

# Risk Assessment

## 1 PURPOSE

- 1.1 The Management of Health and Safety at Work Regulations require an assessment of the work related risks to employees, students, visitors and members of the public arising out of a School's or Department's activities.
- 1.2 The purpose of this is to assist in identifying those measures needed to remove or otherwise control the risks and to mitigate any consequences. The risk assessment will help determine whether everything that needs to be covered has been.
- 1.3 This procedure outlines the process of undertaking a Risk Assessment in the University.

## 2 SCOPE

- 2.1 This procedure is applicable no later than 1<sup>st</sup> August 2017 and applies to all work activities in the University.

## 3 DEFINITIONS

<b>Hazard</b>	Something with the potential to cause harm
<b>Risk</b>	Likelihood of potential harm being realised
<b>Harm</b>	Includes physical injury and mental ill health
<b>Risk Assessment</b>	Examining what could cause harm to people and weighing up whether enough is being done to prevent harm
<b>Control Measures (controls)</b>	Measures put in place to mitigate the Risk. Controls can reduce the likelihood of exposure to the hazard or lessen the severity of the injury should the hazard cause harm.
<b>Reasonably Foreseeable</b>	A hazard that, based on common knowledge, sector knowledge and specialist knowledge of the work being undertaken, would not be unexpected.

**Reasonably Practicable** What can reasonably be done to ensure the health and safety of workers and others. It involves weighting up time, money and effort against reduced injuries and ill-health

## 4 RESPONSIBILITIES

### Vice-Chancellor

- 4.1 On behalf of the Council the Vice-Chancellor has executive responsibility to ensure, that the requirements of the health and safety legislation and the University health and safety policy are complied with. The Vice-Chancellor will ensure that responsibility for health and safety is properly assigned and accepted at all levels within the University.

### Deans, Directors, Heads of Schools and Departments and Research Institute Directors

- 4.2 Are responsible for ensuring that:-
- all necessary Risk Assessments have been created and are being annually reviewed.
  - control measures, deemed as necessary, are resourced and implemented.

### Managers

- 4.3 Must ensure that:-
- all necessary members of staff have been trained to complete risk assessments
  - all work activities, including undergraduate, post graduate and research activities, have suitable and sufficient Risk Assessments.

### Risk Assessors

- 4.4 Will complete risk assessments in conjunction with relevant stakeholders in line with this procedure and University training.

## 5 PROCEDURE

### List of Work Activities

- 5.1 In order to ensure that all activities have been considered and to show that risk assessments have been done for all foreseeable hazards; the head of

each area should prepare a list that shows its activities and the risk assessment name or number that considers the hazards related to that activity. See Appendix 1 for an example.

### **Risk Assessment Process**

- 5.2 When you have decided what areas/activities to cover, risk assessment is a 5-step process
1. Look for the reasonably foreseeable hazards associated with the work activities
  2. Decide who might be harmed
  3. Evaluate the risks and decide whether further controls can be added
  4. Record the findings and implement them
  5. Review your assessment and update if necessary
- 5.3 Guidance on the whole process of undertaking risk assessments and completing the associated forms is included in appendix 3. Training in undertaking risk assessments is also available.

### **Identify the Hazards**

- 5.4 For each task, list all the hazards associated with that activity. Listed in appendix 2 are common hazards classified into 3 groups. These lists are for reference only and are not exhaustive. Any other hazards specific to the work activity you are assessing must be added to your risk assessment.
- 5.5 If you have 4 or more hazardous substances or substances that are mutagenic, carcinogenic or teratogenic then complete a separate COSHH assessment.
- 5.6 Likewise, if your work activity has manual handling that involves a 2-person or team lift or has heavy and bulky items then contact your Health and Safety Advisor for assistance assessing this operation. Simple manual handling operations can be included on the general risk assessment form.
- 5.7 Display Screen Equipment should be included if there is computer work in the area/activity you are assessing, but individuals should complete the DSE training and assessment.
- 5.8 Stress may be included on the general form but a generic Stress Assessment (RA7/1 form) should be completed for each area. Separate procedures exist for COSHH, Manual Handling, DSE and Stress management.

### Decide who might be harmed and how

- 5.9 This involves identifying groups of people as opposed to naming individuals. In each assessment, identify who might be harmed and what type of injury or ill health might occur. This will help you identify the best way of managing the risk.
- 5.10 Children, young people, new or expectant mothers, migrant workers and disabled persons may have particular requirements. Likewise cleaners, maintenance workers, visitors, contractors etc., who may not be in the workplace all the time, must also be considered where appropriate.

### Evaluate the Risks and Decide on Precautions

- 5.11 The risk assessor then needs to assess the risk by considering the severity of any potential harm and the likelihood of that occurring. Details of this process are again included in appendix 3. Severity and Likelihood are determined with the existing control measures in place and being used.
- 5.12 Using the matrix on the form will determine the overall risk rating associated with each hazard i.e. high, medium or low. If the risk from a particular hazard is high, the work **must not be undertaken** until more safety controls are in place to reduce the risk to at least medium. Medium risks are acceptable but must be given priority for action to introduce additional controls that reduce the risks as far as is reasonably practicable.
- 5.13 The risk assessor will need to consider if further controls could further reduce the risk. The “hierarchy of controls” is contained in appendix 3 and shows what actions can be taken. When new controls are introduced, the risk assessment should be reviewed.

### Record the significant findings

- 5.14 WORD and EXCEL versions of the Risk Assessment forms are available on the [Health and Safety Services](#) website. Either format is acceptable; risk assessments may be stored in electronic format and/or paper format.
- 5.15 The risk assessment forms are a record of the assessment and show what needs to be in place to control the risk, who has the responsibility to use each control and when this should be completed.
- 5.16 The risk assessor signs the assessment to show they have completed the assessment and at this stage, if they consider additional controls are appropriate this should be noted in the Assessor’s comments box.

- 5.17 The line manager, who has overall authority to implement the control measures listed, must also sign the risk assessment. At this stage, the manager is signing that they agree with the content of the risk assessment and will arrange for action to be taken regarding suggested additional controls. Signing by management cannot be left until all controls are in place.
- 5.18 For the risk assessment process to succeed, it is essential that all relevant staff, students and anyone else affected is informed of the results of the risk assessments. Time should be allowed for this consultation and comments and feedback on the risk assessment taken into account. Each member of staff should have access to the risk assessments for their job and copies should be readily accessible.
- 5.19 Where staff from other departments may be affected by the activities, those departments should be made aware of the relevant risk assessments this includes maintenance staff, cleaning staff etc.
- 5.20 A risk assessment must be held for at least 3 years and be available for inspection by HSE(NI), Health and Safety Services, Trade Union safety representatives, Health and Safety Coordinators and anyone else who has reasonable grounds for seeing them.

### **Review the Risk Assessment and Update if Necessary**

- 5.21 A risk assessment is a “living” document. Risk assessors should monitor the work activities they have assessed to ensure that the controls are being implemented and amend the risk assessment if any significant changes occur.
- 5.22 Significant changes include
- Changes in the way the work is done
  - Changes in personnel
  - Changes in equipment used - Changes in location
- 5.23 The risk assessment should be reviewed after an accident or incident has occurred. The absolute minimum review frequency is once per year for each risk assessment. The date of each review should be entered on the form

### **Undergraduate, Postgraduate and Research Risk Assessments**

- 5.24 For student and research projects, it is essential that the activity is assessed to determine if there are any reasonably foreseeable hazards. If there are none, then no Risk Assessment is required. If there are hazards then the risk assessment:-

- should be undertaken BEFORE the project commences
- forms a separate appendix to the research or project report.
- must be communicated to all staff and students who are involved with the project or research work

## **REFERENCE DOCUMENTS**

The Health and Safety at Work (Northern Ireland) Order (1978)

The Management of Health and Safety at Work Regulations

## APPENDIX 1

### List of Work Activities

<b>Area / Activity</b>	<b>Number of Risk Assessment</b>	<b>Name of Risk Assessment</b>
General Office environment	No. 1	General Office Risk Assessment
Intercampus Driving	Include in No. 1	
Preparation for Practical Modules	No. 2	Preparation for Labs and Workshops
Running Practical Modules	No. 3	Running Practical Modules
Taking student groups off Campus	No. 4	Taking student groups off Campus
Organising Events	To be completed when required	
<b>Role</b>		
HoS	Covered by No. 1	
TSM	Covered by Nos. 1 and 2	
Technician	Covered by Nos. 1 and 2	
Academic	Covered by No. 1	
Admin	Covered by No. 1	

## APPENDIX 2

### TYPES OF HAZARD

<b>General Hazards</b>	
Working with electricity	Working with Needles
Working in potentially explosive atmospheres	Working with Sharp edges, scalpels, blades
Working at height potential for person falling and dropping objects	Working alone in a hazardous environment
Slips/trips/falls on the level	Poor housekeeping
Unsuitable/inappropriate use of hand tools	Dealing with the public - potential for violence and aggression
Working with poorly maintained tools	Welding – electric, oxyacetylene
Working with inherently dangerous tools e.g. knives	Working with dangerous machinery – potential for entrapment, entanglement
Moving Vehicles on premises and public roads	Field trips – communication, sunburn, weather, cliffs, boats
Inadequate lighting	Inadequate ventilation
Working on and around Fork Lift Trucks	Lack of supervision
Use of access equipment	Lack of information/training
Working in Confined spaces	Working with Gas/gas cylinders
Working in, on and around rivers / sea	Fire
Manual handling activities	Unsafe behaviour
Hazards associated with pregnancy/disability/young workers	Working with very hot / very cold equipment
Working with Display Screen Equipment	Hazards associated with travelling abroad



<b>Hazardous substances</b>	<b>Specialist hazards</b>
Asphyxiants	Ionising radiation
Toxins	Non-ionising e.g. ultra violet, infra-red, microwave
Corrosive	lasers
Harmful or irritant	Radioactive waste
Cancer causing	Lab/process waste
Sensitisers	Entry to confined spaces
Contact with animals	Excessive noise
Substantial quantity of any dust	Vibration
Contact with poisonous plants	Lead
Human blood/body fluids	Flammable/highly flammable material
Cells human/animal	Work on live electrical equipment
Micro-organisms e.g. legionella, hepatitis	Asbestos
Clinical waste/hazardous waste	Occupational Stress
Flammable materials	
Highly flammable materials	

## APPENDIX 3 GUIDANCE ON RISK ASSESSMENT

### 1 FAQ's

Do I need to do a Risk Assessment for everything?	Concentrate on real risks. You only need to do risk assessments for those hazards that are Reasonably Foreseeable.
Do all Risk Assessments have to be written down?	Basically all assessments should be written down. Some assessments will be dynamic i.e. you see a situation and assess what needs to be done to keep people safe. However the majority of assessments will be written as.....
I'm taking students on a visit to London, do I need to do a Risk Assessment for everything – flights, London transport, visit to exhibition, students being out at night etc.?	If the work element of the trip is low risk or is covered by the H&S management system of the place you are visiting, then a Risk Assessment is not required.
We have offices on three campuses; do I need separate assessments for each campus?	If the same hazards are on each campus then one assessment will do. If one campus has something extra then you can add an extra line for that hazard on that campus.

### 2 Risk Assessors

When deciding who is best to carry out a risk assessment, the following points should be considered. Is the assessor:

- familiar with the work and how it is actually done?
- in a position to decide what, (if any), risk reduction measures are necessary?
- able to assess if risk reduction measures are used?
- trained in the Ulster University risk assessment process within the last 3 years?
- clear about which work activities they are required to assess before they are nominated for risk assessor training?
- given adequate time to complete the assessments and follow up work on any control measures?
- aware of their limitations and where to access more specialist advice if necessary?
- able to effectively communicate the content of risk assessments to all those who need to know?

- able to access electronic risk assessment forms and procedures through the Health and Safety Services' webpages?

### 3 Completing the Form

Health and Safety Risk Assessment- general hazards to staff 03/07

<b>Work activity assessed</b> <b>School/Department reference</b> Date:		<b>All manual handling activities, setting up open days</b> <b>Open Days</b> <b>19/5/2014</b>					
<b>Person(s) affected</b> <input checked="" type="checkbox"/> Staff <input type="checkbox"/> Students <input type="checkbox"/> Others <input type="checkbox"/> <b>Numbers affected</b> 10		L I K E L I H O O D	frequently	MEDIUM	HIGH	HIGH	
<b>Activity frequency</b> <input checked="" type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Other <input type="checkbox"/> <b>Campus</b> (please tick) <input checked="" type="checkbox"/> J <input type="checkbox"/> C <input type="checkbox"/> M <input type="checkbox"/> B <input type="checkbox"/> ALL <b>Room ref</b> (if relevant) <b>Review due</b> 12/5/2015			sometimes	LOW	MEDIUM	HIGH	
			rarely	LOW	LOW	MEDIUM	
			SEVERITY →	trivial	significant	severe	
Individual Tasks	Hazards	Controls required	In place Yes ✓ No ×	Risk rating (use matrix)	IMPLEMENTING THE CONTROLS		
					Action by whom?	Action by when?	
Delivering leaflets and guides to display areas	Manual Handling – resulting in musculoskeletal injuries.	Staff receive Manual Handling training. Refresher training is provided every 3 years. Good housekeeping ensures that display areas tidy.	YES	Low	Line Managers	Currently in place	
	Overfilling Trolleys	Instruct staff not to overfill the boxes they have to lift onto and off trolleys.	YES	Low	Staff	When setting up and dismantling displays	

#### Decide on the area/activity to be risk assessed

- 3.1 When deciding on what to include in a risk assessment consider the following points
- Be pragmatic, do not do separate risk assessments for similar areas, do one assessment for all the offices under your responsibility even if they are on different campuses,
  - Do not do single hazard assessments,
  - Consider doing one risk assessment for all activities in a laboratory or workshop instead of having separate risk assessments for each piece of equipment.

Health and Safety Risk Assessment – general hazards to staff 03/07

Work activity assessed	<b>All manual handling activities, setting up open days</b>		
School/Department reference	Open Days		
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Numbers affected 10		sometimes	LOW MEDIUM HIGH
Activity frequency <input checked="" type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> Other <input type="checkbox"/>		rarely	LOW LOW MEDIUM
Campus (please tick) <input checked="" type="checkbox"/> J <input type="checkbox"/> C <input type="checkbox"/> M <input type="checkbox"/> B <input type="checkbox"/> ALL		SEVERITY →	
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**Look for the hazards associated with the work activities**

- 3.2 When assessing a work activity there may be a mixture of general hazards, hazardous substance hazards and manual handling hazards.
- 3.3 One of the most important aspects of your risk assessment is accurately identifying the potential hazards in your workplace.
  - A good starting point is to walk around your workplace and think about any hazards. In other words, what is it about the activities, processes or substances used that could injure the staff or students or harm their health?
  - Check manufacturers’ instructions or data sheets for chemicals and equipment as they can be very helpful in explaining the hazards and putting them in their true perspective.
  - Look back at your accident and ill-health records – these often help to identify the less obvious hazards.
  - Take account of non-routine operations (e.g. maintenance, cleaning operations or changes in production cycles).
  - Remember to think about long-term hazards to health (e.g. high levels of noise or exposure to harmful substances).

**Evaluating the risks**

- 3.4 The risk is assessed by considering the severity and likelihood as follows:-

Determine the **Severity** of harm - this is the likely outcome if the hazard did cause harm.

Trivial	There may be no injury or a minor injury for which local first aid attention will be sufficient
Significant	An accident would result in time off work, broken bones, chemical burns, poisoning or hospitalisation
Severe	Death, loss of limb, loss of sight in one or both eyes, permanent severe disability etc.

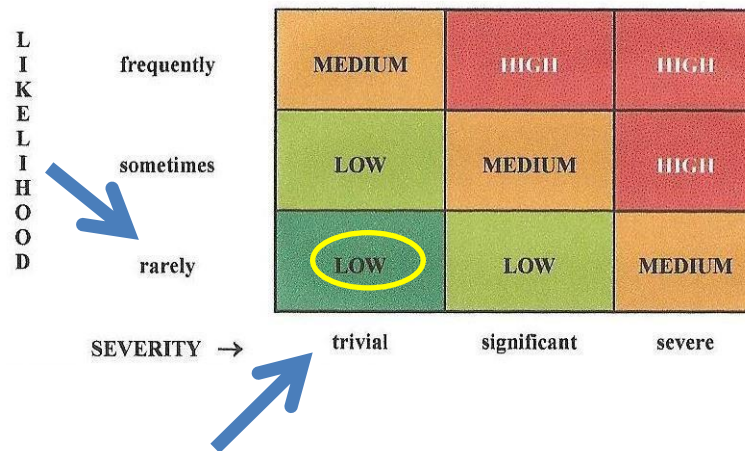
Determine the **Likelihood** – this is the probability that the hazard will cause an accident resulting in the harm - decided above.

Rarely	Unlikely to happen	approx. 1 chance in a million
Sometimes	Could happen	approx. 1 chance in a hundred thousand
Frequently	Will probably happen	approx. 1 chance in a thousand

NOTE: the Severity and the Likelihood are determined with the existing control measures in place.

**Example**

- 3.5 In an office there is a guillotine that is used for cutting card and paper. The hazard is operating guillotine, the guillotine has a guard around the blade that prevents access to the blade.
- 3.6 Severity is 'Trivial' because with the guard in place, you may be able to get a long fingernail under the guard and touch the blade but that would be all.
- 3.7 Likelihood is 'Rarely' as it very unlikely that someone who is competent to use the guillotine would do that.
- 3.8 However other controls must be put in place e.g. instruction saying guillotine must only be operated with guard in place, supervision by manager of staff involved in using guillotine
- 3.9 Use the matrix to determine the level of Risk



### Specialist Hazards

3.10 Risk assessment of more complex specialist hazards may require advice from the following:

Specialist hazards	If necessary contact
Ionising radiation	University Radiation Protection Advisers
Radioactive waste	
Lab/process waste	Physical Resources
Asbestos	Health and Safety Services
Lasers	
Vibration	
Flammable/highly flammable material	
Excessive noise	
Lead	
Non-ionising radiation	

### Hierarchy of controls

3.11 When deciding on further controls the hierarchy of controls looks at the actions that can be taken.

1. Elimination – remove the hazard i.e. fix problem, get new equipment, change process etc., this is the most successful means of reducing risk.
2. Substitution – Replace the material or process with something that is less hazardous e.g. use plastic bottles instead of glass.
3. Physical controls – physical methods to separate people from the hazard e.g. fume cupboards, LEVs, push-sticks etc.
4. Administrative controls – processes put in place to reduce exposure to hazard e.g. job rotation, area safety rules, signage etc.

5. Personal Protective Equipment – this option should always be treated as the last resort in providing long term protection from hazards. This equipment protects only the wearer and no one else in the vicinity. The right supervision of the use of the equipment, training in its use, maintenance and storage is vital.

3.12 Items at the bottom of this list require greater management commitment to ensure they are effective at all times e.g. ensuring the correct gloves are ordered and worn when required. When deciding which controls to use you must balance the cost of implementing them, in terms of time, effort and money and the benefits in terms of reduced accidents and ill health. All reasonably practicable control measures must be implemented.

Health and Safety Risk Assessment- general hazards to staff 03/07

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		Good housekeeping ensures that display area is tidy.	YES		Staff	When setting up and dismantling displays
	Overfilling Trolleys	Instruct staff not to overfill the boxes they have to lift onto and off trolleys.	YES	Low	Staff	When setting up and dismantling displays

**Record the findings and implement them**

3.13 The final two columns are completed to show who has the responsibility to use each control and also states when this should be done.