

# Xchanging Safety Sheet

Number 103

## Hazard Management

A hazard refers to anything that can cause harm, especially a source of potentially damaging energy. There are four important steps in the process of hazard management:

- |                             |                                                                                                                              |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>Identify the hazards</b> | List and determine the nature of the various hazards and how any unwanted incidents can occur                                |
| <b>Assess the risk</b>      | Determine how likely it is that injury or illness will result from the hazard and the severity of the consequences           |
| <b>Control the risk</b>     | Determine a suitable risk control plan to prevent the occurrence of any unwanted incident and to reduce the risk of any loss |
| <b>Review the controls</b>  | Determine if the controls have achieved their purpose and have not resulted in the creation of further hazards.              |

### Identifying the hazards

Not all tasks and activities are necessarily hazardous. Hazard identification involves considering if particular conditions or actions could be harmful. There are many different techniques used to identify hazards, some of which are:

- Use a checklist such as those shown in SafetySheet No. 501 Hazard Checklist
- In consultation with employees, develop your own suitable checklist
- Use a more detailed relevant Compliance Code, Code of Practice or Australian Standards document
- Examine your worksite equipment and activities (where various forms of energy exist)
- Determine which equipment and activities could result in injury or illness.

### Assessing the risk

Now you must determine how significant the hazard is, by considering the likelihood of an incident and the consequence if it occurs. One method of doing this is to use a hazard classification matrix as shown below. Then having done this assessment, you need to consider how acceptable this risk is, and whether it needs further control.

Where the hazard has already resulted in an injury or illness or incident, it should be regarded as a medium to high risk. If you believe there is a remote chance that the hazard could result in severe injury or death for many people – contact an Xchanging OHS Consultant to determine how to estimate the risk of this occurring.

### Using a hazard classification matrix

Most hazards you assess have not resulted in injury or illness and do not have a remote chance of resulting in death and serious injury for many people. Assessing the risk associated with most hazards can be difficult, as the likelihood and consequence may not be obvious at first. The matrix (or table) below can be used to estimate the level of risk associated with these hazards. By estimating the risk, you can determine how quickly resources need to be allocated to reduce the risk.

Two or more of you (preferably the employee health and safety representative/s working with the employer OHS management representative) should agree on the consequences and the likelihood of those consequences occurring.

In estimating the risk, from the table below, use the following definitions:

Consequences:

<b>Fatal</b>	Death or irreversible physical or psychological injury
<b>Moderate</b>	Reversible disability (physical or psychological) requiring hospitalisation
<b>Minor</b>	first aid (physical or psychological) required only
<b>Insignificant</b>	simple self treatment only required

Likelihood:

<b>Almost certain</b>	The event will occur on an annual basis
<b>Likely</b>	The event has occurred several times or more in your career
<b>Possible</b>	The event might occur once in your career
<b>Unlikely</b>	The event does occur somewhere from time to time
<b>Rare</b>	May or may not have heard of something like that occurring elsewhere

**Example**

Suppose you consider and the consequences to be “moderate” and the likelihood of an incident to be “unlikely”, then the degree of risk will be “low”.

**Risk level = Likelihood x Consequence**

Refer to the matrix (table) below, going down the “moderate column” (consequence) and across the “unlikely” row (Likelihood), which results in an yellow cell, a **low risk** of injury, illness or property damage.

	Consequences			
Likelihood ↓	Fatal	Moderate	Minor	Insignificant
Almost Certain	High Risk	High Risk	Medium Risk	Medium Risk
Likely	High Risk	Medium Risk	Medium Risk	Medium Risk
Possible	High Risk	Medium Risk	Medium Risk	Low Risk
Unlikely	Medium Risk	Low Risk	Low Risk	Low Risk
Rare	Medium Risk	Low Risk	Low Risk	Low Risk

  

<b>High Risk</b>	<b>Medium Risk</b>	<b>Low Risk</b>
------------------	--------------------	-----------------

(This Consequences / Likelihood definitions and model has been modified from *AS/NZS 4360:2004 Australian / New Zealand Standard, Risk Management.*)

Once you have assessed the level of risk, you must consider methods of controlling the risk.



Disclaimer: The information contained here is not intended to be relied upon as a substitute for legal or other professional advice. Meeting the requirements outlined does not guarantee you are compliant with the laws relating to health and safety in the workplace. It is your individual responsibility to meet all statutory and legal obligations, and further professional advice or directives may still be required. *Updated: December 2009*

## Controlling the Risk

To control a risk associated with a hazard, you need to consider the implementation and use of practical activities applied to the following actions (steps) in this order:

### Elimination

Can some hazardous process be eliminated?

### Substitution

Can a safer process be used?

### Engineering controls

Can hazardous systems be isolated, guarded or automated using some type of reliable mechanism?

### Administration controls

Is appropriate supervision, training or signage needed and how should this be done?

### Personal protective equipment and clothing

Should goggles, helmets, gloves, safety shoes or earmuffs be used?

## Review the controls

When the employee and employer representative conduct their regular walk through of the workplace, talking to employees and contractors as they go, determine if the control measure/s have worked out or whether they have created further hazards.

## Services Available

Xchanging can provide you with advice and assist with risk assessments. Please contact the OHS Consultants at [risk.management@au.xchanging.com](mailto:risk.management@au.xchanging.com) for further information.

**RISK ASSESSMENT SHEET**

Page \_\_\_\_\_ of \_\_\_\_\_

Location: \_\_\_\_\_

Department: \_\_\_\_\_

Date: \_\_\_\_\_

Hazards	Risk Level*	Control Measures Required	Responsible Officer	Status of Actions & Time Frame	Feedback to Employees

\*Risk Level H – High risk      M – Medium risk      L – Low risk

<b>Potential hazards:</b>	Burns Chemical affects Crushing Cutting	Electrical Entanglement Ergonomic affects Explosion	Falling Fire Fumes Friction	Gasses Lighting Overcome by ... Overexertion	Noise Radiation Repetitive actions Slipping	Stabbing Stress & strain Struck by ... Striking against ...	Suffocation Thermal stress Tripping Vibration
---------------------------	--------------------------------------------------	--------------------------------------------------------------	--------------------------------------	-------------------------------------------------------	------------------------------------------------------	----------------------------------------------------------------------	--------------------------------------------------------

