

## Information on writing a Risk Assessment and Management Plan

As you identify each potential risk, think about the likelihood of it actually occurring and the consequences if it did. Develop risk management strategies that will eliminate the risk or manage the likelihood and consequences of an unfortunate event occurring. To identify risks and manage them, you need to think in *practical* terms. While this is a part of your education process, writing a Risk Assessment is not an academic exercise. This is a serious tool that must offer practical solutions on what you will do if something unfortunate happens when undertaking your research that could threaten your life or cause distress and harm.

### Definitions of Risk

**Risk** - The chance of something happening that will have an impact on the achievement of the objectives. Risk is measured in terms of consequences and likelihood.

**Risk Assessment** - The overall process of risk analysis and evaluation.

**Risk Management** - The culture, processes and structures that are directed towards the effective management of potential opportunities and adverse effects within the University environment.

**Risk Management Process** - The systematic application of management policies, procedures and practices to the tasks of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risk.

### Step process to undertake a Risk Assessment

Step 1: Identify the hazards/risky activities;

Step 2: Decide who might be harmed and how;

Step 3: Evaluate the risks and decide on precautions;

Step 4: Record your findings in a Risk Assessment and management plan, and implement them;

Step 5: Review your assessment and update if necessary.

### Examples of activities that you might undertake as part of your research

- Working in a laboratory
- Working in a preparation/workshop area.
- Undertaking a research field trip
- Working with animals or in areas with dangerous animals
- Working in remote areas or overseas
- Working with vulnerable people (children, people with disabilities, people with poor health)
- Using boats, 4WD vehicles etc
- Working with NGOs, Government, Industry or Agencies
- Discussing sensitive topics
- Working with people from cultural backgrounds that are unfamiliar to you

- Going SCUBA diving, swimming or snorkelling
- Operating heavy equipment
- Using hazardous materials/chemicals
- Using bottled gases
- Using blood or hazardous biological samples
- Using radioactive sources or equipment
- Using genetically modified materials
- Using high voltage equipment
- Using needles
- Undertaking sustained physical activity
- Sitting or standing for long periods of time in positions that are straining

### Examples of actions that can manage the likelihood of an event occurring

- Inspections;
- Project management;
- Preventative maintenance;
- Quality assurance, management and standards;
- Structured training and other programs;
- Strategic, operational and tactical planning processes.
- Supervision;
- Testing;
- Technical controls;
- Review and compliance programs.

### Examples of actions that can manage the consequences of an event

- Contingency planning;
- Contractual arrangements;
- Design Features;
- Disaster recovery plans;
- Minimising exposure to sources of risk;
- Separation or relocation of activities and resources;
- Insurance;
- Public Relations.

### Level of Risk

Once you have identified the risks involved in the activities you will undertake as part of your research, you can then determine the consequences of an event occurring, and then the likelihood of it actually occurring. The point at which the two categories converge on the risk assessment matrix provides a qualitative assessment of the level of risk. You do not need to address the risks that rate as LOW RISK, however be honest and discuss it with your Supervisor if you are unsure.

### Risk Assessment Matrix

Consequence and Likelihood	Insignificant	Minor	Serious	Disastrous	Catastrophic
Rare	L	L	L	L	M
Unlikely	L	L	M	M	S
Possible	L	M	M	S	H
Likely	L	M	S	H	E
Almost Certain	M	S	H	E	E

### Description of the Matrix

L=Low Risk, M=Medium Risk, S=Substantial Risk, H=High Risk, E=Extreme Risk

Descriptor	Description
Almost certain	Is expected to occur in most circumstances
Likely	Will probably occur in most circumstances
Possible	Might occur at some time
Unlikely	Could occur at some time
Rare	May occur only in exceptional circumstances
Insignificant	Low financial loss, no disruption to capability, no impact on community standing.
Minor	Medium financial loss, minor disruption to capability, minor impact on community standing.
Moderate	High financial loss, some ongoing disruption to capability, modest impact on community standing.
Major	Major financial loss, ongoing disruption to capability, major impact of community standing.
Catastrophic	Mission critical financial loss, permanent disruption to capability, and ruinous impact on community standing.

## Points to consider when writing your Risk Assessment and Management Plan

### Questionnaires and interviews

#### Points to consider

- Where will the questionnaires or interviews be held or conducted?
- Will you be door knocking?
- What time will this happen?
- Will you be alone, in pairs or something else?
- How will you set up people as backup?
- How will you avoid dangerous situations and guard your personal/ helpers safety?
- What possible dangerous situations could arise? Including walking from place to place and meeting members of the public asking their own questions!

### Recruiting and supervising volunteers

#### Points to consider:

- Under OH&S laws, you are supervising volunteers working for you and are therefore largely responsible for their safety (duty of care). It is very important that you understand your responsibilities in case of an unfortunate event occurring. See the notes on Duty of Care and Negligence;
- Friends, fellow students (postgraduate or undergraduate), staff who are assisting outside their normal duties and work experience students are all considered volunteers;
- The age and health of the volunteers might be an important consideration;
- Does your School require you to register each volunteer?;
- You will need to be aware of the volunteers' skills, abilities and disabilities (including medical constraints)
- Relevant to the intended activity.
- As your project progresses the activities may change.
- Do they need to undergo training to use equipment or to learn the safety procedures?
- Is there any heavy lifting? Can this be avoided or reduced?
- Plan verbal briefings so volunteers know what they are trying to do.

### Hazardous materials you may be using in the field

Points to consider:

- What will be used and can it be potentially dangerous to the user or bystanders?
- How will it be transported and are there any guidelines to be met for safe labelling and transport (particularly for cryogenics and gases)?
- What quantities will be used?
- Who is using the material and do they require training in safe/correct use?
- How often and where will it be used?
- Are MSDS forms required?
- Are there any safer alternatives to using this material in the field?
- What PPS will be required?

### Handling and working with animals

Points to consider:

- Are you handling or working in the vicinity of any animals?
- Is there any potential for contracting something from these animals?
- Do you require vaccinations?
- Do you have or will you be having training in the handling of these animals?
- Are there any transport and labelling considerations for either equipment, animals or specimen samples?
- Do you have a current first aid certificate?
- Are you working with volunteers?
- Are you working within another organisations safety guidelines?

### Working in remote areas

Points to consider:

- Is it in mobile phone range? Or will you need to take a Satellite Phone/ EPIRB?
- Where is the nearest source of medical help, how would you get to it?
- Do you have a first aid kit and are you trained in remote skills?
- What health and safety risks does this site pose to you?
- Who will you be working with alongside you?
- Describe the location where you will be working and how you would get to it.

## Working with computers

Points to consider:

- Is your computer backed-up on a daily basis?
- Don't sit at the computer for more than 2 hours without a stretch
- If you sit at a computer for more than 4 hours a day, consider undertaking an ergonomic evaluation ([ergo.human.cornell.edu/ergoguide.html](http://ergo.human.cornell.edu/ergoguide.html))
- Are you aware of who your help contact points are?
- Is your computer virus-protected, is it up-to-date?
- Does your computer have adequate memory space?
- Remember to save your work!!!
- Burn final documents onto CD

## Helpful documents for guidance and more information

Risk Management for Community Organisations:

[https://www.icwa.wa.gov.au/publications/cif/cif\\_risk\\_it.pdf](https://www.icwa.wa.gov.au/publications/cif/cif_risk_it.pdf)

Model Policies on Duty of Care and Risk Assessment:

<http://youthaction.org.au/wp-content/uploads/2013/03/modelsafety.pdf>

Environmental Health Risk Assessment Guidelines for assessing human health risks from environmental hazards:

[http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/132/\\$FILE/132 Noise Watch Australia Submission Attachment B.pdf](http://www.health.gov.au/internet/nhhrc/publishing.nsf/Content/132/$FILE/132%20Noise%20Watch%20Australia%20Submission%20Attachment%20B.pdf)

WA Government Health Risk Assessment:

[http://www.public.health.wa.gov.au/cproot/1499/2/Health\\_Risk\\_Assessment.pdf](http://www.public.health.wa.gov.au/cproot/1499/2/Health_Risk_Assessment.pdf)

WA Emergency Contacts:

[www.health.wa.gov.au/services/category.cfm?Topic\\_ID=1](http://www.health.wa.gov.au/services/category.cfm?Topic_ID=1)