

Health, Safety and Wellbeing (HSW) Risk Assessment

Document No:		Assessment Date:	
Faculty/ Service Division:		School/Department :	
HSW Risk:			
Form completed by:	confirms this risk assessment was conducted and will be used as a guide to minimize risk. Student is aware that laboratory safety during pregnancy, fertility treatment and breastfeeding is their responsibility and working in the laboratory is not mandatory.	Responsible Line Manager:	confirms that the risk assessment was conducted and the student is aware of the hazards associated with their change in circumstances.

Signed:		Signed:	
Dated:		Dated:	

Other Risk Assessments which might also be required:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Description of activity and/or location:	<p><i>Research in Chemical Laboratories</i></p> <p>All campus laboratories</p>
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Identify Hazards and Control the Risks:

1. An activity may be divided into tasks. For each task identify the hazards and associated risks. Also list the possible scenarios which could sooner or later cause harm.
2. Determine controls necessary based on University standards, legislation, codes of practice, AS / NZ standards, manufacturer's instructions etc.
3. List existing risk controls (take credit for what you do)
4. Rate the risk once all controls are in place using the matrix in
5. List any additional controls that need to be implemented and take action
6. Communicate the findings

Task sequence	Hazard	Who may be harmed and how	Existing controls	Current Risk Rating (L)Likelihood x (C)Consequence = (R)Rating			Additional Controls required
				L	C	R	

Routine chemical reactions	Carcinogens, mutagens and teratogens Embryotoxic chemicals Antimitotic (cytotoxic) drugs. May be encountered in health treatment processes or in research. Chemical agents that are known to be dangerous and may be absorbed through the skin. This includes some pesticides. Carbon monoxide (CO) Lead and lead derivatives. (see GHS hazard statements and UoA pregnancy risk chemicals for list)	Pregnant or breastfeeding researcher, or researcher going through fertility treatments may develop health complications if exposed	Prevention of exposure is the top priority. Substitution of harmful agents if possible; if not then control by combination of technical measures, Good Laboratory Practice, and the use of Personal Protective Equipment (the latter only as a last resort and in combination with the other control measures). The worker may have to be assigned other duties away from the source of potential exposure for the duration of the pregnancy, fertility treatment and nursing period.	1	2	2	Wide range of toxic effects during pregnancy and impairment of the child after birth. The exposure of pregnant and breastfeeding researchers to lead is specifically prohibited by law if the exposure might jeopardise safety or health. Once pregnancy is confirmed, researcher should be suspended from any work which exposes them significantly to lead.
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Task sequence	Hazard	Who may be harmed and how	Existing controls	Current Risk Rating (L)Likelihood x (C)Consequence = (R)Rating			Additional Controls required
				L	C	R	
Routine lab work	Certain smells	May exacerbate morning sickness of pregnant researcher	Remove source of smell, control by local exhaust ventilation or alter working patterns as necessary.				
Routine job duties	Occupational stress (including postnatal depression)	Stress is associated in some studies with increased incidence of miscarriage and pregnancy loss, and also with impaired ability to breastfeed. Stress also can contribute to anxiety and depression.	Account to be taken of known organisational stress factors (such as shift patterns, job insecurity, workloads, etc) and the particular medical and psychosocial factors affecting the researcher. Protective measures may include adjustments to working conditions or hours, and ensuring that the necessary understanding, support and recognition is available on return to work, while the researcher's privacy is also respected.				
Working with display screen equipment (DSE)	Prolonged sitting	Pregnant research may develop postural / ergonomic problems due to changes in body proportions or circulation problems due to extended periods of sitting.	Access to more ergonomic equipment, foot rest, etc.				

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				L	C	R	
Physical Hazards	<p>Mental and physical fatigue and working hours</p> <p>Prolonged standing</p> <p>Confined space</p> <p>Lifting</p> <p>Extremes of hot and cold</p>	<p>Tiredness increases during and after pregnancy and may be exacerbated by work-related factors. There may be increased risks to health and safety, including significant risks of infection and kidney disease. Because of pressure on the bladder and other changes associated with pregnancy, pregnant researchers often have to go to the toilet more frequently and more urgently than others.</p> <p>Continuous standing during the working day may lead to dizziness, faintness, and fatigue.</p> <p>Breastfeeding women may also need to do so because of increased fluid intake to promote breast milk production.</p>	<p>Control hours, volume and pacing of work. Adjust how work is organised or change type of work if necessary. Ensure seating is available where appropriate, and take longer or more frequent rest breaks to avoid or reduce fatigue. Adjusting workstations or work procedures where this will minimise postural problems and risk of accidents.</p> <p><i>Resting facilities: Rest is important for new and expectant mothers. The need for rest is both physical and mental.</i></p> <p><i>Hygiene facilities: Easy access to toilets (and associated hygiene facilities) at work, due to distance, work processes or systems, etc.</i></p> <p><i>Breastfeeding facilities: Access to suitable facilities for researcher to breastfeed or express milk.</i></p> <p>Review situation as pregnancy progresses.</p>				<p>Somewhere to sit or lie down comfortably in privacy, and without disturbance, at appropriate intervals.</p> <p>It may be necessary to adjust working hours temporarily, as well as other working conditions, including the timing and frequency of rest breaks, and to change shift patterns and duration to avoid risks.</p>

Task sequence	Hazard	Who may be harmed and how	Existing controls	Current Risk Rating (L) Likelihood x (C) Consequence = (R) Rating			Additional Controls required
				L	C	R	
Travel to/from work	Walking long distances or prolonged standing on public transport	Pregnant researcher in later stages of pregnancy who commute to work may have issues with dizziness, faintness, and fatigue.	Options to work from home				
Field trips, working alone or in isolated locations	Unable to get medical attention when needed	Pregnant women are more likely to need urgent medical attention.	Depending on their medical condition, access to women's communication with others may need to be reviewed and revised and levels of (remote) supervision involved, to ensure that help and support is available when required, and that emergency procedures (if needed) take into account the needs of new and expectant mothers.				Breastfeeding women may require somewhere to express and store breast milk.

Task sequence	Hazard	Who may be harmed and how	Existing controls	Current Risk Rating (L)Likelihood x (C)Consequence = (R)Rating			Additional Controls required
				L	C	R	

Personalize your risk assessment for your own workplace

This is not an exhaustive list of risky activities, processes or chemicals and compounds that may be encountered by the pregnant or breastfeeding researcher, so it is important that you tailor your risk assessment to your workplace (using empty cells above), and complete the assessment by providing a risk score for each activity, using the risk matrix below.

Other activities you might want to include in the assessment and limit your exposure to, could include exposure to radioactive material, electromagnetic radiation and x-ray and irradiating equipment.

Action Plan

		Action By:			Action Complete: Responsible Line Manager	
		Responsible Person	Target Date	Completion Date	Signature	Date

Review

Review Details	Comments
Scheduled Review Date	
Are all control measures in place?	
Are controls eliminating or minimising the risk?	
Are there any new problems with the risk?	
Are the supervisory arrangements adequate?	
Are the levels of skills, capabilities and training adequate?	
Review By: (name)	
Review Date:	

Communication				
	Method	Yes	Date	Comments
	Copy of risk assessment issued to staff			
	Controls covered in team procedure issued to staff			
	Staff handbook issued to staff			
	Other			
How they were consulted on the risk	Health, Safety and Wellbeing Committees			
	Induction			
	Toolbox Talk			
	Team Meeting			
	Email circulation			
	Other			

HSW Risk Assessment Matrix

4	Very likely Probably expect the event to occur in most circumstances	Moderate (4)	High (8)	Extreme (12)	Extreme (16)
	Likely Event likely to occur at least once over the coming year	Moderate (3)	High (6)	High (9)	Extreme (12)
	Possible Event may occur at some time	Low (2)	Moderate (4)	High (6)	High (8)
	Unlikely Occurrence is conceivable, but not expected to occur	Low (1)	Low (2)	Moderate (3)	Moderate (4)
		Minor	Moderate	Major	Severe
		1	2	3	4
Consequence level					

Consequence description	Harm to People Potential for injury or death	None or trivial / negligible injury (no or slight injury which requires localised first aid)	Minor injury (illness or injury is not serious, medical treatment required)	Serious injury (serious injury or illness, hospitalisation required)	Fatality, major injury (death, permanent disablement, or significant long-term illness)
	People Affected Extent of people potentially affected	None or few (e.g. 0 to 2)	Small numbers (e.g. 3 to 10)	Moderate numbers (e.g. 10 to 50)	Wide scale (e.g. more than 50)
	Reputation and Legal Potential for publicity with a negative impact on reputation / potential for legal prosecution	None or issue raised by staff or students and resolved promptly by management None or legal dispute – found not guilty – fines up to \$3 million (Body Corporate), \$600,000 (Officer)	Internal scrutiny to prevent escalation and short-term stakeholder concern Minor non-compliance, limited notification to regulators / affected stakeholders	Medium-term stakeholder concern, national media scrutiny and 'brand' impact Medium non-compliance, moderate notification to regulators / affected stakeholder,	Persistent stakeholder concerns, international media scrutiny and long term 'brand' impact Significant non-compliance, extensive notification to regulators / affected stakeholders, potential for

			potential for legal proceedings / fines	legal proceedings / imprisonment / fines
Operations Extent of ability to maintain core business	None or business interruption < 4 hours	Business interruption between 4 hours to 5 days	Business interruption > 5 days	Business interruption of many weeks
	None or effectiveness and efficiency of a service, programme or project impacted in the short term	Operational disruption manageable by workarounds	Medium operational impact resulting in delay of key deliverables	Breakdown of key activities and significant long-term impact
	None or slight damage to property or equipment	Moderate damage to property or equipment	Major damage to property or equipment	Massive damage to property or equipment
Environment Extent of negative impacts on the environment	None or minimal impact	Minor short-term or intermittent impact, able to be contained with specialist assistance	Serious, medium-term detrimental impact	Very serious, long-term or permanent damage
	None or clean up expenses up to \$25,000	Clean up expenses up between \$25,000 to \$1m	Clean up expenses up between \$1m - \$5m	Clean up expenses > \$5m

Consider the Likelihood

How often is the task done? Has an accident happened before (here or at another workplace)? How long are people exposed? How effective are the control measures? Does the environment affect it (e.g. light, temperature, space)? What are people's behaviours (e.g. stress, panic, deadlines)? What people are exposed (e.g. disabled, young students, etc.)?

Consider the Consequences

What type of harm could occur (minor, serious, death)? Is there anything that will influence the severity (e.g. proximity to hazard, person involved in task, etc.)? How many people are exposed to the hazard? Could one failure lead to other failures? Could a small event escalate?

Calculate the Risk

The final score for each risk is calculated by multiplying the likelihood and consequences response scores. This will give a risk score of between 1 and 16.

All risks rates as "High" or "Extreme" require detailed analysis of mitigating practices / controls to determine the residual risk rating. **Action must be taken.**

"Low" and "Moderate" risks may be excluded from further analysis (other than when the consequence may be severe). However the rationale for excluding these risks should be documented to demonstrate the completeness of analysis undertaken. **Some action may be required.**

Other than in the most unlikely circumstance, risks that can cause major or severe harm to people have been determined as “high” or “extreme”. Management review is considered appropriate for risks of these nature due to the potential magnitude of the impact, even though the likelihood may be assessed as relatively low.

Risk Priority - Legend

Extreme (12-16)	Intolerable risk. Immediate action(s) is to be taken by Faculty/Service HSW risk owners - including DVCs, Deans of Faculties, Directors of Services, Academic Heads/PIs, Services Managers. Work should not be started or continued until the risk has been reduced to as low as reasonably practicable using the hierarchy of risk controls. The Associate Director Health, Safety and Wellbeing, and Manager Risk and Performance must be advised of the risk for their review. The risk should be included in the UoA wide risk register.
High (6-9)	Should not be tolerated. Urgent action is to be taken by the immediate manager. Work should not be started or continued until the risk has been reduced to as low as reasonably practicable using the hierarchy of risk controls. The HSW Manager working with the Faculty/Service, and Manager Risk and Performance must be advised of the risk for their review. To be included in the UoA wide risk register.
Moderate (3-4)	Management to monitor risks in case changing circumstances increase the level of risk. Some action may be required, e.g. improving controls.
Low (1-2)	Requires no further attention above routine practices and procedures, apart from monitoring.

Note: This proposed Health and Safety Risk Assessment Matrix aligns with WorkSafe NZ guidance, UoA Resilience Management Plan, UoA Risk Determination Matrix, UoA TVRA and UoA Incident Levels