



WHS Risk Management Fundamentals Training





Welcome to this Course

- Expectations that the Council and University Executive have with respect to risk management, and to ensure management can demonstrate that risks in all parts of the University are being identified and managed in a way that is appropriate for the business environment and objectives
- It is a requirement that you complete this induction within 3 months of commencement with JCU
- Approximately 40 minutes to complete



Learning Objectives

To assist all staff and students to identify hazards in the workplace and assess risks to implement a safe and healthy environment at the workplace.

By the end of the course, participants would be expected to:

- Be aware of the legal requirements governing risk management
- State how risk assessments aligns with JCU HSMS
- Identify and apply the key stages of a risk management process
- Appreciate risk assessment as a tool in the overall scope of risk management
- Be aware of WHS duties
- Be able to carry out a risk assessment in the workplace



Introduction

Health Safety & Environment at JCU is governed by the WHS Act 2011 and the WHS Regulation 2011.

All members of the JCU community are responsible for their own and others safety.

Risk Management is a systematic approach to:

- i. Identifying and analysing workplace hazards
- ii. Assessing risks associated with those hazards
- iii. Identifying methods to control or reduce the risks



JCU Risk Management Policy

Outlines the expectations that the Council and University Executive have with respect to risk management, and to ensure management can demonstrate that risks in all parts of the University are being identified and managed in a way that is appropriate for the business environment and objectives.

[Risk Management Policy](#)

[JCU Risk Management Framework and Plan](#)

[HSE – PRO- 011 Work Health and Safety Risk Management Procedure](#)

[How to manage work health and safety risk Code of Practice 2011](#)

Duty Obligations and Responsibilities

- James Cook University
- Officer
- Worker
- Risk Owner
- Duty to Manage Risk





Risk Management

- Risk Management
 - the identification of work health and safety hazards, the assessment of risks posed by the hazards, the control of those risks either by eliminating the hazard entirely or by minimising the risk and the review of implemented control measures to maintain so far as is reasonably practicable, a work environment that is without risks to health and safety.
- Risk Assessment
 - A systematic process of evaluating the potential risks that may be involved in a projected activity or undertaking



Reasonably Practicable

WHS Act 2011, S.18

The requirement to consider all relevant matters when making any decisions concerning the health and safety of anyone in the workplace

Risk Concepts



Risk management also includes control and monitoring of risks, as well as communicating these risks



Purpose of a Risk Assessment

- Safety
- Legislative requirements
- Decision making
- Understanding
- Communication
- Prioritisation & Resource Allocation



When is a Risk Assessment

- New information about hazards, design etc
- After an incident (and/or a near miss)
- At regular or scheduled intervals
- When legislative obligations change
- Before work starts
- Design or system of work modification
- Change to equipment or plant or movement of plant
- Introduction of new systems, equipment, plant etc
- Environmental changes
- Risk assessment is mandatory for any high risk activity that is stipulated by the Act or its delegated legislation. This includes but is not limited to: entry into confined space
 - diving work
 - remote and isolated work
 - construction work
 - live electrical work



Required under JCU Procedures

- Biosafety risk assessment for biosafety applications
- Laboratory risk assessment
- Risk assessment of the use of hazardous chemicals, including schedule 11 carcinogens
- Risk assessment for chemicals of security concern
- Practical classes involving hazardous chemicals, animals, field trips, machinery, biosafety risks
- Risk assessment before writing a SWP
- First aid risk assessment,
- Confined space risk assessment
- Diving
- Research project risk assessment
- Field trip risk assessment
- High risk tasks identified

Risk v Hazard



$$\text{RISK} = \text{HAZARD} \times \text{EXPOSURE}$$

- Hazard
 - A situation or thing that has the potential to harm a person.
- Risk
 - The likelihood that harm will occur when exposed to a hazard and consequence of that harm (death, injury or illness).
- Risk Control
 - Taking action to eliminate health and safety risk so far as reasonably practicable

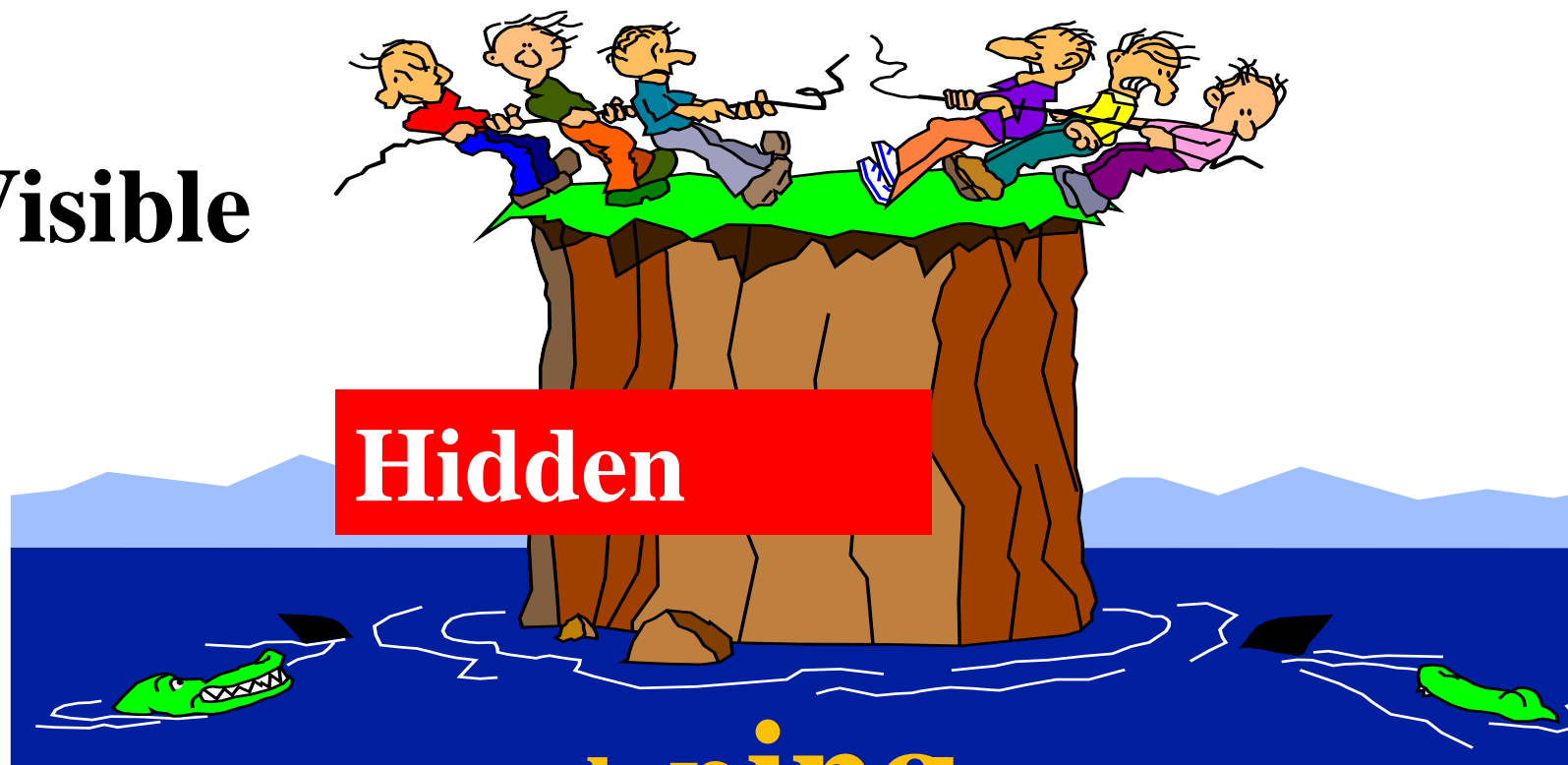


Why do hazards occur in the workplace?

- People factors
- Equipment & machines
- Substances
- Work systems
- Workplace environment
- Change

3 Types of Hazards

Visible



Hidden

Developing



Hazards
Manual Tasks
Gravity
Electricity
Machinery and Equipment
Hazardous Chemicals
Extreme temperatures
Noise
Radiation
Biological
Psychosocial



Identify hazards

- Before and during the conduct of work
 - Before changes to work practices & systems of work are introduced
 - Physical change to or introduction of new plant / equipment
 - Before hazardous substances are introduced into a place of work
 - When there is a failure of an item of plant or equipment
 - When environmental conditions change
-
- ***Hazard Identification is ongoing and should be part of what we do everyday...***



Common Methods of Hazard Identification

- Methods or processes which the University utilises to identify hazards in the workplace include:
 - hazard and incident reporting
 - workplace inspections
 - inspection and testing
 - design stage of products, buildings or process (including modification).
 - Consult your workers
 - Review available information



Hazards or Hazardous Task

- keyboard work for long periods without a break
- activities that involve lifting or carrying materials or equipment
- trip hazards like trailing cords, frayed carpet or boxes in walkways
- using a hazardous substance for cleaning or in a laboratory process
- noise generated by machinery or during loud events
- working with or close to machinery with moving parts
- driving long distances to or from fieldwork.
- solar heat and UV radiation when working outdoors
- working with micro-organisms that may cause infection
- Blocking of fire fighting equipment
- working with animals that could bite, kick, crush, or transmit disease
- dealing with clients or other people who are potentially violent
- working with sharp instruments, e.g. needles and blades



Risk Management

- All risk assessments must be recorded in RiskWare. RiskWare is the approved Risk Register of JCU.



[WHS Risk Register](#)

View and manage WHS Risk Assessments

Risk Management Process





Establish the Context

- Establishing the Context is essential to ensure an effective risk management process
- Establishing the context defines the scope for the risk management process and sets the criteria against which the risks will be assessed.



Communicate and Consult

- Communication and consultation is required to take place during all stages of the risk management process. A consultative approach can:
 - help establish the context appropriately
 - ensure that all hazards are adequately identified
 - bring different areas of expertise together for analysing risks, and
 - enhance appropriate change management during the risk management process.

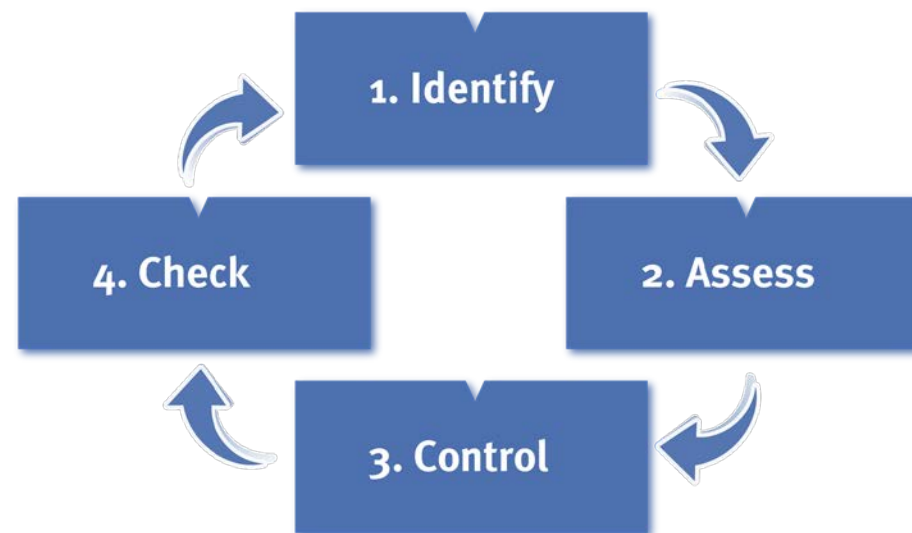
Step 1 - Identify

A 'hazard' is something that has the potential to cause harm.

Identifying hazards is simply finding out what could cause harm.

How?

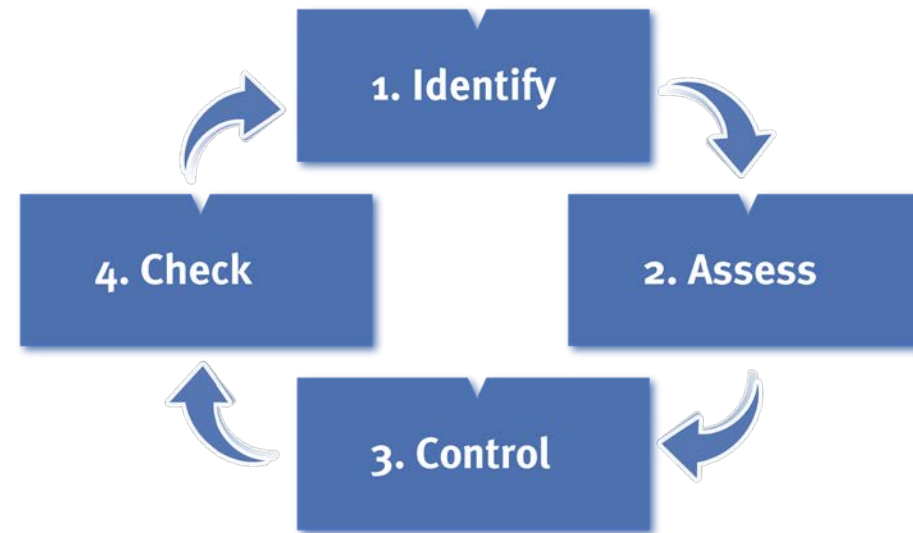
- Think about the types of hazards that might exist in your workplace.
- Ask questions such as:
 - *What is going on around me?*
 - *What could hurt me?*
 - *Who can I ask?*



Step 2 - Assess

A risk assessment involves considering the following things:

1. What could go wrong?
2. How likely is it to occur?
3. What are the consequences?
4. How could it be prevented?
5. How urgently should I act?



Measuring Likelihood & Consequences

- The level of risk is determined by the relationship between the **likelihood** (frequency or probability) and the **consequences** (impact or magnitude of the effect) if the risk occurs.
- At JCU the consequence and resulting severity of risk is calculated based on both financial impact and operational impact using this matrix.

Risk Matrix

		Consequence					
		WHS	Incident including first aid, workplace hazard contained immediately and no ongoing safety risk impact. No known similar risk within University.	Incident including medical treatment, near miss, safety finding resolved in 3 days, impacts a minor part of University with minor works < \$10k.	Lost time injury (< 6 months), finding, ISOS combined extreme/high risk, impacts a moderate to substantial part of University with moderate works between \$10-50k.	Significant lost time injury (> 6 months), notifiable event, finding, notice, suspension of work impacts a substantial part or whole of University with major works between \$50-100k.	Fatality, prosecution or legislative non-compliance impacts a substantial part or whole of University with significant works > \$100k.
			Insignificant	Minor	Moderate	Major	Catastrophic
Likelihood	Likely to occur within a 3 month period or during the performance of an actual task.	Almost Certain	Medium	High	High	High	High
	Could occur within a 3 to 12 month period.	Likely	Medium	Medium	High	High	High
	Could occur within a 1 to 5 year period.	Possible	Low	Medium	Medium	High	High
	Could occur within a 5-10 year period.	Unlikely	Low	Low	Medium	Medium	Medium
	May occur within every 10 year period or more.	Rare	Low	Low	Low	Low	Medium

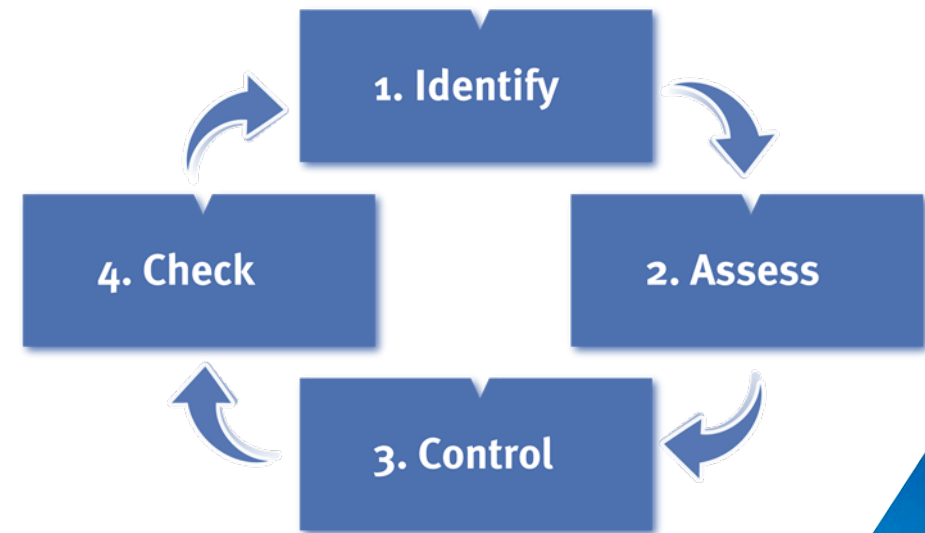
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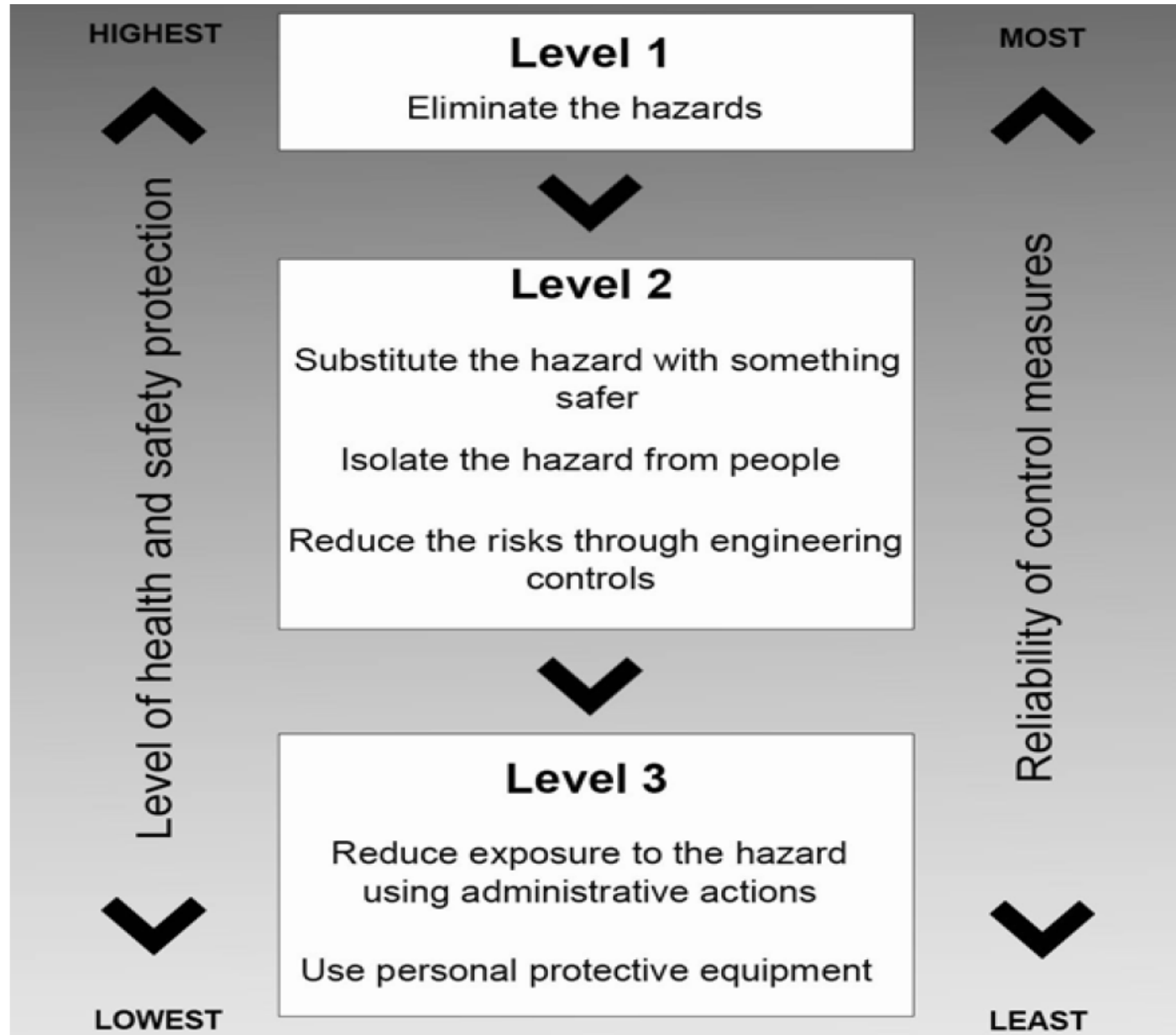
Cancel

Step 3 – Control

A control measure is something to help prevent you or someone else from getting hurt.

- Identify control options – **Hierarchy of Control**
- Assess control options
- Implement controls
- Determine residual level of risk
- Monitor & review controls





Level 1

- Elimination**, e.g. automate the manual task (such as using remote controls), deliver goods directly to the point of use to eliminate multiple handling

Level 2

- Substitution** e.g. replace heavy items with those that are lighter, smaller and/or easier to handle, replace hand tools with power tools to reduce the level of force required to do the task
- Isolation** e.g. isolate vibrating machinery from the user, for example, by providing fully independent seating on mobile plant
- Engineering** e.g. use mechanical lifting aids, provide workstations that are height adjustable

Level 3

- Administrative** e.g. rotate workers between different tasks, arrange workflows to avoid peak physical and mental demands towards the end of a shift
- Personal protective equipment** e.g. heat resistant gloves for handling hot items, shock absorbent shoes for work on hard concrete floors



Develop and Implement Control Options

When you have determined the appropriate control measures for all risks, you must ensure that they are effectively implemented.

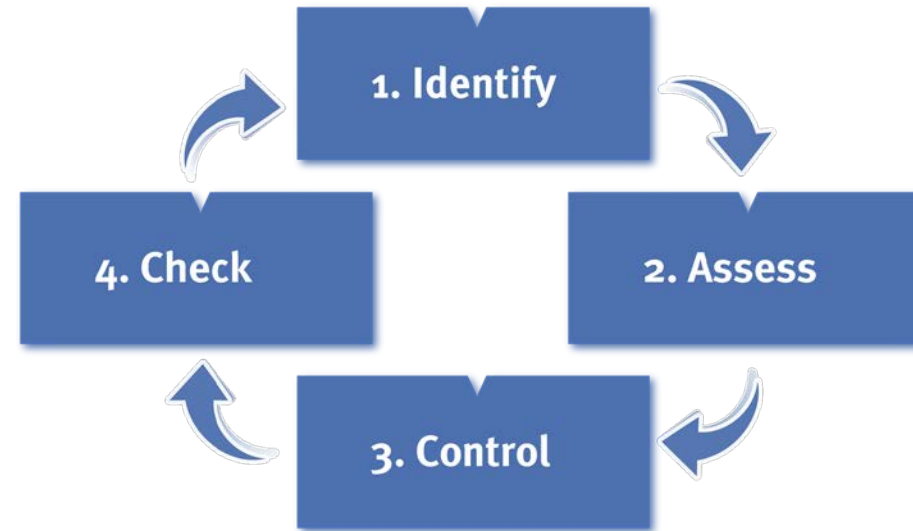
This can be achieved through:

- Developing work procedures
- Communicating with staff, students and visitors to make them aware of the safety improvements and why they have been applied
- Providing training or briefings to ensure that all persons affected understand the new process or procedure
- Supervising all new or altered control methods to ensure the new system of work is being applied correctly; and
- Maintenance of all new processes, equipment or control measures

Step 4 – Check

Control measures should be checked regularly to review:

- that they work
- they are easy to follow
- people know what to do
- if anything else can be done

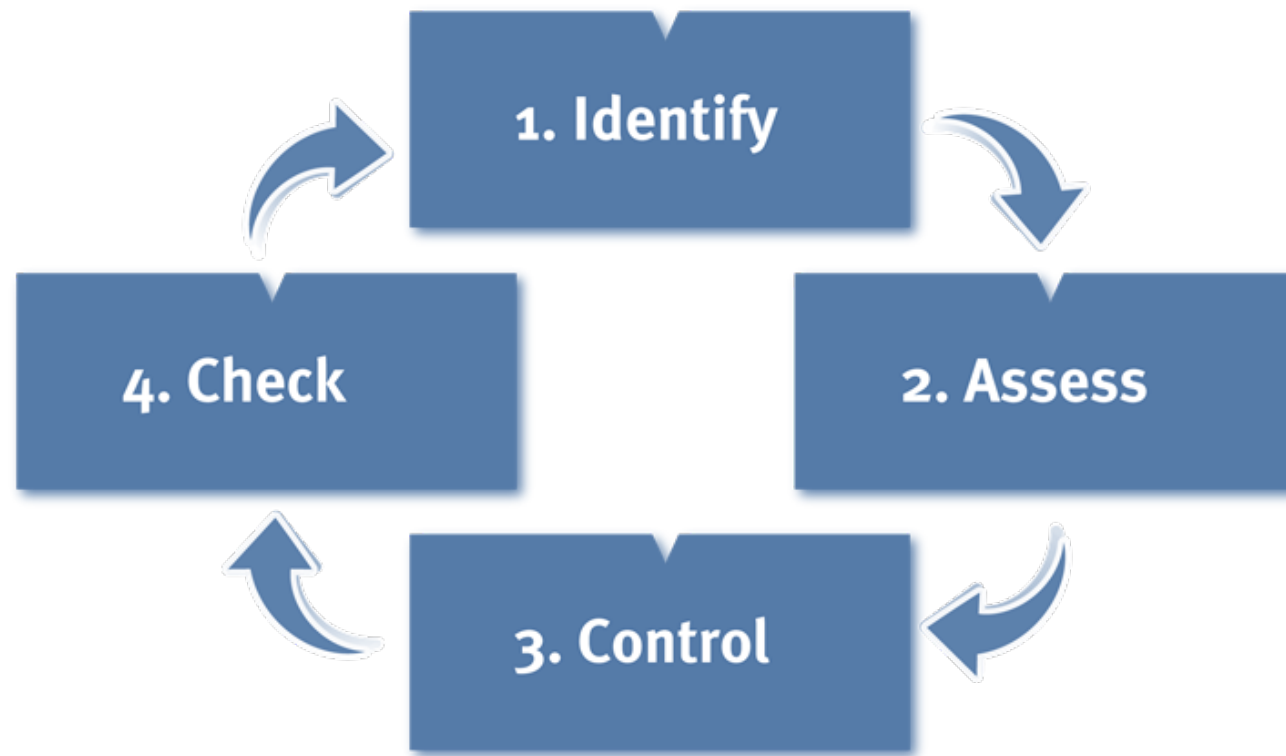




Keeping Records

- RiskWare is the University's approved system for creating and recording Risk Assessments. There is a separate online training module on how to create a HSE Risk Assessment in RiskWare
- Keeping records of the risk management process demonstrates potential compliance with the WHS Act and WHS Regulation. It also helps when undertaking subsequent risk assessments

Summary





You have now completed the JCU WHS Risk Management Fundamentals Training

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