

LA TROBE UNIVERSITY

RISK IDENTIFICATION, ASSESSMENT AND CONTROL PROCEDURE

1. PURPOSE

The purpose of this procedure is to provide a systematic and objective approach to assessing hazards and their associated risks that will provide an objective measure of an identified hazard.

2. DEFINITIONS

Hazard

A source of potential harm to people or a situation with potential to cause injury or loss to plant, property or equipment.

Hazard identification

Is the process of identifying all situations or events that could give rise injury, illness or damage to plant or property.

Risk

A function of the probability of an adverse event occurring and the potential consequence of that event.

Risk Score

Is measurement of risk on a common score so that risks can be compared and prioritised for control.

Risk Assessment

A systematic approach to assessing hazards which provides an objective measure of the hazard and allows hazards to be prioritised and compared.

Hazard Control

Is the process of implementing measures to reduce the risk associated with a hazard.

Hierarchy of Control

Is the established priority order for the types of measures to be used to control risks.

3. RESPONSIBILITIES

3.1 Deans, Heads of Schools/Colleges and Divisional Managers are responsible for ensuring that:

- Hazards are identified and assessed in consultation with employees.
- Control measures are implemented where appropriate based on the hierarchy of control.
- Records are maintained of all risk assessments

Some of the functions necessary to comply with the Regulations may be delegated to an appropriately authorised person.

3.2 All employees have a responsibility to report hazards to their area manager or supervisor.

4. **PROCEDURE**

4.1 **Hazard Identification**

Hazard Identification is the process of identifying all situations or events that could give rise to the potential of injury or illness. Hazard identification and risk assessment must also accompany any proposal for the introduction of new equipment or processes or the modification of equipment or processes. Hazards can be grouped as physical, chemical, ergonomic, biological, or psychological

Hazards can be identified through the following methods

- Direct report from employees.
- University Incident report form
- Industry information
- Health and Safety Committees
- Hazard Identification checklists such as manual handling risk identification plant, planned OHS inspections, workstation
- Consultants report
- Material Safety Data Sheets

4.2 **Risk Assessment**

Once a hazard has been identified/reported or if modifications eg to equipment, a laboratory, a risk assessment must be undertaken to determine the likelihood of injury or illness being caused by the hazard.

When assessing the risk associated with any hazard, it is necessary to ask the following questions

- Who is exposed to the hazard?
- How often are people near the hazard?
- Has this hazard already caused any problems?
- How easily could someone be hurt?
- How common is it for the hazard to cause problems in other workplaces?
- Which factors relating to the hazard need to be taken into account, according to health and safety law?
- Which factors or specific aspects of the work are increasing the likelihood of injury or illness?

4.2.1 **Assessment Process**

This requires a systematic approach to assessing hazards and provides an objective measure of the hazard and allows hazards to be prioritised and compared.

For each hazard review the tables below.

- A. The **Exposure** to the hazard is related to the frequency with which people may be exposed to the identified hazard. The following ratings from 1 to 10 have been adopted

Choose one exposure

EXPOSURE (E)	EXAMPLE	RATING
Continuously	Exposure to the hazard several times a day	10
Frequently	Exposure approximately once per day	6
Occasionally	Exposure to the hazard approximately once per week to once per month	3
Infrequently	Approximately once per year	2
Rarely	Exposure every 2 years or more.	1

- B. The **Probability** measures the likelihood of an event linked to the identified hazard occurring or being realised. The ratings are from 0.05 to 1.0

Choose one exposure

PROBABILITY (P)	EXAMPLE	RATING
Most likely	The most likely result of the hazard / event being realised.	1.0
Possible	Has a good chance of occurring and is not unusual	0.6
Conceivable	Can be envisaged to occur after many years of exposure.	0.3
Remote	Has not been known to occur after many years of exposure.	0.1
Inconceivable	Is practically impossible and has never occurred.	0.05

- C. The **Consequence** is the physical outcome of the hazard and provides an indication of the severity of the risk in relation to the detrimental effects to humans, property and productivity. A rating of 20 to 1 is used.

Choose one consequence

CONSEQUENCE (C)	EXAMPLE	RATING
Catastrophic	Numerous fatalities, irrecoverable property damage and productivity	20
Fatal	Approximately one single fatality, major property damage if hazard is realised	10
Serious	Serious non-fatal injury, permanent disability	5
Minor	Disabling but not permanent injury	2
Negligible	Minor abrasions, bruises, cuts, first aid type injury.	1

D. To obtain the risk score

Multiply the Exposure X Probability X Consequence

The higher the risk score the greater priority to control the hazard.

4.2.2 Prioritising Hazards

RISK	DESCRIPTION	ACTION
> 8	HIGH	A HIGH risk requires immediate action to control the hazard as detailed in the hierarchy of control. Actions taken must be documented on the risk assessment form including date for completion.
5 - 8	MEDIUM	A MEDIUM risk requires a planned approach to controlling the hazard and applies temporary measure if required. Actions taken must be documented on the risk assessment form including date for completion.
< 5	LOW	A risk identified as LOW may be considered as acceptable and further reduction may not be necessary. However, if the risk can be resolved quickly and efficiently, control measures should be implemented and recorded.

4.3 Control of Hazards

Risk control requires actions to be taken to eliminate or reduce the likelihood that exposure to a hazard will result in injury or disease. When determining control solutions consultation shall occur between competent persons undertaking the risk management process, employees affected health and safety representatives and the zone health and safety committee when required.

4.3.1 Methods of Risk Control

When planning how hazards are to be controlled and risks reduced the following Hierarchy of Control should be considered. Controls closer to the top of the hierarchy are preferable to those lower down the hierarchy such as PPE because they are less dependent on human behaviour. In many circumstances control solutions will incorporate a combination of controls.

Hierarchy of Control in the preferred order as listed:

- Elimination – can complete elimination of the hazard be undertaken?
- Substitution- can the process or chemical be substituted for a less hazardous alternative?
- Engineering Controls.
Can the hazard be redesigned through:
 - Isolation/enclosure
 - Machine guards
 - Ventilation
 - Wet methods
 - Mechanical Aids

- Administrative Controls, Can procedures be developed?
 - Job rotation
 - Limiting exposure
 - Permit systems
 - Exclusion
 - Safe operating procedures
 - Training

- Personal Protective Clothing and Equipment. (PPE&C) Through the issue of appropriate equipment

Elimination is the first choice in controlling hazards. Where elimination of the hazard is not practicable then isolation and engineering controls should be next considered. Administrative controls and protective clothing and equipment may provide interim solutions in a planned program to eliminate or reduce a particular risk, or they may be useful in addition to other control methods. They are however not a preferred control method.

Review of the control measures must be undertaken by the area manager to ensure that control measures are adequate.

4.4 Evaluation

All control measures implemented including temporary solutions should be assessed to evaluate their effectiveness.

4.5 Consultation

If practicable, there must be consultation with the relevant health and safety representative(s) when identifying, assessing and controlling risks. Consulting directly with employees and drawing on their experience and knowledge is more effective in reducing risk.

4.6 Records

Each risk assessment must be fully documented. The risk assessment form must be completed by the risk assessment team and signed by the manager of the area. Departments responsible for the hazards and their control are required to maintain all records of assessments for at least 5 years. (In some cases, legislative requirements will determine the minimum time to retain records)

4.7 Training

Information, instruction and training provide employees with the skills and knowledge to perform their work in a manner that is safe and without risks to health. It enables them to:

- follow health and safety procedures;
- use risk controls set in place for their protection;
- have an appreciation of the nature of the hazard; the risks associated with their use; and the reason why risk controls are used.

Managers, Supervisors Health and Safety Representatives and others who may be required to perform risk assessments by agreement with management shall be trained in hazard identification risk assessment and control methods. They must be trained in the risk assessment process and be familiar with:

- the regulations associated with the hazard
- have a practical understanding of the work hazards
- consult with the Health and Safety Representative

5 REFERENCES

OHS ACT 2004
OHS (Manual Handling) Code of Practice 2000,
OHS (Noise) Regulations 1992, Reg 13
OHS (Plant) Code of Practice 1995
OHS Hazardous Substance Regulations 1999

6. CROSS REFERENCES

LTU Incident Report forms
LTU Hazardous Substance Procedure
LTU Plant Safety Procedure

7. DOCUMENTATION

Risk Assessment form http://www.latrobe.edu.au/hr/forms/Risk_Control.PDF
Planned Inspection Checklist http://www.latrobe.edu.au/hr/forms/Office_Inspection_checklist.pdf

The Executive Occupational Health and Safety Committee approved this procedure at its Meeting on 5th March 2001.

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