University of Western Sydney

Hazard Identification, Risk Assessment And Control Procedure

1. Purpose

1.1 To ensure that there is a formal process for hazard identification, risk assessment and control to effectively manage hazards that may occur within the workplaces of the University of Western Sydney.

2. Preamble

2.1 Why make the workplace safer? There are three main reasons:

(i) Out of concern for the health and safety of staff, students, contractors and visitors.

(ii) It makes good business sense and is cost effective.

(iii) So that the University's duty of care to its employees, customers, contractors, students and visitors can be undertaken, and so health and safety legal requirements can be met.

2.2 Workplace hazard identification, assessment and control is an on-going process. It should be undertaken at various times, including:

(i) If it has not been done before.

(ii) When a hazard has been identified.

(iii) When a change to the workplace occurs.

(iv) After an incident, accident or workplace illness.

(v) At regularly scheduled times appropriate to the workplace.

2.3 The following procedure for risk assessment (involving hazard identification, risk assessment and control) is a practical guide for helping make all University workplaces safe for staff, students, contractors, and visitors. It will help both management and employees, through consultation, to comply with the health and safety regulations set by the WorkCover regulatory authority. These regulations require employers to identify, assess, fix and record all hazards and risks in their workplace.

2.4 The procedure will assist in:

(i) Finding hazards in University workplaces.

(ii) Assessing the risks that may result because of the hazards.

(iii) Deciding on control measures to prevent or minimise the level of the risks.

(iv) Fixing the problem using control measures.

(v) Monitoring and reviewing the effectiveness of the measures.

3. Definitions

3.1 **Hazard:** Anything (e.g. condition, situation, practice, behaviour) that has the potential to cause harm, including injury, disease, death, environmental or property and equipment damage.

3.2 **Hazard Identification:** This is the process of examining each work area and work task for the purpose of identifying all the hazards which are "inherent in the job". Work areas include but are not limited to machine workshops, laboratories, office areas, agricultural and horticultural environments, stores and transport, maintenance and grounds, reprographics, and lecture theatres and teaching spaces. Tasks can include (but may not be limited to) using screen based equipment, audio and visual equipment, industrial equipment, hazardous substances and/or teaching/dealing with people, driving a vehicle, dealing with emergency situations, construction.

3.3 **Risk:** The likelihood or probability that a hazardous event (with a given outcome or consequence) will occur.

3.4 **Risk Assessment**: Can be defined as the process of assessing the risks associated with each of the hazards identified so that appropriate control measures can be implemented based on the probability, ie. likelihood that harm, injury or ill health may occur and how severe the consequences of exposure might be.

3.5 **Risk Control:** This is the process of identifying and implementing the most cost effective risk control measures having regard to the Hierarchy of Control Principle, legislative provisions, Australian Standards and other relevant information.

3.6 **Monitoring and Review:** This involves ongoing monitoring of the hazards identified, risk assessment and risk control processes and reviewing them to make sure they are working effectively.

4. Aim

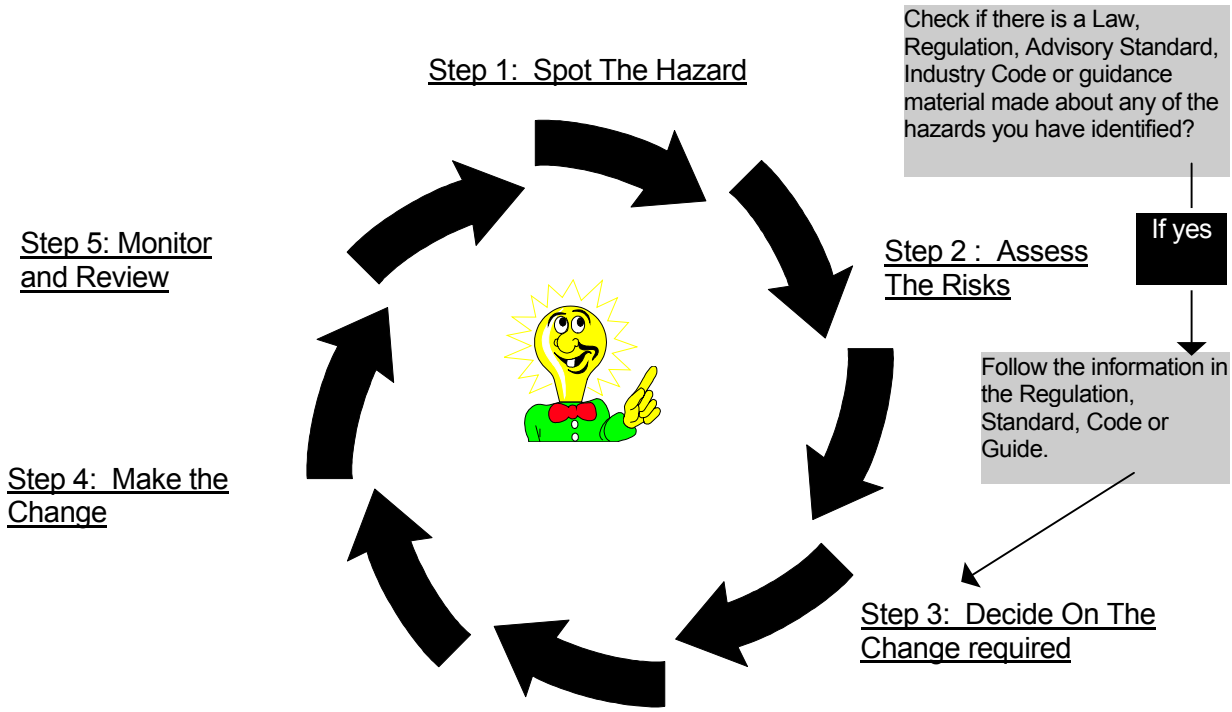
4.1 The University is committed to providing and implementing a procedure to cover both systematic and incidental identification, assessment and control of all workplace hazards so that it meets its statutory occupational health and safety obligations.

5. Responsibilities

5.1 It is the responsibility of all managers and supervisors to ensure that this policy is fully implemented in their area(s) of control and to consult with staff as part of undertaking the hazard identification, risk assessment and control process. It is the responsibility of staff to cooperate and comply with this policy.

6. Risk Assessment Procedure

6.1 The risk assessment procedure can best be illustrated in the following way.



6.2 Step 1: Spot the Hazard

6.2.1 Health and safety legislation in New South Wales requires that employers in consultation with employees identify all potentially hazardous situations which could result in any person in the workplace being harmed. The hazard identification process requires that:

(i) Past incidents/accidents be examined to see what happened and whether the incident/accident could happen again.

(ii) Employees be consulted to find out what they consider are safety issues, eg. how could an employee be exposed to this hazard?

(iii) Work areas or work sites be examined to find out what is happening now.

(iv) Information about equipment (e.g. plant, operating instructions) and Material Safety Data Sheets be reviewed to see what is said about safety precautions.
(v) Some creative thinking about what could go wrong takes place, i.e. what hazardous event could take place here?

6.2.2 At UWS, any hazard which is identified by this process should be recorded by all staff on the **UWS Hazard Summary Sheet** (see Attachment 1 to this document) which belongs to each work area.

6.3 Step 2: Assess the Risks

6.3.1 OH&S legislation in NSW requires that once a hazard has been identified, an employer is required, in consultation with employees (or their representative), to determine how likely it is that someone could be harmed by the hazard and what the consequence of the resulting injury or illness could be. If the problem is obvious and the likelihood of injury and the seriousness of injury is thought to be high, act immediately to control the risk by using an interim short-term measure. Then do the research required to fully assess the risk and decide on solutions.

6.3.2 The process of assessing the risk is undertaken by reviewing any available information about the hazard (e.g. a law, regulation, Australian Standard, Industry Code of Practice or guidance material about the hazard) and by using your personal work experience about what sort of accident or illness the hazard could create and how likely this would be to happen. When determining how likely it is that a person could be exposed to a hazard or hazardous event, consideration needs to be given to these "exposure factors":

(i) Whether there are any other risk factors that increase the likelihood of exposure?
(ii) How often is the person exposed (frequency)?
(iii) For how long is the person exposed (duration)?
(iv) How many people are exposed?
(v) The likely dose to which the person is exposed?
(vi) Any legislative or recommended exposure levels required by statutory authorities.

6.3.3 At UWS we require managers and supervisors to identify hazards, assess the risk of an accident or illness which has occurred and set a priority for corrective action by using a clearly laid out process. The process is as follows:

(i) Identified hazards are placed on the **Hazard Summary Sheet.**
(ii) The likelihood of a person being exposed to the hazard and that hazard leading to an accident or illness is determined by giving consideration to the "exposure factors" listed above.

(iii) A **Risk Assessment Table** (see table on page 6) is then used to categorise the likelihood and the severity or consequences of each hazard and to give it a "risk rating".

(iv) Once a risk rating is determined, each hazard is then to be given an order of priority on the **Hazard Summary Sheet** so that the area or site within UWS can easily see the priority of corrective action for all the hazards listed on the sheet. These priorities for risk ratings are listed as follows:

i. **1 & 2: Top Priority** – Isolate the hazard immediately. Must fix the cause(s) now.

ii. **3 & 4: Medium Priority** – Isolate the hazard as soon as practicable. Must fix the cause(s) within 1 month. Regularly monitor the cause(s) and hazard until rectified.

iii. **5 & 6: Low Priority** – Must fix the cause(s) when time and resources permit, but within 3 months. Regularly monitor the cause(s) and hazard until rectified.

Risk Assessment Table

How dangerous is the hazard you've found?
For each hazard think about:

LIKELIHOOD

CONSEQUENCES

	+ + **Very Likely** Could happen any time	+ **Likely** Could happen sometime	- **Unlikely** Could happen but very rarely	- - **Very unlikely** Could happen but probably never will
 **Fatality or permanent disability,** or property, or environmental damage over $50,000	1	1	2	3
!!! **Long term illness or serious injury,** or property, or environmental damage between $5,000 and $50,000	1	2	3	4
!! **Medical attention and several days off work,** or property, or environmental damage between $500 and $5,000	2	3	4	5
! **First aid needed,** or property, or environmental damage up to $500	3	4	5	6

The numbers below show you how important it is to do something, and the action to take:

1 & 2: Top Priority – **Isolate the hazard immediately. Must fix the cause(s) now.**

3 & 4: Medium Priority – **Isolate the hazard as soon as practicable. Must fix the cause(s) within 1 month. Regularly monitor the cause(s) and hazard until rectified.**

5 & 6: Low Priority – **Must fix the cause(s) when time and resources permit, but within 3 months. Regularly monitor the cause(s) and hazard until rectified.**

6.4 **Step 3 & 4: Decide On the Change Required and Make the Change**

6.4.1 Having identified the hazards in your workplace and assessed their risks, they must be removed or fixed before people are hurt, become ill or there is damage to plant, property or the environment.

6.4.2 All hazards that have been assessed should be dealt with in order of priority in one or more of the following ways:

(i) **Eliminate the hazard** - remove it from the workplace.

(ii) **Substitute the hazard** - substitute a substance, method or material to reduce the risk or the hazard.

(iii) **Isolate or enclose the hazard** - separate the hazard from the workplace, eg:

A. Chemical store room, or laboratory kept locked except to an authorised person.
B. Lock out procedures on faulty equipment.
C. Appropriate guarding for machinery.

(iv) **Use engineering solutions** – modify existing machinery or plant or purchase different machinery or plant.

(v) **Administrative Procedures** - develop work methods to reduce the conditions of risk, eg:

A. Written Safe Operating Procedures
B. Job rotation to restrict hours worked on difficult jobs.
C. Staff trained in the correct operating procedures.

(vi) **Use Personal Protective Equipment (PPE) and training in its use** - this should only be used as a last resort to deal with the hazard, where the hazard cannot be removed or reduced by any other means, eg:

A. Handling of chemicals – gloves, safety glasses, aprons.
B. Protecting eyes from flying particles.
C. Protecting feet – safety boots.

(vii) Finding solutions to hazards may involve:

A. Assessment of the hazard by other UWS stakeholders e.g. Capital Works & Facilities, IT, or other Departments if the solution is outside your responsibility.
B. Giving consideration to make procedural changes both in-house and/or with other UWS stakeholders.
C. Making changes to work practice or behaviour.

6.5 Step 5: Monitor and Review

6.5.1 Hazard identification, risk assessment and control is an on-going process. Therefore, regularly review the effectiveness of your hazard assessment and control measures. Make sure that you undertake a hazard and risk assessment when there is a change to the workplace including when work systems, tools, machinery or equipment change. Provide additional supervision when new employees with reduced skill levels or knowledge are introduced to the workplace.

7. Summary Of Hazard And Risk Assessment Procedure

Step 1: **Describe the activity or task undertaken.**
Identify and list the hazard(s).
What is the hazardous event that could take place?

TIP: Be aware that more than one event may take place.

- Check if an incident has occurred in the past.
- Talk with those who do the job.
- Think about what could happen if something went wrong.

Step 2: **Analyse the likelihood of exposure to the hazard** by identifying:

- Any *other risk factors* that would increase the likelihood of exposure. e.g. lack of training, no safe work procedure.
- *How often* is the person exposed to the hazard (frequency)?
- For *how long* is the person exposed to the hazard (duration)?
- *How many people* are exposed to the hazard?
- What is the *likely dose* to which the person will be exposed?
- Any *legislative or recommended exposure levels* required by statutory authorities.

Step 3: Having gathered information in steps 1 & 2, now **determine how likely or probable it is, that the hazardous event will take place and the person will be exposed to the hazard.**

- **Very likely** could happen any time.
- **Likely** could happen sometime.
- **Unlikely** could happen but very rarely.
- **Very unlikely** could happen, but probably never will.

Step 4: **Determine the resulting consequence/impact, were the hazardous event to occur. Could cause:**

- **Fatality or permanent disability,** or property, or environmental damage over $50,000. OR
- **Long term illness or serious injury,** or property, or environmental damage between $5,000 and $50,000. OR
- **Medical attention and several days off work,** or property, or environmental damage between $500 and $5,000. OR
- **First aid required,** or property, or environmental damage up to $500

Step 5: **Link the *likelihood rating to the consequence rating* to give a risk priority** of either:

- 1 & 2: Top Priority – Isolate the hazard immediately. Must fix the cause(s) now.
- 3 & 4: Medium Priority – Isolate the hazard as soon as practicable. Must fix the cause(s) within 1 month. Regularly monitor the cause(s) and hazard until rectified.
- 5 & 6: Low Priority – Must fix the cause(s) when time and resources permit, but within 3 months. Regularly monitor the cause(s) and hazard until rectified.

Step 6: **Identify and list short and long-term solutions** to either eliminate the hazard or reduce the risk.

Determine by how much the risk would reduce if your solutions were implemented. **Reassess the risk in relation to your proposed solutions**, by repeating steps 2 to 5.

8. Risk Assessment Worksheet

8.1 Some hazard identification and risk assessment processes are quite complex. Attachment 2 to this document contains a copy of a **"Hazard Identification Risk Assessment & Control Worksheet"**. The completion of this worksheet involves:

(i) Identifying the major hazards related to a risk assessment.
(ii) Assessing the risk of each hazard, and
(iii) Developing any control actions required.

This work sheet should be used by UWS managers, supervisors and OHS Consultation Committees and Representatives for all complex assessments. The results of the assessment for a particular piece of equipment or circumstance would then be recorded on the "Hazard Summary Sheet" as described in "Step 2: Assess The Risks" above.

University of Western Sydney

Hazard Summary Sheet

(A consolidated list of identified hazards and their solution)

USW Work Area :

HAZARD	REPORTED BY	PRIORITY OF RISK 1 - 6	RECOMMENDED SOLUTION	BY WHO	ESTIMATE DDATE TO BE FIXED	DATE FIXED

- All managers and supervisors to complete the grey section.
- Start a new page of this form every month.
- Keep each form on file in your work area for 5 years.