Health and Safety Services

UNIVERSITY OF GREENWICH

Guidance on Completing Risk Assessments

Contents

1. Overview

As an employer, the University is required by law to protect its employees, and others, from harm. Under the Management of Health and Safety at Work Regulations 1999, the minimum we must do is:

- Identify what could cause injury or illness (the hazards)
- Decide how likely it is that someone could be harmed and how seriously (the risk)
- Take action to eliminate the hazard(s), or if this isn't possible, control the risk.

This document supports the Code of Practice for Completing Risk Assessments and aims to provide practical guidance to assist University staff in ensuring their risk assessments are considered "suitable and sufficient".

2. Definitions

"Control measure" – Something that does / will minimise the likelihood and severity of any injuries or ill health that may occur for all individuals and groups who may be affect by the hazards identified.

"Hazard" – Anything with the potential to cause harm. Examples include handling chemicals that have the potential for spillages and accidental exposure, perhaps causing burns to the skin or damage to the lungs; working on a roof has the potential for falls from height or dropped tools, possibly causing death or severe fractures.

''Persons at Risk'' – When conducting a risk assessment, it is essential to identify all individuals who may be affected by the activity, including those directly involved and others who may be indirectly exposed to potential hazards. To ensure appropriate control measures are in place, these risks must be carefully assessed and documented. The following categories should be considered and recorded in the risk assessment form:

- Individuals carrying out the activity, including staff, students, and researchers.
- Technicians and support staff responsible for preparing, maintaining, or clearing the workspace.
- Observers and bystanders who may be present in the area or using shared equipment.
- Maintenance personnel and contractors working on equipment or within the area.
- Domestic and security staff who may enter the space outside of regular hours.
- Individuals requiring extra precautions, such as those who are pregnant, have health conditions, are inexperienced, or have disabilities.
- Environmental considerations, including emissions, by-products, waste, and disposal routes.

"Reasonably Practicable" - Unless there is a more specific higher legal requirement, usually indicated by '*shall'* or '*as far as practicable',* then most precautions to minimise risk are *'so far as is reasonably practicable.'* The term 'reasonably practicable' means that the degree of risk in a particular activity should be balanced against the resources (time, effort, cost) and difficulty of taking all the technically possible measures to avoid

or minimise the risk. If applying these resources is so disproportionate to the risk that it would be unreasonable to implement them, the employer is not obliged to do so.

"Risk Assessment" – The process of identifying all the health and safety hazards of a given work activity and determining the associated risks, if the work is carried out with the planned precautions. If the risks are deemed to be unacceptably high, the assessment also identifies additional steps that need to be taken, when and by whom, to reduce the risks further.

"Suitable and Sufficient" – For a risk assessment to be deemed suitable and sufficient it must:

- identify all the hazards associated with the activity
- include what is reasonably foreseeable
- be proportionate to the risks and the nature and duration of the work
- take account of legislation, guidance, and industry good practice
- evaluate the extent of the associated risks, taking the understanding of existing or planned precautions and their effectiveness
- identify additional precautions, if necessary, with timescales and responsibility for their implementation
- be kept up to date

3. Guidance for completing the risk assessment form

The guidance below sets out the information that should be considered when carrying out a general risk assessment and what should be recorded under each section of the relevant risk assessment form. (See

3.1. Faculty / Directorate / Unit

Please enter the name of the Faculty, Directorate or Unit for which the assessment is being undertaken. If using the form to assess an area or activity, please state which Faculty / Directorate / Unit is responsible for managing that area / activity.

3.2. Title of Risk Assessment / Work Being Assessed

Please provide a brief, meaningful, title of the assessed activity, for example, 'Annual stocktaking and disposal of surplus materials in storeroom 123' rather than 'Stocktaking'

3.3. Location of work being assessed

Please provide details of where the activity will occur such as the area, room, laboratory, workshop, building, campus, or off-campus area.

3.4. Description of work being assessed

Please provide a brief description of what the work will involve, setting out the following:

- Duration and timing of the activity (particularly if it runs outside regular hours or overnight) and if suitable notifications have been made under University or local arrangements.
- Frequency of the activity (for example, daily, once a year)

- Details of all stages of the activity being considered in the assessment such as preparation, storage, transportation, use, disposal, or the specific stages or portions of the activity if the whole is not under consideration.
- Details of materials and/or chemicals that will be used.
- Details of equipment that will be used.
- Estimate of quantities used (this is the total used over the course of the task / activity and by all people involved).

When undertaking research activities attach the research paper, protocol, or method statement to the risk assessment. Within the description of "work being assessed" make note of any differences between the paper/protocol/method and the proposed work/activity, for example different quantities, materials, or equipment.

3.5. Potential Hazards and their consequences

Identifying hazards inherent in a task or process is crucial for ensuring safety and preventing accidents. The general risk assessment form includes several Hazard Categories, which cover a range of activities that may need to be assessed. Each category should be carefully considered, and relevant information should be entered under the appropriate hazard category. If a category is irrelevant to the assessment, either delete that section or enter 'Not Applicable' or 'N/A' under that category.

When determining if a category is relevant, consider the planned activity, where it will be undertaken, by whom and when. List aspects of the work with significant inherent hazards (hazards which are expected or foreseeable in the context of the work or process being undertaken and where it will be done).

In each relevant category on the assessment form, provide brief details of:

- All the reasonably foreseeable hazards for those preparing for the activity, doing the work, or clearing up afterwards, for example, calibrating equipment, handling heavy loads, exposure to noise or dust, disposal of waste chemicals, and repairing equipment.
- All the reasonably foreseeable hazards for others who are not directly involved; for example, working at height in a free access area could mean tools drop on passers-by, and using solvents may affect others working elsewhere in the laboratory.
- Which equipment, or materials, or parts of the activity could cause injury or ill-health. Examples include transport; fixed machinery; analytical equipment; electrical equipment; hand tools, needles.
- How the equipment and materials are normally used, and how could injuries or ill-health occur. For example, routine use of scalpels could cause cuts if the blade slips, and spillage of a corrosive liquid could cause burns to the skin.
- How injuries or ill health could occur if something goes wrong, such as a power failure stopping the fume cupboard fan, leading to hazardous fume exposure, or a water supply failure causing cooling system malfunction and overheating risks.
- Whether the harm likely to be instantaneous (acute - e.g., contact with a hot surface) or over a more extended period (chronic - e.g., exposure to excessive noise)

3.5.1. Hazard categories:

The examples given in the below are for awareness only and are not exhaustive. When completing the risk assessment, you should include any / all hazards which might foreseeably cause harm during the task / activity being assessed.

Physical hazards - These are any hazards which carry the risk of physical injury e.g. cuts from sharp edges, strains when handling items (Material properties such as weight, shape, size, and density can impact potential risks), fractures from slipping, tripping of falling, burns from contact with hot / cold surfaces, eye injuries / loss of sight from foreign bodies, respiratory issues

Equipment hazards – in addition to physical hazards above, equipment can present hazards during its storage, handling and use e.g., Tools might present pinching or crush injuries; machinery can rotate and entrap the user; vehicles move and can crash; noise and vibration can be produced; work at / fall from height may occur; electricity can cause shocks / electrocution; fire may occur; vacuums or high pressure may be involved; radiation may be present, including ultra-violet, lasers, and X-rays.

Chemical hazards – Substances that are classified as hazardous to health will carry a warning label describing the nature of the hazard e.g., toxic by inhalation or ingestion; irritant; corrosive; flammable; explosive; oxidising; radioactive. These require a special "COSHH" risk assessment. When completing the risk assessment consider how the product will be stored, handled, used, and disposed and include the initial products, intermediates, and waste generated during the process – will any of these elements present an opportunity for people to be exposed to the hazard or for the environment to be harmed by its use / release?

Biological hazards - includes 'Any micro-organism, cell culture or human endoparasite including any which have been genetically modified, which may cause infection, allergy, toxicity and other hazards to human health'. This includes bacteria, viruses, fungi, and parasites. As with chemical hazards above, consider whether the storage, handling, use, and disposal of biological agents, intermediates, products, and waste might expose someone to the hazard.

Natural physical hazards - effects of the natural environment, climate, landscape, plants, animals e.g., extreme weather; earthquakes and volcanoes; mountains, cliffs and rock falls; glaciers, crevasses and icefalls; caves, mines and quarries; forests including fire; marshes and quicksand; fresh or sea water; tidal surges

Psychosocial hazards – related to the way the work is designed, organised and managed. This could include work related stress, interpersonal conflict, poor work design, bullying or harassment.

Environmental impact - e.g., pollution and waste (to air, water or land); deposition of rubbish; disturbance of ecosystems; harm to animals or plants

3.5.2. Example:

Annual stocktaking and disposal of surplus materials in storeroom 123, where a step ladder is used to access boxes stored on racks / shelving units.

Significant hazards may arise due to:

- the storeroom's remote location, which could delay assistance in case of an accident, or
- falling off the stepladder while reaching high shelves, or
- frequent manual handling of the stepladder and boxes of materials in the narrow aisles, or
- If working alone, there is a risk of injuries from tasks that typically require two people.

3.6. Control Measures and Risk Mitigation

For each significant hazard identified, provide brief details of all the existing and planned precautions (control measures) that will be in place to minimise the likelihood and severity of any injuries or ill-health that may occur for all individuals and groups who may be affected by the hazards identified. The following points should be addressed:

Eliminate or substitute the hazard - Is there a different way to do this task that either removes or reduces the hazard . E.g. Instead of working at height to clean windows, could you use an extendable cleaning tool; if handling heavy items, could you make use of mechanical lifting aids or break the load down into smaller/ lighter components; could you substitute a hazardous substance with one that is less hazardous?

Safe working methods and procedures - Document where and how the work must be done, including whether any specific arrangements need to be made, for example, periodic delivery of materials to a particular location, arranging access – if this is critical, a local code of practice will be required, to describe the sequence of steps that must be followed.

- Are there any restrictions or prohibitions?
  - can this only be done by authorised personnel
  - are there specific lone working arrangements (NB lone working is prohibited for undergraduates in laboratories and workshops)
  - must it be completed only in particular location(s)
  - are there timing restrictions, for example, must it always be carried out during normal working hours
  - is there a minimum number of people, for example, working in pairs to handle heavy loads
  - can the work only be done under supervision

Materials and equipment – should be the safest and most suitable for the work. E.g Mobile elevated working platforms (MEWPs) offer better protection than ladders, when working at height; Forklift trucks may be more appropriate than trolleys, when moving larger loads.

- Are there any particular instructions or precautions for the use of the equipment and are arrangements in place for periodic equipment checking, maintenance, servicing, and inspection, if necessary?

Competence, information and training, and supervision - All personnel involved must be competent to carry out the work or be under competent supervision.

- Look at precisely what the people doing this activity will need to know. Will they already have the necessary knowledge and skills, including any practical expertise? Will

training be required? If so, does this need to be before work commences and with periodic refreshers?
- Does the training need to be a formal course / to a particular standard / from a named provider or a local briefing with specific fixed content. If so, who will deliver it?
- What are the maximum staff/student ratios or workgroup size?
- Are there arrangements to check that the proper precautions (control measures) are in place and followed?
- Are associated local Codes of Practice, Standard Operating Procedures (SOP) and/or guidance and instructions kept up to date and available to those carrying out the work?
- Don't forget to include arrangements for providing advance information and notification to others who might affected by the activity e.g., cleaners, contractors and security personnel if necessary

Personal protective equipment (PPE) and clothing - This should always be a last resort after you have consider all other methods of controlling the risk. All PPE and clothing must be suitable for the individual using or wearing it, of the correct type for the working environment and sufficient to protect against the hazard that has been identified. For example:

- Gloves and clothing should be chosen based on the type of exposure (e.g., do they need to be worn outside, or offer chemical-resistance or cut-resistance) Other factors such as length, cuff style and looseness of fit, will need to be considered.
- Eye and face protection should match the level of risk (e.g., safety glasses for minor impacts, face shields for chemical splashes). Consider whether the whole face and neck also need to be covered.
- Respiratory protection should be appropriate for the exposure type and particle size (e.g., respirators for fumes, powered air-purifying respirators for high-risk airborne contaminants).
- Hearing protection must be rated appropriately to the level of noise and be effective without interfering with other safety gear (e.g., ear defenders that do not obstruct the use of safety glasses or head protection).
- Head protection should match the level of risk. Consider the potential types of impact and working environment.
- Safety footwear should be appropriate to the working conditions (e.g. to protect against punctures from items on the ground, protect from dropped items or prevent slips)

Emergency arrangements – first aid, firefighting, communications, spillages – Effective emergency plans must be in place to handle unexpected incidents and reduce risks. Remember to document what actions will need to be taken and by whom.

- Is the campus or Faculty/Directorate/Unit provision of first aiders adequate? Can they enter the area easily and safely? Is specialist knowledge required for the likely type of injury, e.g., chemical burns?
- Are first aid / spill kit supplies adequate for the potential injuries / chemicals and can people access them in an emergency?
- What should be done if the power or water supply fails? Where can services be isolated? Is there a specific safe sequence of steps?

3.7. Residual risks

The residual risk (RR) is judged by multiplying the likelihood that the harm will occur (L) by the severity of that harm if all the planned methods and all precautions are followed (S):

$$RR = L \times S$$

3.7.1. Additional precautions required for future work

Ideally all residual risk scores will be low, if the right control measures are in place and followed. If the risk remains medium or high (with a score greater than 9), further actions must be considered before the work commences, continues, or takes place again. These should be documented as additional precautions (control measures). Examples may be:

- Replacement of equipment
- Improved guarding of machinery
- Revision of existing procedures or Standard Operating Procedures
- Further training for personnel involved
- Provision of better or different PPE

In some cases, it is not possible to make the changes immediately, but they can be noted in the assessment for future action. All actions noted on the risk assessment should be in the SMART format - specific, measurable, attainable, relevant, and time-based – and be allocated to a named person.

3.8. Person(s) completing this assessment

The person who completes the risk assessment should be the one carrying out or managing the activity day-to-day, and who can make informed judgements and decisions on the hazards, risks, and precautions. This could be more than one person and might include:

- The Manager or Supervisor for the activity
- The Health and Safety Local Officer (HaSLO) for the activity / area
- A PhD Student for their own project
- A technician in charge of specific equipment
- The lecturer in charge of a practical lesson

3.9. Other persons commenting on the assessment (where required under Faculty/Directorate/Unit arrangements)

Others involved in the decision-making process should be noted in this section, if necessary. They may be the line managers or academic supervisors responsible for the activity day to day, others carrying out the work, the HaSLO of Health and Safety Manager (HSM). The Faculty/Directorate/Unit H&S committee may also be used as a formal mechanism for comments as part of a project or funding approval.

3.10. Person approving this assessment

This is whoever has the overall responsibility for the activity, the decisions on how it will be carried out, and ensuring that it will be done as described. It should be someone with enough seniority to accept the residual risk contained within the assessment and could be:

- Faculty Operating Officer/Director of Professional Service/Head of Unit
- Head of Department

- Senior Academic
- Manager or Supervisor for activity

3.11. Review of assessment, and revision if necessary

Assessments must be reviewed periodically to check and make sure that all the information is still correct and that the arrangements are still appropriate. Reviews must be carried out at least annual for continuing activities, or sooner:

- When there is a change in relevant legislation, University Codes of Practice, or industry/ higher education sector good practice
- When there are significant changes to work materials, equipment, methods, location, or people involved
- If there are accidents, near misses or complaints associated with the work
- If problems are noted
- When restarting work after an extended period
- For each visit in a series

As part of the review, precautions (control measures) should be checked for their suitability and effectiveness by:

- Observation: is the task being carried out safely?
- Obtaining comments and suggestions from those carrying out the task, supervisors, and observers
- Noting any complaints
- Reviewing environmental monitoring if it is being undertaken
- Reviewing health surveillance if being undertaken
- Reviewing accident and near-miss reports
- Checking compliance with the latest standards
- Checking the sources of information used in the original assessment or most recent review

All significant revised details need to be annotated in the revised assessment, including:

- New details about the activity, hazards, persons at risk or precautions
- Changes to the activity that affect hazards and risk
- Changes to existing precautions that are no longer adequate
- Necessary improvements are recommended to maintain good practice
- Latest sources of information

Small revisions can be annotated on the original assessment form. Ensure the revision(s) are signed and dated. Where a considerable number or substantial revisions have been made it will be appropriate to produce a new assessment.

3.12. Risk Assessment Templates / Forms

The principles and process of risk assessment remain the same across all activities. However, some situations require a specialist risk assessment due to specific hazards, legal requirements, or complexity. These assessments follow the same framework of identifying hazards, evaluating risks, and implementing control measures.

However, the template used must be appropriate for the specific situation or activity. Users must ensure they select and complete the correct risk assessment template based on the nature of the work or individual circumstances. The below templates are available and must be used where applicable to ensure compliance and best practice:

- General risk assessment
- Biological and / or Genetically modified materials
- Expectant (pregnant) mothers risk assessment
- New mothers risk assessment
- (Simple) COSHH risk assessment
- Stress risk assessment
- DSE self-assessment

NOTE: The assessment of hazards related specifically to travelling are built into the FORESIGHT pre-travel approval platform. The general risk assessment form should be used to document the assessment of any hazards related to fieldwork and uploaded to the FORESIGHT system for consideration as part of the related approval process.

4. Further information

4.1. Related HSE Guidance:

Further general guidance on Risk Assessments can be found on Health and Safety Executive (HSE) Risk Assessment Web Pages

4.2. Related University documents:

- Health and Safety Policy
- HS018 General Risk Assessment Form
- HS064 Risk Assessment Matrix

4.3. Other related guidance:

Guidance for the Management of Health and Safety at Work Regulations,1999

5. Document History

Details of reviews are as follows:

Review Date	Reviewer	Summary of Review
23-May-25	Vikki Wood AD H&S Services	First revision (v25.1) – consolidation of previous code of practice and guidance documents, to remove duplication and bring all information into one place.

This document will be reviewed at least annually