University of
Western Sydney

# Conducting Effective Risk Assessments

Occupational Health, Safety & Risk Unit

Objectives of this session:

- Explain the legislative responsibilities & requirements relating occupational risk management in NSW

- Explain how risk assessments are to be carried out

- Discuss the UWS hazard identification,risk assessment and control protocol

- Explain how the principles of risk control can be applied to risk management at UWS

- Identify & discuss useful criteria that can used as a guide when conducting risk assessments

Chapter 2 of the OH&S Regulation 2001 states:

- "Note:This Chapter imposes obligations on an employer to identify foreseeable hazards that may arise from the conduct of the employer's undertaking, to assess the risks of those hazards and to eliminate the risks, if not reasonably practicable to do so, to control the risks"

- This should to be taken to mean that when an occupational hazard has been identified the risk assessment process involves identifying what needs to do to be done to eliminate, in the first instance, or minimize the risk by deciding on which control option is appropriate given the degree of risk posed in consultation with workers.
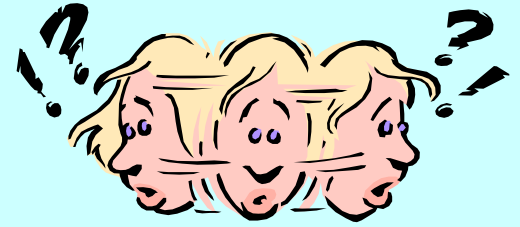
To clarify:

- Hazard control measures therefore need to be commensurate with the degree of risk that is posed by the particular hazard concerned.

- The degree of risk to people or property is not necessarily uniform across the entire "hazard spectrum".

Key elements of Hazard ID, Risk Assessment & Control Procedures

Commitment by senior management

Succinctly stated policy objectives

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OHS&R Policy

Strict accountabilities & defined responsibilities

Adequate resourcing

Definition of a 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.

Definition & measurement of risk:

Risk: The likelihood of a specific event occurring under a defined set of circumstances.

Risk Measurement: Consequence x Probability x Exposure = Assessed Risk

Risk Management Process:

- Identify, Evaluate, Control then Monitor for effectiveness & continuous improvement to attain & maintain best practice

**Useful criteria to compliment risk assessments:**

- Evidence of education & training
- Lux levels
- Safe working loads (SWLs)
- Serviceability of equipment & property
- Threshhold limit values (TLVs)
- Operating instructions/specifications
- Ambient temperatures
- How much/many vs how often it is done

Useful criteria to compliment risk assessments cont'd:

- Previous experience self/others
- Recommendations of manufactures/suppliers
- Information contained in statutes, MSDSs, codes, guides etc
- Known injury experience
- Knowledge of internal policies & procedures
- Known specialist advice
- Known characteristics of hazards which may elevate risk of injury eg carcinogenic, mutagenic, irritant to eyes etc

What is an accident?

An accident is an unplanned and undesired event that leads to injury, damage or other loss.
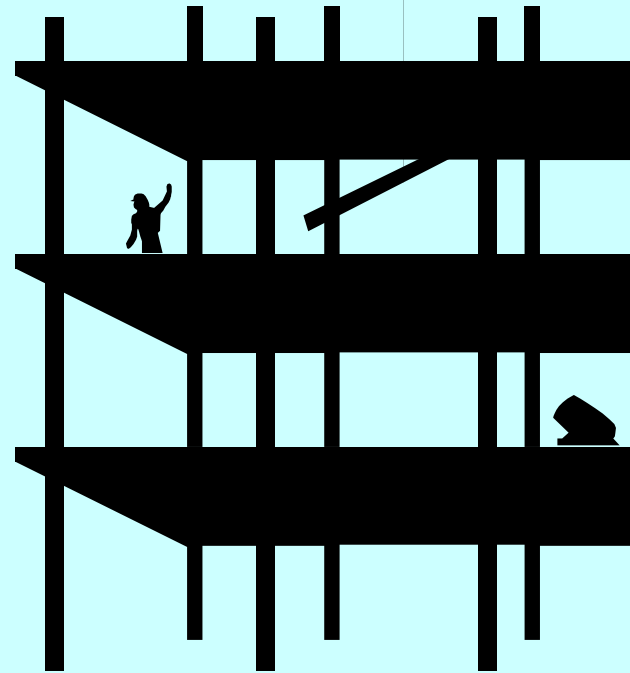
Who or what is at risk?

Who:

- **workers directly involved in the activity**
- **other employees in the workplace**
- **maintenance/cleaning staff**
- **contractors**
- **Visitors eg customers, students**
- **passers-by and members of the public**

What:

- **Property**
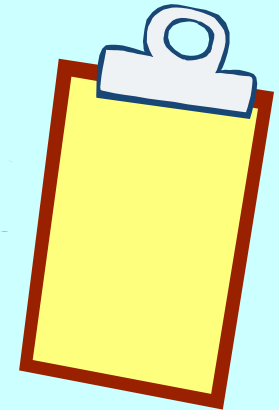- **Reputation**
- **Revenue**
- **Research**
- **Funding**

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Risk Assessment Procedure

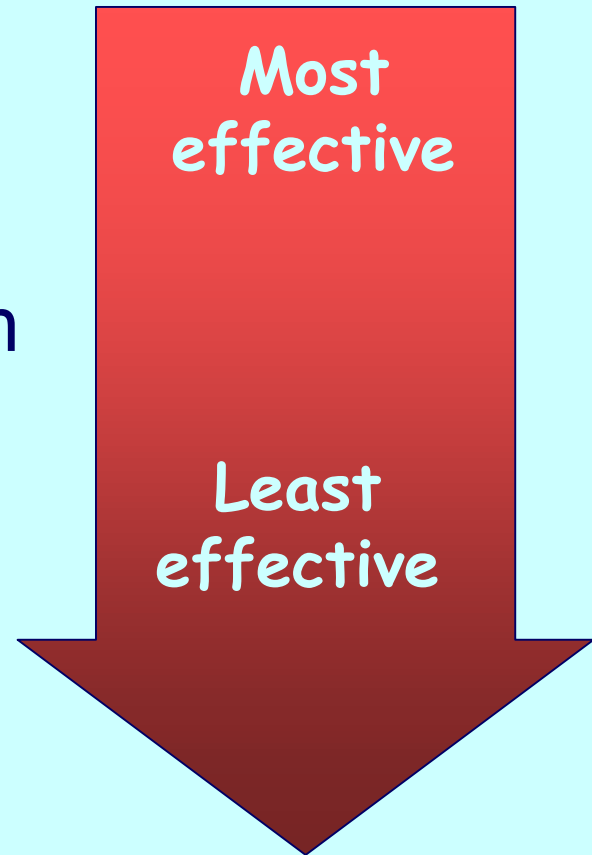Step 1   Spot the Hazard

Step 2   Assess the Risk

Step 3&4 Decide on the change
required and make the change

Step 5   Monitor & Review

Hierarchy of control measures

- Elimination

- Substitution

- Engineering & isolation

- Administration

- Personal protective equipment

Most effective

Least effective

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

LIKELIHOOD

CONSEQUENCE	++ 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.
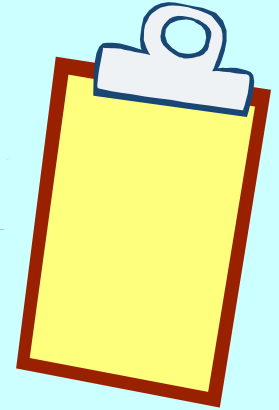
Step 1
Spot the hazard
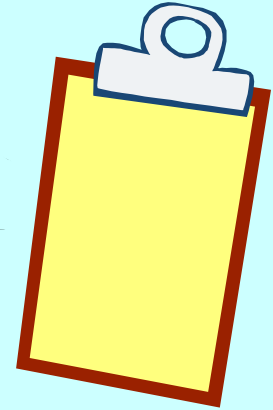
- Establish effective consultation

- Allocate responsibilities

- Plan the assessment and document using the Worksheet and summary form
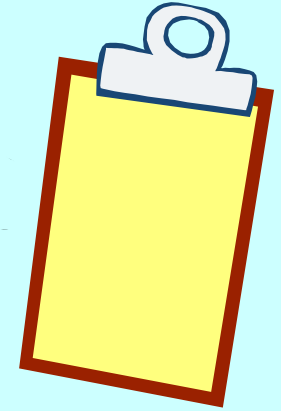
Step 2
Assess the Risk

- Identify the hazard

- Assess risk using the Risk Assessment Table

- Give an order of priority

- Write down the findings in the Hazard Summary Sheet

# Step 3 & 4
Decide on the change Required & Make the Change

- Decide on risk controls using the **Hierarchy of Control Principle**
- Document using the Hazard ID, Risk Assessment & Control Worksheet

Step 5
Monitor and Review

- Check that each risk control is put in place according to the agreed timetable

- It there are delays, work out why and do something about it

- Set up ongoing processes to maintain the control measures.
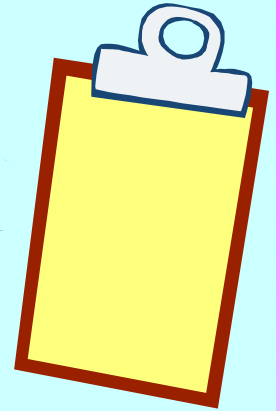
Events/conditions justifying a review of a risk assessment:

- An accident
- A complaint
- A change to the system of work
- The introduction of new plant or modification to old plant
- The introduction of a new substance into the workplace
- Change to an experiment, recipe or process
- Change(s) to legislation
- New information from the manufacturer or supplier
- New guidance published
- A direction from a statutory authority eg WorkCover

Further Information
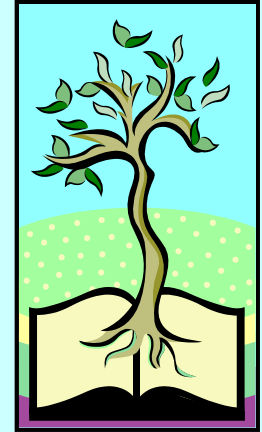
- www.workcover.nsw.gov.au
- AS4360 Risk Management
- AS4801 OHS Management Systems

  Specifications with guidance for use

- AS4804 OHS Management Systems

  General Guidelines on principles, systems & supporting techniques

- Hazpack – Make your workplace safer