

## **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.

1.2 This procedure is for general OHS hazards and risks. It is not be used for scientific activities in laboratories and associated facilities. The Laboratory Risk Assessment Form is to be used for these situations.

### **2. Preamble**

2.1 Employers have obligations under the *Occupational Health and Safety Regulation 2001* to identify any foreseeable hazards that may arise in the workplace and to assess the risk of harm arising from the identified hazards. There are three main reasons for this process:

- (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 dangerous goods, 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:** Is 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

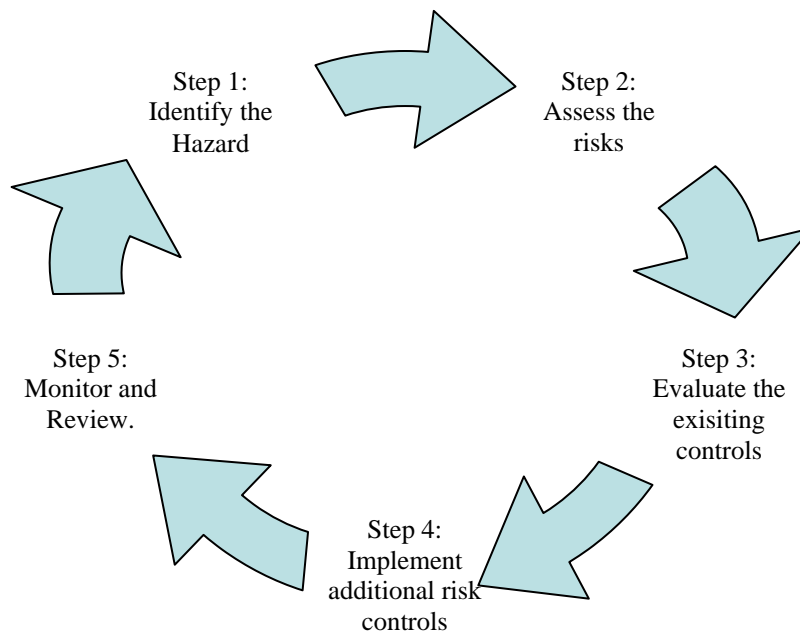
4.1 The University is committed to providing and implementing a procedure to cover both systematic and incidental identification, assessment and control of all workplace hazards so that it meets its statutory occupational health and safety obligations.

## 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: Identify 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 Risk Assessment and Control 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. This should include:

- (i) Identify factors that may be contributing to the risk,
- (ii) Review health and safety information that is reasonably available from an authoritative source and is relevant to the particular hazard,
- (iii) Evaluate the likelihood of an injury occurring and the likely severity of an injury or illness that may occur,
- (iv) Identify the actions necessary to eliminate or control the risk; and
- (v) Identify records that it is necessary to keep to ensure that the risks are eliminated or controlled.

6.3.2 Other risk factors should also be identified as they may contribute to the risk: including

- (vi) The work premises and the working environment, including their layout and condition,
- (vii) The capability, skill, experience and age of people ordinarily undertaking work,

(viii) The systems of work being used; and

(ix) The range of reasonably foreseeable conditions.

6.3.3 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.

6.3.4 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 **UWS Risk Assessment and Control Form**. (attachment 1)

(ii) A **Risk Category Table** (below) is then used to categorise the type of risk to the university

### **Risk Category Table**

<b>Risk Category</b>	<b>Description</b>
Academic (Course load/ logistics)	Student load by course and campus, Staff student ratios, teaching loads, admission processes and standards, student progression and retention rates , mode of delivery, changes of student profile and market demands, course and unit coordination capacity and load of academics, levels of administrative and technical support for academic course and unit delivery
Academic (Course curriculum / quality)	Quality/ standard of academic program/ course contents, planning strategy for course offerings, approvals and monitoring process for courses and units
Academic	Research income, research load, research work and staff, research

(Research)	capacity, Intellectual property, patents, ethical conduct in research etc.
Behaviour	UWS community's risk culture: staff & students' reckless (disasters), conservative (opportunities lost), observation of policies and procedures. Student demonstrations, terrorism, fraud, corrupt conduct, activists seeking to damage UWS.
Environmental	Water, soil, air contamination, asbestos, waste management, incidents causing damages, injury/ death, environmentally triggered emergencies.
Financial	Reductions in income, liquidity, financial loss, insurances, debt, budget overruns, tenders.
Infrastructure	The physical fabric of the University, buildings, roads, pathways, utilities (electricity, water).
International	Overseas ventures/ reputation/ program disaster, relationships with overseas universities.
Legal	Contracts and agreements, high profile litigation - financial and reputational impact.
Legislation	Breach, financial penalty/ impact on reputation, laws, regulations, codes, affecting UWS.
Organisation	Strength of policies and procedures, planning, staffing, morale, training, ethical culture, leadership and management.
Political	Ability to respond to major changes in education policies, level of government consultation.
Reputation (local/ international)	Damaging media reports, employability of graduates, research links, regional involvement.
Technology	Strategic direction of IT, reliance on ecommerce/ email/ internet, student records system, library.

(iii) The **Risk Rating Matrix** is used to assess the likelihood and the severity or consequences of each hazard and to give it a "risk rating".

### Risk Rating Matrix

Impact	Likelihood				
	Rare	Unlikely	Possible	Likely	Almost certain
Catastrophic	moderate	moderate	high	critical	critical
Major	Low	moderate	moderate	high	critical
Moderate	Low	moderate	moderate	moderate	high
Minor	very low	low	moderate	moderate	moderate
Insignificant	very low	very low	low	low	moderate

Likelihood (L)	Impact (I)	Rating (L) X (I)	Definition
(5) Almost certain	<b>(5) Catastrophic</b> <ul style="list-style-type: none"> <li>Potential financial impact of \$500,000 (\$50,000)(a) or more</li> <li>Detrimental impact on operations or major projects</li> <li>Sustained loss in reputation ,</li> <li>Sustained impact on services or quality</li> <li>Loss of public confidence in the University</li> <li>Contractual, legislative or regulatory non-compliance with</li> </ul>	<b>Critical &gt; 20</b>	Issue represents a control weakness which could cause a severe disruption to or have a severe adverse effect on operations and objectives

	<ul style="list-style-type: none"> <li>certain litigation, prosecution or penalties</li> <li>Life threatening</li> </ul>		
<b>(4) Likely</b>	<b>(4) Major</b> <ul style="list-style-type: none"> <li>Potential financial impact of \$200,000 (\$20,000) or more</li> <li>Major impact on operations or major projects</li> <li>Serious loss in reputation</li> <li>Serious impact on services or quality</li> <li>Probable loss of public confidence in the University</li> <li>Contractual, legislative or regulatory non-compliance with probable litigation, prosecution or penalties</li> <li>Extensive injuries</li> </ul>	<b>High</b> $\geq 13$ & $\leq 19$	Issue represents a control weakness which could cause a major disruption to or have a major adverse effect on operations and objectives
<b>(3) Possible</b>	<b>(3) Moderate</b> <ul style="list-style-type: none"> <li>Potential financial impact of \$100,000 (\$10,000) or more</li> <li>Moderate impact on operations or major projects</li> <li>Short-term loss in reputation</li> <li>Moderate decline in services or quality</li> <li>Possible loss of public confidence in the University</li> <li>Contractual, legislative or regulatory non-compliance with potential for litigation, prosecution or penalties</li> <li>Minor injuries</li> </ul>	<b>Mod erate</b> $\geq 5$ & $\leq 12$	Issue represents a control weakness which could cause a disruption to or have an adverse effect on operations and objectives
<b>(2) Unlikely</b>	<b>(2) Minor</b> <ul style="list-style-type: none"> <li>Potential financial impact of \$50,000 (\$5,000) or more</li> <li>Minor impact on operations or major projects</li> <li>No loss in reputation</li> <li>Minor impact on services or quality</li> <li>No loss of public confidence in the University</li> <li>Contractual, legislative or regulatory non-compliance but unlikely to result in litigation, prosecution or penalties</li> <li>Potential for injury</li> </ul>	<b>Low</b> $\geq 3$ & $\leq 4$	Issue represents a minor control weakness which could cause a minimal but reportable effect on operations and objectives
<b>(1) Rare</b>	<b>(1) Insignificant</b> <ul style="list-style-type: none"> <li>Potential financial impact less than \$50,000 (&lt; \$5,000)</li> <li>Impact can be absorbed – insignificant effect on operations and objectives</li> </ul>	<b>Very Low</b> $\leq 2$	Issue represents an insignificant control weakness

#### 6.4 Step 3: Evaluation existing risk controls

6.4.1 Once a risk rating is determined, each hazard must have its existing risk control measures evaluated using the Evaluation of Control Effectiveness Table. This allows for determination of any additional requirement necessary.

#### Evaluation of Control Effectiveness Table

Well Designed Control ?		Effectively Implemented ?	
<b>3</b>	Needs improvement	<b>3</b>	Deficient (b)
<b>2</b>	Adequate	<b>2</b>	Marginal
<b>1</b>	Strong	<b>1</b>	Effective

#### 6.5 Step 4: Implement additional risk controls

6.5.1 Having identified the hazards in your workplace, assessed their risks and reviewed the existing controls, all hazards must be managed before people are hurt, become ill or there is damage to plant, property or the environment.

6.5.2 All hazards that have been assessed should be dealt with in order of priority in one or more of the following hierarchy of controls

- (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.

6.5.3. Each measure must have a designated person and date assigned for the implementation of controls. This ensures that all required safety measures will be completed.

## **6.6 Step 5: Monitor and Review**

6.6.1 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.