

Health and Safety Risk Assessment

Experiment:		Approved By: Signature and Date	
Student Name:	Student Number:	Date:	

Consequence

Likelihood		Insignificant <i>eg. No injuries</i>	Minor <i>eg. First aid needed</i>	Moderate <i>eg Medical attention + several days off work</i>	Major <i>eg Long term injury or illness</i>	Catastrophic <i>eg. Kill or permanently maim</i>
	Almost Certain <i>Event is expected to occur in most circumstances</i>	MEDIUM	HIGH	EXTREME	EXTREME	EXTREME
	Likely <i>Event could occur some time/annually</i>	MEDIUM	MEDIUM	HIGH	EXTREME	EXTREME
	Possible <i>Event could occur, but rarely - once every 1-10 yrs</i>	LOW	MEDIUM	HIGH	HIGH	EXTREME
	Unlikely <i>Even may occur but probably never will – once every 10 -100 yrs</i>	LOW	LOW	MEDIUM	HIGH	HIGH
	Rare <i>Event expected to occur only in exceptional circumstances.</i>	LOW	LOW	LOW	MEDIUM	HIGH

Summary of Requirements

Personal Protective Equipment	
Equipment	

Health and Safety Risk Assessment

[illegible]



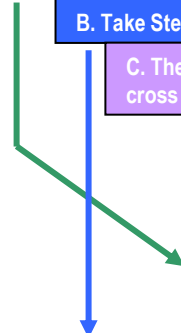
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What is a hazard?

<p>A Could people be injured or made sick by things such as:</p> <ul style="list-style-type: none"> • Noise • Light • Radiation • Toxicity • Infection • High or low temperatures • Electricity • Moving or falling things (or people) • Flammable or explosive materials • Things under tension or pressure (compressed gas or liquid; springs) • Any other energy sources or stresses • Biohazardous material • Laser 	<p>B What could go wrong?</p> <ul style="list-style-type: none"> • What if equipment is misused? • What might people do that they shouldn't • How could someone be killed? • How could people be injured? • What may make people ill? • Are there any special emergency procedures required?
<p>C Can workplace practices cause injury or sickness?</p> <ul style="list-style-type: none"> • Are there heavy or awkward lifting jobs? • Can people work in a comfortable posture? • If the work is repetitive, can people take breaks? • Are people properly trained? • Do people follow correct work practices? • Are there adequate facilities for the work being performed? • Are universal safety precautions for biohazards followed? • Is there poor housekeeping? Look out for clutter • Torn or slippery flooring • Sharp objects sticking out • Obstacles 	<p>D How might these injuries happen to people?</p> <ul style="list-style-type: none"> • Broken bones • Eye damage • Hearing problems • Strains or sprains • Cuts or abrasions • Bruises • Burns • Lung problems including inhalation injury/ infection • Skin contact • Poisoning • Needle-stick injury
<p>E Imagine that a child was to enter your work area</p> <ul style="list-style-type: none"> • What would you warn them to be extra careful of? • What would do to reduce the harm to them? 	<p>F What are the special hazards?</p> <ul style="list-style-type: none"> • What occurs only occasionally-for example during maintenance and other irregular work?

How to Assess Risk

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<div>Step 1 – Consider the Consequences</div> <div>What are the consequences of this incident occurring? Consider what <u>could reasonably</u> have happened as well as what actually happened.</div> <div>Look at the descriptions and choose the most suitable Consequence.</div> <div></div>		<div>Step 2 – Consider the Likelihood</div> <div>What is the likelihood of the consequence identified in step 1 happening? Consider this with the current controls in place.</div> <div>Look at the descriptions and choose the most suitable Likelihood.</div> <div></div>		<div>Step 3 – Calculate the Risk</div> <div>A. Take Step 1 rating and select the correct column.</div> <div>B. Take Step 2 Rating and select the correct line.</div> <div>C. The calculated risk score is where the two ratings cross</div> <div></div>																																																															
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- -" The magnitude of consequences of any event, should it occur, and the likelihood of the event and its associated consequences, are assessed in the context of the effectiveness of existing strategies and controls." Section 3.4.3 AS/NZS 4360:2004, Risk Management.

Risk Control

Risk control is a method of managing the risk with the primary emphasis on controlling the hazards at source. For a risk that is assessed as "high", steps should be taken immediately to minimize risk of injury. The method of ensuring that risks are controlled effectively is by using the "hierarchy of controls". The Hierarchy of Controls are:

Order No.	Control	Example
Firstly	Eliminate	Removing the hazard, eg taking a hazardous piece of equipment out of service.
Secondly	Substitute	Replacing a hazardous substance or process with a less hazardous one, eg substituting a hazardous substance with a non-hazardous substance.
Thirdly	Isolation	Isolating the hazard from the person at risk, eg using a guard or barrier.
Fourthly	Engineering	Redesign a process or piece of equipment to make it less hazardous.
Fifthly	Administrative	Adopting safe work practices or providing appropriate training, instruction or information.
Sixthly	Personal Protective Equipment	The use of personal protective equipment could include using gloves, glasses, earmuffs, aprons, safety footwear, dust masks. NOTE: This is a last resort control and should be for interim periods only, while higher level control is developed or implemented.

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Residual Risk

After the initial risk has been classified and the control measures considered, the risk assessment should be reconsidered taking into account the recommended control measures. The following actions should be followed when the residual risk assessment risk score has been determined.

Actions:

Extreme Risk: Stop the work until the risk is reduced. Immediate action required.

High Risk: Reduce risk urgently. Senior management attention required.

Medium Risk: Reduce risk as a priority. **Management responsibility must be specified.**

Low Risk: Reduce risk. Manage by routine procedures.