other parties is an option that organisations take up when the risks are deemed too great for them to handle on their own. Taking out insurance is a typical example of sharing risk. Organisations also subcontract, enter into partnerships or alliances, or take part in joint ventures to reduce the amount of risk they carry. However, additional risks may be incurred if the subcontractor or partner does not meet the required standard.
<b>Retain the risk</b>	Despite changing or sharing the impact of a risk, there will still be some risk attached to the activity. Being aware of the risk and carefully monitoring it during the course of the activity will ensure that you retain control.

## The advantages and disadvantages of each option

The options you choose for treating risks or opportunities will largely depend on the nature and context of the activity.

Keep in mind the advantages and disadvantages of each option. For example, entering into partnerships or alliances brings its own risks such as a partner failing to meet deadlines or producing inferior work. Avoiding a risk because the negatives seem to outweigh the benefits can result in lost opportunities. Conversely, accepting a risk without properly investigating potential negative outcomes is in itself a risky course of action. Reducing or changing the likelihood of a risk before an activity begins is usually a more effective option than attempting to reduce its impact after the risk has occurred. However, having a number of options in place to help reduce the negative impact of a risk is essential if you need to control a risk during an activity.

When looking at the advantages and disadvantages of a particular option consider how cost-effective it is. When choosing options you need to balance the cost of using an option against what can be gained from it. While reducing a risk might incur considerable cost, the benefits gained may make this a worthwhile option. On the other hand, pursuing an option may not be worth the cost involved. You must also consider any legal implications of any chosen option.

## Continually monitor risks

Identifying and treating risks is a continual process. Even after you have identified a set of risks and selected appropriate options to manage them, other risks can appear. In addition, risks you have already identified may worsen, or risks that you have not previously considered may emerge. Therefore, it is essential that the types of risks encountered are continuously monitored.

For example, suppose you decided to change the company that supplies your organisation with office paper as a treatment to control cost. The suppliers you used previously were continually increasing their prices so you did some research and found an organisation that supplied cheaper paper that was also environmentally sound. You changed suppliers, but after a few months realised that you had swapped one risk (cost) for another (delivery delays).

### Example

#### The importance of being aware of all risks

A graphic design company was awarded the contract to design and produce all stationery and publicity material for a large multinational company. The timelines were very tight and because staff already had a number of projects underway that were taking up most of their resources, they decided to subcontract part of the project to an organisation recommended to them. Their risk analysis and prevention strategies covered cost blow-outs, personnel-centred risks and risks associated with the timeline but failed to predict other risks that could occur.

After a few weeks they found that the work was not meeting the design criteria, drafts were coming in late and the product was not meeting quality assurance standards.

The project manager at the graphic design company realised there should have been a more comprehensive risk analysis completed before taking on the subcontractors.

### Changing circumstances change the risks

Changing circumstances are one of the most common causes of a change in the types of risks encountered. For example, an organisation that experiences rapid growth will be exposed to a number of different types of risks than before. These might centre upon security, confidentiality, personnel, finances and business operations such as marketing, investment and sales.

Changes in legislation and government policies may increase an organisation's risks. For example, new work health and safety measures may mean an organisation needs to put stricter controls, and more comprehensive policies and procedures, in place to comply with the new legislation.

Ever-changing technology is a prime example of the need to continuously monitor risks. With more viruses, complex programs and the threat of hackers, the need to identify new risks is constant. Measures must be put in place to protect an organisation's information, safeguard against breakdowns and ensure staff are sufficiently trained and understand IT policies and procedures.

## Practice Task 7

### Question 1

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Match each control measure to either of the two options.

- |                                |  |
|--------------------------------|--|
| » Seek the opportunity         | » Options if positive outcomes have been identified. |
| » Retain the opportunity       | » Options if positive outcomes have been identified. |
| » Avoid the risk               | » Options if positive outcomes have been identified. |
| » Share the opportunity        | » Options if positive outcomes have been identified. |
| » Change the likelihood/impact | » Options if negative outcomes have been identified. |
| » Increase the chance          | » Options if negative outcomes have been identified. |
| » Share the risk               | » Options if negative outcomes have been identified. |
| » Retain the risk              | » Options if negative outcomes have been identified. |

### Question 2

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Which of the following control measures would be effective in managing risks brought on by storing hazardous chemicals on workplace premises? Tick all that apply.

- Buy disposable gloves.
- Rewrite policies and procedures for storing chemicals.
- Improve storage facilities.
- Train staff.
- Update yearly budgets.

## 3B Assess strengths and weaknesses of control measures

Not all risk controls are equal. The strengths and weaknesses of measures vary according to the risk situation.

Most organisations apply a combination of options depending on the costs, benefits, effectiveness, social and legal implications and sustainability of controls. For example, you might decide to provide training for staff to ensure their skills match those required for the activity (reducing the likelihood of the task not being performed adequately) and prepare a contract for external personnel involved (sharing the risk). If you find that the measures you select are too costly, you will need to prioritise the controls by considering cost against benefits and implementing those with the best overall value.

### How does the activity fit into the organisation's plans?

When considering what measures to apply to control risks or enhance opportunities, look at the activity as a whole and see how it fits into the organisation's strategic plans. The bigger picture may influence your decision about what measures to adopt. For example, it might be wise to pursue an activity despite its potential for a negative outcome as long as you put plans in place to control the risks. The activity might be crucial to your organisation's continuing relationship with another organisation, or it might be essential if your organisation is to expand into a new market or increase profit. Considering the context of the activity is essential when allocating resources and actions to control risks.

### Is a reassessment needed?

To be certain you are choosing the right control measures, you should go back to the risks you have identified and look more closely at their causes. The control measures you implement should treat the cause, not the result of the cause.

The following table provides some examples. In the first example, there are a number of controls that could be put in place to reduce the risk of a chemical being spilt. The measures listed in the third column will help reduce the likelihood of a chemical being spilt. However, if a chemical is spilt, additional measures must be listed to lessen the result of the cause. You need to be sure that your control measures address the causes and are not additional measures that treat the impact of the risk.

Risk incident	Cause	Control measure	Additional measures
Chemical is spilt	Inadequate storage controls	<ul style="list-style-type: none"> <li>Rewrite policies and procedures for storing chemicals</li> <li>Improve storage facilities</li> <li>Train staff</li> </ul>	<ul style="list-style-type: none"> <li>Implement warning signals</li> <li>Supply appropriate clean-up clothing</li> <li>Notify relevant OHS personnel</li> <li>Insure against a spill (transfers some of the risk to another body)</li> </ul>
Sales are down	Low consumer interest	<ul style="list-style-type: none"> <li>Improve the product or service</li> <li>Research the market</li> <li>Increase product awareness through a marketing campaign</li> <li>Employ more sales staff to contact consumers</li> </ul>	<ul style="list-style-type: none"> <li>Contact lapsed clients</li> <li>Launch new product</li> <li>Cut costs elsewhere</li> </ul>

## The effectiveness of past and present control measures

Examine previous activities similar to the one you are doing and note the control measures used. Were they successful? If not, why not? Were they cost-effective? Were the measures easy to sustain?

Ask how effectively the risks are controlled by existing measures. Does anything need to be adjusted, modified or changed? For example, is the security system performing well? Are there checklists in place to help you select appropriate suppliers? Are your contracts working well for you?

Use this list of questions to approach decision making in a systematic way.

### Questions for a systematic approach to risk control

- Is the treatment option easy to implement?
- What is the cost of implementing the control measure? Is it more cost-effective to not treat the risk?
- Are there any benefits to be gained by not controlling the risk?
- What resources are needed to control the risk?
- Do the risk treatments comply with legal requirements and organisational and government policies?
- Will the treatment mean more risks are identified or will it lead to additional benefits?
- Will the control measure be sustainable or is it only a short-term fix?
- Are the costs of the measure selected too great? Is a cost-benefit analysis needed?
- Are there rare but severe risks that need to be treated regardless of cost?

## Example

### Risk treatment plan

The marketing manager at a sports company selects the control measures for personnel-related risks identified in their new marketing campaign. The manager still needs to allocate responsibilities for specific risks and prepare a timetable for implementation. But for now, it looks like the team has selected appropriate measures to control the risks.

Here is an extract from the risk treatment plan the team has prepared.

Risk	Preferred treatment option
Team member is away for a short time	<ul style="list-style-type: none"> <li>▪ Ensure other members are trained as backups.</li> <li>▪ Make sure everyone understands the scope of the activity and is familiar with others' tasks and duties.</li> </ul>
Team member is difficult to motivate	<ul style="list-style-type: none"> <li>▪ Assign a mentor.</li> </ul>
Team member does not have sufficient skills required for the task	<ul style="list-style-type: none"> <li>▪ Arrange training.</li> </ul>

Risk	Preferred treatment option
<p><b>Team member performs well (potential opportunity)</b></p>	<ul style="list-style-type: none"> <li>▪ Encourage team members to perform to the best of their ability.</li> <li>▪ Instigate a bonus for good performance.</li> <li>▪ Make arrangements to celebrate and reward the team member.</li> </ul>
<p><b>Campaign is completed over budget</b></p>	<ul style="list-style-type: none"> <li>▪ Seek quotes for outsourced items.</li> <li>▪ Prepare detailed budget.</li> <li>▪ Identify which items can be omitted.</li> </ul>
<p><b>Activity causes major injury to members of the public</b></p>	<ul style="list-style-type: none"> <li>▪ Ensure activities in the public domain comply with work health and safety legislation.</li> <li>▪ Take out public liability insurance.</li> <li>▪ Have damage control/media control in place to maintain the organisation's reputation.</li> </ul>

### Who should be consulted?

Making a decision on what control measures to use is another step that should not be taken in isolation. Consult with your team, other colleagues, specialists, stakeholders and any other person or group involved. Using other people's ideas, suggestions, expertise and experience allows for effective and informed decision-making, based on knowledge and understanding.

Consulting others also empowers them and encourages continuing support from others in your organisation. Record all the ideas and suggestions they offer and consider them carefully before making a decision.

## Practice Task 8

### Question 1

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Which of the following need to be considered when looking at the strengths and weaknesses of particular control measure options? Tick all that apply.

- How cost-effective it is.
- Balancing how much it will cost to use an option against what can be gained from it.
- Whether pursuing an option may not be worth the cost involved.
- Make sure safety comes last.
- The legal implications of any chosen option.

### Question 2

---

Which of the following statements are correct? Select yes or no for each one.

- |   |       |      |
|---|-------|------|
| a) Strengths and weaknesses of measures vary according to the risk situation.   | » Yes | » No |
| b) Control measures should be prioritised by implementing those you can afford first.   | » Yes | » No |
| c) Always apply new controls, even if the risk context is similar to past risks experienced by the organisation.  | » Yes | » No |
| d) Cost-benefit analyses should always be conducted for measures involving cost outlays.  | » Yes | » No |
| e) A combination of control measures should be applied depending on the costs, benefits, effectiveness, social and legal implications and sustainability of controls. | » Yes | » No |

## 3C Refer risks to relevant personnel according to policies and procedures

Within your organisation, you will have access to numerous people who have their own areas of expertise. This could be their understanding of workplace health and safety, the business environment or insurance and finances.

In cases where the risk relates to the whole organisation or is outside your area of expertise or responsibility, you will need to refer it to other personnel. This will depend on the policies and procedures of your organisation. Make sure you understand who you should be dealing with, their level of responsibility and how they support your responsibilities. Prepare a timeline for consultation and completion of the risk control process.

It is important to look internally at the knowledge that already exists in your organisation.

Useful and important knowledge can be found by:

- talking with employees about their experiences and skills
- accessing files of documents (electronic, print versions or both).

The challenge is knowing who to speak to or where to find the information you are after.

<b>Employees</b>	<p>Within your organisation there will be individuals who have skills and experience that you can use as an asset. Many staff will have worked in risk management and/or managed risks in different areas of an organisation or in different positions, i.e. overseeing risk management processes as opposed to being a frontline worker.</p> <p>Ensure you can identify and access employees' knowledge and skills by holding brainstorming sessions, offering training courses and completing documentation.</p>
<b>Documentation</b>	<p>As discussed previously, risk management records can hold a wealth of information regarding processes and controls used in the past. This can be invaluable when tackling new risks in time-sensitive situations.</p>
<b>Policies and procedures</b>	<p>Modern organisations tend to have an open door policy which means employees can approach managers or senior staff members at any given moment (unless office doors are closed). In this situation seeking in-house expertise is a straightforward interaction.</p> <p>However, not every organisation follows this trend. In structured organisations, there will be reporting requirements and a hierarchy in place. When referring to organisational staff outside your team or department, advice or permission might need to be gained from your direct manager first. Meetings might need to be made through calendar invitations and notes taken during discussions.</p>

## Seeking external experts

As previously discussed, your first source for assistance or advice should be with your organisation's staff.

In situations when workplace employees cannot help you, for example, if no one has the knowledge to help or the issues are highly sensitive, you may need to seek outside expertise. To do this, you need to use a process that includes:

- discussing this decision with authorised personnel, e.g. senior managers
- being clear about who the expert is, and all costs associated with accessing this assistance
- seeking quotes from several suppliers if costs are over a certain amount (as per company policy)
- meeting budgeting constraints or getting approval if outside of budget.

Sometimes you may want to test advice given to you in-house by seeking outside expertise. Companies using best practice should allow for this and have a clear process on gaining approval for such practices.

Consultants or firms being sought for advice should be thoroughly checked to ensure that information provided meets legal requirements, regulations and standards.

### Questions to consider when seeking an outside expert:

- Which other organisations have the experts worked with?
- Are they happy to provide you with references or contact details of people they have worked with previously?
- What do the referees have to say about the expert?
- Are the experts respected by their peers?
- How much do they know/understand about your organisation?
- How much do they know/understand about your business environment?
- Do they provide you with clear fees/fee structure for the work?

## Example

### Refer a risk to another party

This example illustrates a range of situations that require referral of the risk to another party.

Risk	Treatment option	Refer to	Reason
Member of the public may sue	Take out public liability insurance to protect the organisation against damages	An insurance company	To arrange insurance
Activity is too costly for the organisation to undertake alone	Share the risk by forming a partnership or alliance	Consortium partners	To assist in carrying out the activity
Falling sales	Develop new/improved product	Management/business development	To develop a new/improved product
Office break-in	Increase security	Business administration department	To arrange more effective security measures
Lack of expertise and experience to complete activity	Recruit appropriate staff	Human resource department/recruitment firm	To recruit people with appropriate skills
Lack of skills to complete activity	Ensure staff have appropriate skills	External trainers	To provide training to staff

## Practice Task 9

### Question 1

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Which of the following people should the risk of failing to meet a deadline be referred to? Tick all that apply.

- Team leader
- Accountant
- CEO
- Project manager
- Supplier

### Question 2

---

Draw a line to match each identified risk to the most appropriate person who the risk should be referred to.

- |  |                                   |
|--|-----------------------------------|
| » Some staff are showing a lack of skills to complete work tasks | » An insurance company            |
| » Member of the public may threaten legal action                 | » Manager of business development |
| » Sales are falling well below sales targets                     | » Human resource department       |

### Question 3

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Which of the following are reasons for referring identified risks to other personnel? Tick all that apply.

- Must be done in every instance
- Is always recommended by the ERM guidelines
- Guarantees that risk is going to be effectively managed
- Prevents your organisation from being sued
- Depends on the policies and procedures of your organisation

## 3D Select and implement control measures

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Be flexible and keep in mind the alternatives available to you if your first choice proves unsustainable. Seek advice from colleagues who have experienced a similar situation.

You have already looked at a range of control measures and selected those that need to be referred to other people to manage. Your next step is to choose the most appropriate control measures for the risks you are responsible for.

The types of control measures you might select include:

- arranging training or professional development
- conducting further research; for example, investigating alternative options, researching competitors, obtaining customer feedback
- reviewing or creating new policies, procedures or processes
- organising marketing activities
- arranging to sell assets
- reorganising rosters
- changing suppliers, contractors or consultants.

### Implementing control measures

Base your selection on the resources you have, the time it will take to implement the control measure and the cost of its implementation. These criteria will all influence your decision. For example, a three-month-long activity will not allow a lot of time to be spent on research as a control measure. Similarly, if the training you require is too expensive you will need to seek cheaper training or see whether there are other staff with the skills you need.

Once you are confident that the control measures you have selected are appropriate and cost-effective, draw up a plan to show how you are going to implement and manage them. These plans are often referred to as risk treatment plans.

## Preparing and implementing risk treatment plans

A risk treatment plan guides you in implementing the treatment options you have selected. It is a clearly articulated and documented plan of action that details:

- the activity
- the risk
- the preferred treatment
- the budget
- the resources required
- how the plan will be implemented
- the expected outcomes
- the personnel responsible for controlling the risk
- the timeline for implementing the risk control strategy
- how the risk and the risk treatment will be controlled and monitored.

### Risk treatment plan

By recording your plans in a systematic way you can avoid losing track of your objectives. Everyone involved in the risk control plan can see what their responsibilities are and how the activity will be implemented. You are clear about the budget assigned to the activity and exactly what resources you need. Make sure your timeline is realistic and achievable.

Your organisation may already have a risk treatment template it uses. If it does not, develop your own treatment plan to suit the nature of the activity. You might use a spreadsheet format, or another software application that allows you to record multiple risks. You might use a separate sheet for each risk.

Follow the plan carefully as you implement the treatment. While the plan is a valuable support tool do not be afraid to change it if you discover that a treatment is not working.

#### Example

##### Risk treatment plans

Here are two examples of risk treatment plans. The first example has been completed for an activity in a small to medium-sized business. The second example is more typical of a larger organisation.

Risk treatment plan	
Prepared by: Teo W.	Date: 1 May
Activity: Prepare marketing brochure for distribution to 10,000 customers.	
Risks	<ul style="list-style-type: none"> <li>▪ Suppliers may not deliver on time.</li> <li>▪ Team member may be absent for an extended period.</li> <li>▪ Budget may be cut or cancelled.</li> <li>▪ Technology malfunctions.</li> <li>▪ Quality assurance suffers.</li> <li>▪ Requirements of target audience not met.</li> <li>▪ Work goes over deadline.</li> </ul>
Treatment	<p><b>Suppliers</b> Give suppliers ample warning and firm deadlines. Require written notification that they will deliver on time. Two days ahead of deadline ask for a progress check.</p> <p><b>Team members</b> Ensure a backup person is appropriately skilled to take over the tasks. Decide to alter timelines if possible.</p> <p><b>Budget</b> Reprioritise other projects or cancel the project (depends on the timing of any budget crisis).</p> <p><b>Technology</b> Have alternative suppliers for emergencies. Have backup copies of all documents.</p> <p><b>Quality assurance</b> Have a checklist of things to be done before printing is approved; for example, layout, content, edit, proof. Make sure job requirements for a quote are specified clearly, confirmed and approved.</p> <p><b>Target audience</b> Conduct market research. Make sure the design brief for the brochure is clear on identifying the audience. Show the draft to a sample audience for feedback.</p> <p><b>Deadline</b> Have a work plan with timelines, responsibilities and actions for monitoring throughout the project.</p>

Risk treatment plan	
<b>Outcome</b>	Quality brochure developed on time, within budget and meets customer needs and the organisation's requirements.
<b>Budget</b>	Designer: \$350 Desk-topper: \$30 per hr x 15 hours = \$450 Photographer: \$200 Copywriter (in-house) Editor/proof-reader (in-house) Production: \$1.50 per brochure x 10,000 brochures = \$15,000
<b>Resources</b>	Access to technology
<b>Implementation strategies</b>	Prepare project brief. Develop contracts and briefs for suppliers. Prepare project plan. Ensure team knows roles and responsibilities.
<b>Personnel</b>	Jayne (copywriter). Ari (editor).
<b>Timeline</b>	Two-month project: 8 May – 7 July.
<b>Review</b>	Progress checks. Team meetings. Supplier reports.

## Practice Task 10

### Question 1

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Which of the following factors influence the implementation of control measures? Tick all that apply.

- The resources you have, the time it will take to implement the control measure, and the cost of its implementation.
- The risk not being sufficiently identified.
- The likelihood of legal action flowing from the risk remaining unmanaged.
- Whether the risk management guidelines of the International Standards Organisation are breached.
- Whether you have been properly trained as a manager.

### Question 2

---

Which of the following control measures would you implement to counteract the risk of promotional material not being finished in time for a new product launch? Tick all that apply.

- Allow for sufficient lead time in project timeline for supplier to deliver.
- Hire an external trainer.
- Schedule a stocktake.
- Allow for sufficient time in project plan to use an alternative supplier.
- Prepare a contingency plan to deal with the consequences of a delay in the launch.

### Question 3

---

Which of the following statements are correct? Select yes or no for each one.

- |  |       |      |
|--|-------|------|
| a) Every organisation will have a risk treatment template that can be used by staff.   | » Yes | » No |
| b) If you have to create a risk treatment template, you might use a spreadsheet format, or another software application instead. | » Yes | » No |
| c) Once risk treatment plans are created, they should be implemented rigidly going forward to avoid future risk.                 | » Yes | » No |
| d) Risk treatment plans should detail the responsibilities of everyone involved in managing workplace risks.                     | » Yes | » No |

### Summary

- Risk treatment involves identifying the range of measures that can be used to control risk, assessing each option for its strengths and weaknesses and preparing a plan outlining how the risk is going to be treated and who will be responsible for each task.
- There are a range of risk control options available depending on whether the risk has been assessed as having positive or negative outcomes. These include actively seeking the opportunity, changing the likelihood or consequence of the opportunity, sharing the opportunity, avoiding the risk or retaining the risk.
- Choosing which control measure to implement from the range you have identified depends on the estimated costs, benefits, effectiveness, social and legal implications and sustainability of each measure.
- A risk treatment plan must be developed to implement the treatment options you have selected.
- A risk treatment plan should outline the activity, risk, preferred treatment, budget, resources required, implementation, expected outcomes, personnel responsible, timeline and monitoring and control systems.
- There will be occasions where particular risks may be outside your area of responsibility and you will need to refer them to an appropriate person or department within the organisation.
- Risks must be continuously monitored while you are treating them, and the treatment should be adjusted accordingly when changes occur.

## Learning Checkpoint 3

### Treat risks

#### Part A

1. Which of the following control measures would be effective in managing the risk of a member of the public being injured during an outdoor marketing event? Tick all that apply.

- Provide customer service training to all staff.
- Ensure activities in the public domain comply with work health and safety legislation.
- Take out public liability insurance.
- Have damage control/media control in place to maintain the organisation's reputation.
- Prepare a detailed budget.

2. List two ways you can assess the strengths and weaknesses of control measures.

3. Which of the following apply to reporting or referring risks outside your area of expertise and responsibility? Tick all that apply.

- Risks that can potentially harm others.
- Risks identified are low impact and low probability.
- The risk relates to the whole organisation.
- Organisational policies and procedures require reporting of all potential injuries, incidents and near misses.
- Understand who you should be dealing with, their level of responsibility, and how they support your responsibilities.

## Part B

Read the case study and answer the questions that follow.

### Case Study

The communications manager for a city parks department was responsible for coordinating the 100th anniversary of the city parks system. The activity chosen was an outdoor commemoration celebration, the highlight of which was 100 schoolchildren planting 100 trees and shrubs. The aim was to draw attention to the anniversary, present the Parks Department as progressive and forward-thinking and cement relations with the city administration.

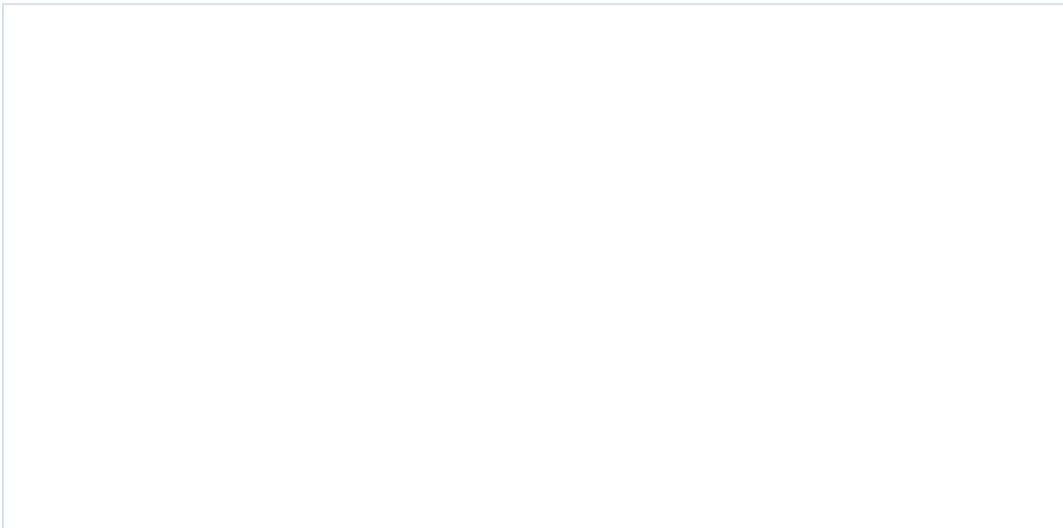
In this table, the manager has documented how they identified and analysed the potential risks.

Item	Potential risk	Treatment
<b>Weather</b>	We checked with the weather bureau and, although they predicted a fine day, we knew it could rain or worse, could be very windy.	We had a marquee set up in case of rain and wind. As it turned out, it was very hot so it was a good move in terms of shade, though we were really only thinking about rain.
<b>Children</b>	It's always a risk to use children. They might not turn up because of illness. The school principal might cancel at the last minute. There were insurance concerns, the logistics of transport, we had to get permission from the parents for their children to participate, and of course their behaviour on the day could cause problems. However, they were a key element and I deemed them essential.	I asked 10 staff members and arranged for their children to be available at short notice to back up as part of the 100 children in case anything happened and we were stuck with no children, who were essential to the event.
<b>Catering</b>	I delegated this task. The risks were if the caterers didn't turn up because they had the wrong date, or if the food was poor quality or there was not enough for the number of people attending.	I made sure they had a contingency plan and checked regularly with them.
<b>Media</b>	This was a crucial aspect because it fitted in with the objective to draw attention to the anniversary and the Parks Department. We hoped for and expected the media to attend.	I had a backup in case not all the media showed up. I organised for a video company to film the event so we had a record of it and could make it available to the television stations if they wanted it.

1. What role did the video play as a risk control measure?

A large, empty rectangular box with a thin blue border, intended for the student to write their answer to question 1.

2. What was the control measure implemented to address the risk associated with catering at the event?

A large, empty rectangular box with a thin blue border, intended for the student to write their answer to question 2.



## Topic 4 | Monitor and review the effectiveness of the risk treatment

- 4A Review implemented risk treatments
- 4B Use review results to improve the treatment of risks
- 4C Monitor and review management of risk

## 4A Review implemented risk treatments

Implementing a set of control measures does not guarantee that the risk has been successfully treated. The control option selected may have been flawed; there may have been changes in the political, legal or social environment or internal changes may have occurred to lessen the impact of the risk.

During the course of an activity, your risk treatment options should be regularly monitored and reviewed. You need to ensure control measures are effectively reducing or managing the identified risks or are increasing the identified opportunities. Circumstances can change quickly and render the treatment you have chosen ineffective. Therefore, you might need to revise an inappropriate option; other risks can arise that need to be treated or risk treatment priorities might change.

Reviewing the changing environment and the progress that has been made in treating risks is an essential part of a risk management strategy. In the monitor and review process you need to include everyone involved in the activity. Team members and stakeholders will be able to report their findings from a perspective that may be very different to yours.

### Some key questions to ask yourself and others

- Are the risk treatments effective in minimising the risks?
- Are the risk treatments cost-effective and time-efficient in minimising the risks?
- Do the performance outcomes address the key elements for risk treatment?
- Are the assumptions made about the organisation's environment, technology and resources still valid?
- Are the management and financial control measures adequate?
- Do the risk treatments comply with legal requirements and government policies such as accountability, ethics, access and equity?
- How can improvements be made?

### Review methods

You can review risk treatments that have been implemented by observing and carrying out physical inspections; conducting an internal audit, or arranging for one to be carried out by a third party and by reviewing policies, strategies and documentation on a regular basis.

You can also use a set of established criteria to provide a concrete measure of success against which you can judge the effectiveness of the treatments. Criteria help you compare the actual performance with the desired outcome.

Criteria include:

- costs
- reduction in impact
- reduction in likelihood
- reduction in occurrence.

For a thorough, consistent review, you need to go back to your risk identification plan, your risk analysis, the list of risks, and the risk treatment plan. You should also document your review.

### Is the treatment cost-effective?

You need to decide whether the benefits generated from your risk treatments are satisfactory in view of the costs involved. Consider the following examples.

#### Examples of evaluating if the risk treatment is cost-effective

The avoidance of a risk caused the organisation to actually lose money because it decided not to pursue an opportunity that has subsequently proven successful.

Further research conducted to reduce the likelihood of a risk was cost-effective because the team joined forces with another department that needed similar information and therefore offset the costs.

The training specified to help staff learn new skills was more expensive than originally thought and was carried out too late to have any real benefit for the activity.

Improved contracts have saved the organisation money because late suppliers now risk penalties due to an added clause in their contracts.

Quality control mechanisms were costly to implement but resulted in improved products and subsequently increased sales and profits.

### Has the impact been reduced?

Look at the risk you identified, then look at each of the options you selected for reducing the risk. How effective have they been in reducing its impact? If the impact has been reduced significantly, you can be confident that the option you selected was an appropriate choice. On the other hand, if the risk has increased or remained the same you will need to identify why the treatment is not working and what alternatives are available.

Consider the following scenarios and the issues arising from them.

<b>Contingency planning</b>	<ul style="list-style-type: none"> <li>▪ A contingency plan was prepared in case an outdoor activity had to be moved indoors because of poor weather. The day of the activity was stormy so the activity was moved to the pre-arranged location.</li> <li>▪ Has the contingency plan reduced the impact of the risk? Were the arrangements handled well to ensure the activity was successful? If the contingency plan didn't work, why not? Was there too little publicity about the alternative location? Should the activity not have been conducted during winter?</li> </ul>
<b>Marketing campaign</b>	<ul style="list-style-type: none"> <li>▪ A product awareness campaign was instigated to combat the negative impact of a competitor's intensive marketing campaign.</li> <li>▪ Has the product awareness campaign improved public awareness of the organisation's products and services, reducing the impact of the competitor? If not, was the campaign long enough? Were enough resources assigned to it? Do products and services need to be improved before the impact can be reduced?</li> </ul>
<b>Feedback</b>	<ul style="list-style-type: none"> <li>▪ Although administration processes were in place, customers complained that the processing and preparation of invoices was taking too long.</li> <li>▪ Has the recruitment of staff helped reduce the negative impact of the feedback? If not, is the system itself to blame? Could a better system be run with fewer staff?</li> </ul>
<b>Training</b>	<ul style="list-style-type: none"> <li>▪ Staff were trained as backups to relieve absences.</li> <li>▪ When absences occurred, how did the backup plan work to reduce the impact of the absences? Did the training prove successful in that absences were successfully covered? If not, was the training inadequate? Perhaps more people were away than planned for? Perhaps not enough people were trained?</li> </ul>

## Has the likelihood reduced?

Look at the processes that were put in place to ensure the identified risks were not likely to happen. Have they been effective? Have other risks arisen that were unforeseen or were some risks seen as insignificant and not planned for?

If the risk happens despite the precautions you put in place you need to check where the failure occurred. You should find answers to questions such as, were the measures too superficial? Did unforeseen circumstances occur that rendered the risk reduction measures inadequate? Were new risks introduced that were not covered by the measures?

**Consider the following examples of risk treatments:**

- A list of risks and a risk treatment plan were prepared.
- Comprehensive contracts were drawn up.
- Supplies were ordered well in advance.
- Staff were trained to the standard required.
- Security measures were put in place.
- Quality assurance policies and procedures were reviewed and updated before the commencement of the activity.
- A comprehensive project management plan was developed with the help of everyone involved.
- Timelines were approved only after consultation, drawing on previous experience and ensuring they were realistic and fair.

### Is the risk occurring less often?

Another measure of effectiveness is if the risk occurs less often. Consider the following examples.

<b>Contractor performance</b>	If contractors were not performing to the required standard or were delivering past the deadline and improved contracts were put in place; the risk of dealing with poor contractors should have disappeared or at least been substantially reduced.
<b>New equipment</b>	Purchasing new equipment or improving the quality and frequency of equipment servicing can result in fewer breakdowns.
<b>Increased security</b>	Increasing security measures can result in fewer break-ins over an extended period.
<b>Research and management</b>	Conducting wider research and managing finances more efficiently can mean that an organisation is more successful in forming partnerships so that the risk of forming inappropriate partnerships is reduced.
<b>Recruitment policies</b>	More comprehensive recruitment policies can result in more appropriate staffing appointments so that the risk of having untrained staff is minimised.

## Document the review

It is useful to construct a risk treatment review table. You can list all the risks on one table or use a separate table for each risk, as in the following example.

Risk treatment review	
Risk: Technology breakdown	
<b>Risk treatment:</b> <ul style="list-style-type: none"> <li>• Purchase high-quality equipment and consumables.</li> <li>• Ensure equipment is regularly serviced.</li> <li>• Train staff to ensure equipment is used in accordance with the manufacturer's instructions.</li> </ul>	
Measures of success	Review
Cost-effectiveness	<ul style="list-style-type: none"> <li>• Servicing regularly has reduced the frequency of breakdowns.</li> <li>• Investing in high-quality equipment has proven to be beneficial as breakdowns are now rare.</li> <li>• Spending money on training was worthwhile because the machines are used more efficiently.</li> <li>• Purchasing high-quality paper has reduced the incidence of breakdowns.</li> </ul>
Reduction in impact	<ul style="list-style-type: none"> <li>• Downtime caused by inefficient equipment has been greatly reduced.</li> <li>• Staff are confident that the equipment is efficient and will not break down.</li> </ul>
Reduction in likelihood	<ul style="list-style-type: none"> <li>• Policies and procedures have been amended in regard to purchasing and servicing.</li> <li>• Staff have been trained in the correct use of the equipment.</li> </ul>
Reduction in occurrence	<ul style="list-style-type: none"> <li>• By purchasing new equipment the frequency of breakdowns is now almost zero.</li> <li>• Skilled staff have contributed to fewer incidents of malfunction.</li> </ul>

## Example

### Review implemented treatments

After many planning and consultation sessions, Diego, a floor manager at Ziggy Technoton, implemented the following treatments to mitigate identified WHS risks:

Risk	Preferred treatment option
Team members do not have sufficient skills to operate new POS system	<ul style="list-style-type: none"> <li>▪ Arrange training.</li> </ul>
Injury to pedestrians on warehouse floor	<ul style="list-style-type: none"> <li>▪ Ensure hi-vis clothing policy is followed at all times.</li> <li>▪ Draw lines for walkways.</li> <li>▪ Provide floor staff and machinery operators with training.</li> <li>▪ Install signs to direct traffic flow and enforce speed limits.</li> </ul>
Lifting machinery is faulty	<ul style="list-style-type: none"> <li>▪ Tag out faulty equipment.</li> <li>▪ Inform team members of faulty equipment.</li> <li>▪ Conduct maintenance and servicing with authorised representative.</li> <li>▪ If required, seek quotes for replacement items.</li> </ul>

It has now been two months since the treatments were implemented and Diego is pleased with progress. His review details his findings.

#### Risk treatment review

**Risk:** Injury to pedestrians on warehouse floor.

**Risk treatment:**

- Ensure hi-vis clothing policy is followed at all times.
- Draw lines for walkways.
- Provide floor staff and machinery operators with training in traffic flow
- Install signs to direct traffic flow and enforce speed limits.

Risk treatment review	
Measures of success	Review
Cost-effectiveness	<ul style="list-style-type: none"> <li>Staff have been more productive as they are able to travel safely through the warehouse to complete assigned tasks.</li> <li>Decreased levels of absenteeism due to injury or stress.</li> <li>Decreased spending on contracting replacement staff.</li> </ul>
Reduction in impact	<ul style="list-style-type: none"> <li>Downtime caused by near misses and injuries has been greatly reduced.</li> <li>Staff are confident that they can safely carry out their work.</li> </ul>
Reduction in likelihood	<ul style="list-style-type: none"> <li>Policies and procedures have been amended in regard to hi-vis clothing.</li> <li>Staff have been trained in floor markings and the correct traffic flow directions for the warehouse floor.</li> </ul>
Reduction in occurrence	<ul style="list-style-type: none"> <li>By marking the floors for foot traffic, the frequency of injuries and near misses is now almost zero.</li> <li>Machinery operators have contributed to fewer near misses and injuries.</li> </ul>

## Practice Task 11

### Question 1

Which of the following measures of success can be used to review the effectiveness of implemented risk treatments? Tick all that apply.

- Costs
- Increase in training
- Reduction in impact
- Reduction in likelihood
- Reduction in occurrence

## Question 2

---

Draw a line to match each of the following examples to the correct measure of success.

- |  |                           |
|--|---------------------------|
| » Downtime caused by inefficient computer systems has been greatly reduced.                      | » Cost-effectiveness      |
| » On the job training has reduced near misses by 85%.  | » Cost-effectiveness      |
| » Upgrades in computing systems has increased staff productivity.                                | » Reduction in impact     |
| » Staff are confident that they can complete their work on time without data loss or corruption. | » Reduction in impact     |
| » Decrease in personal and sick leave by 2 days.   | » Reduction in occurrence |
| » Regular servicing has reduced the frequency of breakdowns.                                     | » Reduction in occurrence |

## 4B Use review results to improve the treatment of risks

Your review of the risk treatments should have identified where improvements need to be made. Using these results, you need to identify what these improvements entail and how you can implement them.

You may find that some problems, while significant to your activity and area of responsibility, also have wider implications for the organisation. For example, incomplete operational procedures in your team make work tasks difficult there. This can also mean that others in the organisation are unaware of what is required to help your team complete tasks competently.

If a risk is not responding to a treatment you might need to make improvements immediately so that the outcome of the activity is not compromised. Other improvements may be long-term measures relating to organisational policies and procedures and should be put in place over an extended period of time.

Risk management documents must be active. This means regularly updating the risk inventory and the risk treatment plan to record any new risks that have developed and any treatments that need to be adjusted or changed. Record the actions taken and the reasoning for taking the actions.

Keep in mind that any improvements you suggest must be within the allocated budget and comply with organisational, political and legal requirements.

### Improvements may include:

- making contracts more specific (if results showed that contractors were costing too much money in relation to the standard of their work)
- taking on new suppliers (if the existing suppliers were not performing well)
- increasing security for the building (if the value of the office contents had recently increased)
- building better storage facilities (if chemical spills were still occurring despite stricter controls)
- purchasing vehicles with more safety features (if there had been an increase in accidents involving staff)
- using an accountant to prepare the budget or conduct a cost-benefit analysis (if the budget was consistently being blown out despite control measures)
- improving the quality of training (if the training was not proving adequate to staff needs)
- preparing a more detailed list of risks and a treatment plan (if some risks were being overlooked)
- consulting more widely on difficult issues.

## Provide assistance with risk treatment audits

Third party audits provide an objective perspective to both risk management and quality assurance processes. Although some people conduct audits independently, ideally audits should be part of the risk management process. Everyone involved should be aware of when the audit is happening, why it is taking place, what it involves and what will happen as a result.

### The focus of an audit

A risk treatment audit can focus on specific aspects such as whether standards are being followed or legislation is being complied with. It can also concentrate on the treatments being implemented.

Because audits can be time-consuming and resource-heavy, they might highlight only the most relevant aspects such as the level of risk, the effectiveness of a particular treatment or the organisational environment.

An audit will generally identify any weaknesses in the processes that are being used to treat the risk. You may find that people have forgotten to continue the risk treatment after the initial control measure was put in place. Perhaps changes have caused the level of risk to increase but the treatment has remained the same. An audit sometimes helps motivate people to resume focus whereas a continuous monitoring approach requires ongoing treatment of risks.

Questions asked in an audit vary depending on the scope of the activity, the time available to conduct the audit and the resources available.

#### Examples of questions that can be used in an audit:

- Has the organisational context or environment changed since the activity began?
- How do the treatments comply with legislative requirements?
- What organisational procedures are you following to treat this risk?
- How effective do you think the treatment has been?
- How are you measuring the success or otherwise of the treatment?
- Have you had to change your treatment because of a change in the risk level?

## Example

### Use review results to improve risk treatments

It has now been three months since Diego reviewed the effectiveness of implemented risk treatment options. In this time, there has been a massive change to the organisational context; XYZ Logistics now freights industrial cleaning chemicals. These substances, due to their hazardous nature, can only be transported within the warehouse in high visibility, low traffic areas. This has resulted in new line markings being drawn on the warehouse floor and previous walkways and access routes being blocked off.

This change now requires a review of risk treatment options as many are no longer valid. Diego proposes the following risk treatments in addition to, or in place of, existing treatments:

- Provide floor staff and machinery/plant operators with training in warehouse layout, traffic flow, and foot traffic 'no-go' zones.
- Provide floor staff and machinery/plant operators with training in handling dangerous goods and emergency procedures.
- Set up first aid stations (hand and eye wash) in high traffic areas.
- Install warning and restricted access signs at key points.

## Practice Task 12

### Question 1

Which of the following questions could you use to review risk treatments? Tick all that apply.

- How do the treatments comply with legislative requirements?
- What organisational procedures are you following to treat this risk?
- How effective do you think the treatment has been?
- Has the review been audited recently?
- Have you had to change your treatment because of a change in the risk level?

## Question 2

---

Draw a line to match each treatment to the review result that prompted it.

- |  |   |
|--|---|
| » Increasing security for the building                       | » Increased delays in receiving products from suppliers |
| » Improving the quality of training                          | » Increase in office assets and their value             |
| » Creating a purchasing policy and authorised account holder | » Training was not meeting staff needs                  |
| » Taking on new suppliers                                    | » Duplicate resources being ordered                     |

# 4C Monitor and review management of risks

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The risk management process is never completed. This is because new risks will arise and existing risks will no longer exist. As a manager or leader, you need to keep on top of it.

You need to understand risk management as an organisation-wide process as well as retaining control of the process in your own area. If you have delegated some of the risk management to another team member you need assurance that it is being handled effectively. Managing the process requires time, diligence and cooperation with all those involved.

Although this is the final step in risk management, it is one that will be ongoing and periodic. You should have a process in place to monitor (continually assess risk treatments that have been implemented) and review (periodically assess the effectiveness of risk treatments and the environment you operate in) the risk management process.

Some treatments in your organisation can be monitored continuously such as checking the quality of products, measuring the amount of energy used and noting the frequency of paper being purchased. Other treatments can be reviewed when needed, such as reviewing the performance of a staff member after training.

There are numerous ways to ensure your risk management process is being effectively monitored and reviewed.

## Set timeframes and deadlines

To ensure risks and treatment options are managed and reviewed, timeframes and deadlines must be set. Prioritise the most urgent (high impact/high occurrence) risks to ensure they are monitored and reviewed frequently.

In your risk register or inventory, record when risk treatments need to be checked and mark them as complete once they've been completed.

You will also need to set a date or timeframe for when that risk area should be reviewed again.

The timeframes and frequency of your review will depend on the risk (and treatment options) in question. For example, alarm systems may only need to be checked quarterly but the condition of plant may need to be inspected before and after each shift.

## Monitor and review strategies

The strategies you decide to use to monitor and review risk management in your area will be influenced by your organisational structure, environment, workflow, daily operations and your position and responsibilities within the organisation.

Useful strategies to consider include:

- concentrating on one area at a time
- conducting small reviews periodically
- requiring reports from colleagues
- arranging for a third-party audit.

### Other strategies to consider

- As a guide, consider the following strategies.
- Give priority to high-level risks.
- Find out why risk treatments that should have worked failed to work.
- Prepare a checklist to help you monitor risks efficiently.
- Seek out people or equipment that will help you process information quickly and accurately.
- Ensure you consult with everyone involved.
- Plan how you will incorporate improvements into your risk management strategy.
- Plan how you will inform others of your findings so your information is integrated with the organisation's risk management strategy.

## Keep documentation

Managing risk requires documentation and record keeping; not only to ensure compliance and adherence to legislative and regulatory requirements, but also to prove you were justified in the actions you took to manage and treat risks in your area.

Records to keep include:

- meeting minutes detailing important decisions and the reasons they were made
- file notes or emails to record important conversations had in person, on the phone or through email
- staff training records documenting formal training, coaching or mentoring undertaken by staff
- incident records and forms completed as a result of a near miss, injury or incident.

Your records should also include reports on the effectiveness of the risk management process itself. To provide a comprehensive report, you need to determine whether:

- the original risk identification and analysis were accurate
- the suggested risk treatments were appropriate and, if not, where improvements could be made
- the strategies in place were realistic in terms of time, money and resources
- the risk treatments were successful and operated as intended
- any new risks have emerged that were not included on the risk inventory
- those responsible for treating risks in their area of responsibility are regularly monitoring and reviewing their progress
- anyone is experiencing any problems with either the activity or the risk treatment
- there is a process in place for making sure risk treatments are not repeated if they have failed
- there is a process in place for ensuring successful treatments are publicised and incorporated into the organisation's risk management strategy.

## Seek feedback

As part of your monitoring and review of risk management processes you should seek feedback from your team members on whether the risk treatment options are working.

In most cases, workers on the 'frontline' will be best able to see what treatment options work and which don't. They may also be the first to notice changes in the risks themselves; if new risks arise or identified risks disappear or change.

Feedback can be collected through formal channels such as feedback forms (available on shared servers or the intranet) or informally, for example during routine team meetings.

## Example

### Monitor and review risk management

Diego wants to make sure that risk is being managed in his personal area of operation, the warehouse floor. He sets up the following plan to keep track of all risk monitoring processes.

Identified risks	Risk monitoring and review		
Risk	Method	Progress	Deadline
Injury to workers from incorrect handling of chemical substances	Weekly review of all incidences – near misses, injury and accidents	Incident forms under review	7 <sup>th</sup> , 14 <sup>th</sup> , 21 <sup>st</sup> , 28 <sup>th</sup>
Failure to meet compliance obligations (handling of chemicals)	Monthly review at management meeting	Partial compliance review completed Research delayed on potential tracking system	Last Friday of every month
Accidents involving plant and warehouse pedestrians	Weekly review of all incidences – near misses, injury and accidents	Incident forms under review	7 <sup>th</sup> , 14 <sup>th</sup> , 21 <sup>st</sup> , 28 <sup>th</sup>
Staff absenteeism due to injury	Fortnightly review of rosters	Staff attendance tracking under review	14 <sup>th</sup> , 28 <sup>th</sup>
Injury to workers from incorrect transport of chemical substances	Weekly review of all incidences – near misses, injury and accidents	Incident forms under review	7 <sup>th</sup> , 14 <sup>th</sup> , 21 <sup>st</sup> , 28 <sup>th</sup>

## Practice Task 13

### Question 1

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Which of the following are effective strategies to monitor and review risk management? Tick all that apply.

- Conduct an in-depth review annually.
- Concentrate on one area at a time.
- Conduct small reviews periodically.
- Prioritise high-level risks.
- Arrange a third-party audit.

### Question 2

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What three records should you keep as part of your monitoring and review process?

## Summary

- The risk management process is not static – you need to constantly review risk management planning documents and processes to track the progress of risk treatment plans that have been implemented.
- Monitoring and reviewing the implementation of risk treatment plans ensures that risk control measures are either maintained or improved, and that new risks will be detected and managed.
- Risk treatment plans need to be reviewed against identified measures of success or criteria that allow you to identify the effectiveness of a strategy and any gaps in the risk treatment process.
- Criteria for reviewing the effectiveness of risk treatment plans include costs, a reduction in the risk's impact, a reduction in the risk's likelihood of occurring, and a reduction in instances of the risk actually occurring.
- The review of risk treatment plans can be performed using observations, physical inspections, internal or external audits and reviews of organisational policies, strategies and documentation on a regular basis.
- The review of risk treatment plans will identify potential improvements to risk management practices and where and how these can be implemented within the organisation.
- You must ensure that people or teams auditing risk treatment plans in your area of the organisation are assisted and supported in obtaining all the information they require.

## Learning Checkpoint 4

### Monitor and review the effectiveness of the risk treatment

#### Part A

1. Draw a line to match each measure of success to the correct example.

- |                           |  |
|---------------------------|--|
| » Reduction in occurrence | » Quality control mechanisms were costly to implement but have resulted in improved products and subsequently increased sales and profits. |
| » Reduction in likelihood | » A social media marketing campaign was run to combat the negative impact of a competitor's new product launch.                            |
| » Cost-effective          | » Supplies were ordered well in advance.   |
| » Reduction in impact     | » Purchasing new equipment, or improving the quality and frequency of equipment servicing, can result in fewer breakdowns.                 |

2. Which of the following benefits apply to review audits? Tick all that apply.

- Use up surplus funds.
- Generally identify any weaknesses in the processes that are being used to treat the risk.
- Remove all risks for the whole chain of operation.
- Remind people to continue the risk treatment after the initial control measure was put in place.
- Identify that the level of risk may have increased but the treatment remained the same.

3. Which of the following statements are correct? Select yes or no for each one.
- |  |       |      |
|--|-------|------|
| a) The changing environment is irrelevant to risk treatment as part of an overall risk management strategy.  | » Yes | » No |
| b) The review of the risk treatment should have identified where improvements need to be made.   | » Yes | » No |
| c) If you delegated some of the risk management to another team member you need assurance that it is being handled effectively.  | » Yes | » No |
| d) The review of risk treatment plans can be performed using observations, physical inspections, internal or external audits, and reviewing organisational policies, strategies and documentation. | » Yes | » No |

## Part B

Read the case study and answer the questions that follow.

### Case Study

The business administrator of a book publishing company says during an audit interview:

'I use the priority ranking system that is recorded on the risk management plan and then see if the risk has reduced or, I hope this is never the case, increased. I will then make sure the plan is altered to reflect the changed conditions and level of risk. For example, before we purchased a new computer server, the risk of the system crashing was deemed to be moderate. I gave that a combined total of 6, resulting from multiplying the level of probability of the system crashing (2) with the level of impact if it crashed (3). Now we have a new server, I have looked at the risk and have downgraded it to a 2, resulting in the level of probability (1) and the level of impact (2).'

1. What actions does the business administrator undertake to monitor and review risk management in his area of operation?

2. What is the risk treatment that the administrator used to bring the priority risk ranking down?

