

April 2022

Risk Assessment Handbook

Occupational Health & Safety Service
HSD044M (rev 7)



UNIVERSITY OF
CAMBRIDGE

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Revision History

Date	Revision	Summary of changes	Approved by
Sept 2017	4	Full review and revision of the Risk Assessment Handbook to align with current HSE guidance	Consultative Committee for Safety
February 2018	5	Addition of signature to policy, insertion of this Revision History, clarification (pg 7) that “excessive” noise may cause hearing loss.	Sub-Committee for Physical Safety
October 2019	6	Updated RA1 form	Consultative Committee for Safety
April 2022	7	Clarification of responsibilities; revision to syntax; insertion of revised RA1 form	Sub-Committee for Physical Safety

Risk Assessment Policy Statement

The University of Cambridge is committed to achieving and maintaining the highest standards of health and safety in all its activities and premises, to prevent injury to, and ill health of, its employees, students, collaborators, visitors and anyone else that may be affected by risks in its work or premises. The University's Health and Safety Policy dated January 2022 states (section 4.4):

The process of risk assessment is fundamental to successful health and safety management.

There is a statutory requirement for 'suitable and sufficient' assessment of the identifiable risks to health and safety to be carried out in order that Safe Systems of Work and Safe Operating Procedures containing appropriate control measures can be formulated.

Each Head of Department is ultimately responsible for ensuring that risk assessments are being competently completed; that they relate to actual working practices and that they are reviewed as necessary and at least annually.

However, on a day-to-day basis, those managing research or other work, i.e. Principal Investigators, Line Managers and Supervisors, must ensure that risk assessments are completed in their area of control before work commences and in some cases during an activity.

In other words, the University requires everyone responsible for areas of work, research or premises to manage risks effectively by:

1. Carrying out an appropriate 'risk assessment', that is,
 - Identifying all activities and locations that could cause significant harm, and
 - Evaluating the level of risk arising from these, and
 - Determining if reasonable steps (risk control measures) are being taken to prevent the harm, or if more must be done to mitigate the risks

Note: Specific risk assessment forms should be used for hazard topics where the law requires detailed risk assessment – see Appendices.
2. Putting in place the risk control measures identified by the risk assessments
3. Providing suitable information, instruction and training to those involved so they know the risks and what to do to control them
4. Checking that the risk management measures do work in controlling the risks effectively
5. Reviewing and, if necessary, revising risk assessments regularly (at least once a year) and when there is a significant change or an incident.

Principal Investigators and line/premises managers and team leaders must ensure that risk assessments are done to identify and control risks rather than fill in forms, and that:

- All work and research on and off University premises, large event or other use of premises is risk-assessed appropriately, and suitable precautions are in place BEFORE work/research begins or premises are occupied
- Work by contractors/suppliers is risk assessed by the provider and assessments given to the University person purchasing work or equipment
- Assessments are carried out by people who understand the process, equipment or premises, are involved in the tasks, and have sufficient competence to assess the type of risks involved

- The Departmental Safety Officers and/or other specialists are involved in more complex risk assessments
- They, as Pls or managers, have checked risk assessments to ensure they are suitable and sufficient for the level and type of risk, and shown their agreement by signing off the assessment form
- Reasonably practicable measures/precautions are put in place to adequately control the risks
- Work or premises are inspected periodically to ensure risk assessments are up to date and control measures are still effective
- Assessments are regularly reviewed and revised so they stay up to date and relevant
- Everyone involved in the task is suitably briefed, has understood the risks and the reason for using the control measures identified
- Where several Regulations apply to an activity or location and require risk assessment, the requirements of each set of Regulations are met – this may be done through a combined risk assessment.

Heads of Institution are responsible for ensuring that appropriate systems are in place for competent people in their institution to conduct suitable and sufficient risk assessments and manage risks to acceptable levels.

Staff, students and registered visitors of the University are responsible for:

- Finding out about the risks of their work and the precautions in place to control the risks
- Complying with the control measures and any safe operating/working procedures
- Suggesting further improvements to processes and control measures to reduce risks
- Reporting anything that may cause/has caused harm

Dr Martin Vinnell
 Director of Health, Safety and Regulated Facilities
 April 2022

Risk assessment – Why do it? Who is responsible?

What is risk assessment and why is it needed?

Risk assessment is the process used to identify what could cause significant harm to people, determine what measures are required to remove or control the risks to prevent the harm, and then put in place these measures and check they are working effectively.

Sensible risk assessment allows us to think systematically about what we are going to do and how we and others can be kept safe doing it. Assessment also allows us as individuals, and the University as an employer, to meet legal obligations.

What does the law require?

The Management of Health and Safety at Work Regulations (Management Regulations) require all employers to make a 'suitable and sufficient' assessment of health and safety risks to:

- Employees whilst they are at work, whether at their employer's premises or elsewhere;
- People other than employees, such as students, contractors and members of the public (including children, visiting researchers, casual/temporary staff), who may be adversely affected by the employer's activities or premises.

The law also requires the significant findings of assessments to be recorded, and the assessment to be reviewed and revised if there are significant changes to the work, personnel, or circumstances (e.g., if there is an accident).

These duties overlap risk assessment duties under other Regulations. It is therefore possible to do a single assessment covering all the risks of the work (an overall risk assessment), supplemented by specific risk assessments for particular hazards identified by the Safety Office. For example, assessing the risks of ground maintenance may require not only assessment of the use of chemicals (e.g., pesticides) but also from working at height, and hand-arm vibration, which are covered by separate legal requirements for risk assessment.

Who is responsible for assessing the risks?

The principle here is "those who create risks must manage them". The responsibility for health and safety management rests with the employer, i.e. University of Cambridge/your department. In practice this means whoever is responsible for the work/project/premises, must ensure risk assessments are done by someone who understands it and has enough competence in assessing risks.

When should risk assessments be done?

Risk assessment **must always be done when you are planning** an activity or use of new premises, **and before** the proposed work is carried out, the event takes place, or the premises are occupied. Occasionally you will be assessing tasks or premises that are already in place.

If the work is always done in the same way or the use of a location is always the same, it is possible to draw up 'generic assessments', e.g., for:

- Running annual public open days
- Use of a lab which is dedicated to one purpose only
- Routine handling of a particular biological substance
- Repeat activities such as cleaning or grounds maintenance

Generic assessments **must be reviewed and adapted** for the specific work, location, or people proposed and revised if what is planned differs from the original assessment. For example, a generic risk assessment for conferences involving adults must be revised if used for an open day for primary school pupils with a lower level of experience of hazards.

At what level should the process and tasks be assessed?

If a task or premises is too large or complex, break it down into sensible sections for assessment. For example, for detailed, long running experiments, you may have an over-arching general risk assessment, with specific assessments for chemical and biological hazards, or separate assessments for each phase of the experiment.

Risk assessment – How to do it

Who assesses the risks?

Risk assessment should be done by people who know an area or task and are trained in assessing risks. Include people who are involved with the work or area, and make sure at least one of them knows how to assess risks – training is provided by the University and many departments. Complex assessments are often completed by a team of two or more people, including the supervisor/manager, the person doing the task, and the safety officer.

Steps for assessing risks

The Health and Safety Executive (HSE), the arm of the UK Government responsible for safety and health at work, has defined these simple steps for risk assessment*:

Identify the hazards

Consider who might be harmed and how

Evaluate risks and choose control measures

Record significant findings and tell others

Review/revise your risk assessment

Below are the details for each step.

Identify the hazards

A hazard is anything that could cause harm to people, that is, could injure them or damage their health. Common examples at the University include hazardous substances, pressurised gases, poor arrangement of workstations, radioactive substances, noisy equipment, and asbestos in buildings.

Before you start detailed risk assessments, you need to know what your unit does or what buildings you need to cover. Draw up an **inventory of tasks/areas** by talking with colleagues or with a 'walk through' survey: walking through work areas and observing the activities/conditions.

You can **identify hazards** by:

- ✓ Observing activities and talking to people who are/will be carrying out the tasks
- ✓ Considering what will be done routinely, and what may be done in non-routine operations (e.g. maintenance of equipment, clearing up spillages)
- ✓ Checking the supplier or manufacturer's information on the equipment or substances (Safety Data Sheets) – remember to look for hazards that affect long-term health
- ✓ Contacting your Departmental Safety Officer or other departmental specialist
- ✓ Reading University of Cambridge Safety Office guidance, or your departmental guidance; attending University of Cambridge or other safety courses covering the topic (e.g. safe use of cryogenic or pressurised gases)
- ✓ Visiting the HSE website (www.hse.gov.uk)
- ✓ Reviewing accident or ill-health records

Next, use your own and/or your colleagues' experience, previous incidents, or advice from the safety officer to determine what might be higher risk areas of work. Assess these first.

Some **good starting points for assessment** (in alphabetical order) would be looking at work involving:

- Aggression or violence
- Animals
- Biological agents and genetically modified organisms**
- Confined spaces*
- Electrical equipment and installations*
- Expectant or new mothers**
- Experimental rigs
- Field trips**
- Flammable and explosive substances**
- Hazardous substances (including chemicals)**
- Height: ladder, access equipment, high places*
- Ionising radiation**
- Lifting equipment and operations**
- Manual handling**
- Noise*
- Non-ionising radiation (infra-red, lasers)**
- People with specific needs
- Pressure systems and equipment*
- Temperature extremes*
- Travel and work away (including fieldwork)**
- Vibration*
- Work equipment*
- Workplace conditions, including walkways*
- Young persons (under 18)*

*There is specific legislation or HSE guidance covering these issues

** As well as legislation, there are specific risk assessment forms on the Safety Office website to lead you through the legal requirements of these assessments.

Go through your inventory of tasks/areas to identify the significant hazards present in each area or in each part of the job.

You can get **information on significant hazards** from:

- Your PI or manager, your Departmental Safety Officer or the University Safety Office (<http://www.safety.admin.cam.ac.uk/>)
- The Manufacturer's or supplier's information/instructions, such as Safety Data Sheets for hazardous substances, or Technical Data Sheets for equipment
- Records of previous accidents or ill health – especially for less obvious hazards
- The Health and Safety Executive (HSE) webpages: www.hse.gov.uk

Your risk assessment must include hazards from:

- ✓ Non-routine operations like maintenance or cleaning
- ✓ Foreseeable emergencies and dealing with regular problems (e.g., spills)
- ✓ Storage of the material
- ✓ Disposal of waste from the process
- ✓ Substances or conditions that can have long-term effects on health (e.g., noise or carcinogens)
- ✓ Any usual conditions – you do not have to consider **very rare conditions, such as a severe earthquake in Cambridge**

Consider who might be harmed and how

To find out **who** is likely to be at danger of harm, ask:

- Who is doing the task or occupying the premises? Are they employees, students, registered visitors/collaborators, or volunteers?
- Are they competent or familiar with the task/area? Can they be expected to understand risks (no, in the case of children)? What relevant training and supervision will they have?
- Who else might be at risk? Are there others using the premises who could be affected? Do cleaners, contractors, maintenance people and members of the public come in regularly? Is the workplace shared with another organisation?
- Are there young or vulnerable visitors, pregnant workers or people with special needs for whom you must consider specific protection measures (there are specific legal requirements for these)?
- Is there anyone you have missed? Ask the people doing the tasks or running the premises.

Then consider **how** these people could be harmed. Include the most likely injuries - e.g., fracture from a fall or ill health from exposure to a small amount of chemicals – do not assume every hazard will cause death!

Think about what is 'reasonably foreseeable' – that is, what harm or damage you can usually expect based on usual and non-routine working conditions (such as maintenance of equipment).

These considerations will help you choose more effective measures to control the risks. You do NOT have to include every rare effect that could occur.

Evaluate risks and choose control measures

'Evaluating the risk' means assigning a risk level to help you decide:

- a. Which risks are significant and should be dealt with first, and which are too trivial to do anything about, and,
- b. How much time, money and effort to spend on managing the risks to achieve 'reasonably practicable' control

For each significant hazard identified, **evaluate the level of risk** from the hazard by considering:

The SEVERITY of the consequences – how bad will the effects be if the risk is realised? For example, setting up your computer workstation badly could cause pain in your muscles and skeleton, but will not kill you. However, falling off a roof could easily cause death.

The LIKELIHOOD of occurrence – how likely is it that the situation will happen and cause the consequences you have identified? The likelihood can increase if:

- The work is done/premises are used by people with inadequate capability, competence, knowledge or maturity
- There are many people doing the activity
- The activity is repeated often
- The activity takes a long time to complete
- There are major changes to the daily activity that are not evaluated (e.g., non-routine operations like maintenance or cleaning; or using new equipment or substances)

You are NOT expected to think about 'unforeseeable' risks – beware of getting bogged down in thinking up extremely unlikely outcomes or events.

In most cases you will make a **subjective, qualitative** estimate of severity and likelihood, based on the answers to the questions above. Occasionally, you need to use **objective, quantitative**

data, such as when calculating the amount of asphyxiating gas that could be released into a room if there is a major leak.

You can **estimate risk levels** using your own knowledge, published guidance, the knowledge of people involved in the work, accident statistics and/or advice from the Safety Officer.

Evaluating risk levels and deciding if action is needed

Although it is not legally required, you can use a **qualitative** risk matrix such as this one, provided on the HSE website, to help you estimate the level of risk. A matrix can be a clearer way of explaining why you reach a risk level of high, medium or low:

Qualitative Risk Matrix		Potential SEVERITY of Harm		
		Slightly Harmful 1	Harmful 2	Extremely Harmful 3
LIKELIHOOD of Harm Occurring	Highly unlikely 1	Trivial 1	Tolerable 2	Moderate 3
	Unlikely 2	Tolerable 2	Moderate 4	Substantial 6
	Likely 3	Moderate 3	Substantial 6	Intolerable 9

Then use the table below to **decide if you need to take any action**:

Risk Level	Action? (Use hierarchy of risk control measures)
High (Intolerable or Substantial)	DO NOT START WORK without good control measures in place to reduce risk level
Medium (Moderate)	Reduce risks further (consider costs)
Low (Tolerable or Trivial)	Do something to reduce risk if there is little or no cost

Controlling the risk with effective precautions (aka control measures)

Start by taking action to control 'intolerable' and 'substantial' risks and reduce them. 'Trivial' and 'tolerable' risks may require no action but should be monitored in case the situation worsens.

Next, consider what you are already doing to remove or control the risks, and if these measures are working effectively. You will know controls are not fully effective if:

- Health surveillance results show people are exposed to unacceptable levels and health is deteriorating, or there is lost work time due to ill health
- There are 'accidents' or 'near misses'
- Any failure of controls leaves a dangerous situation (fail to danger)

If you can't get rid of the hazard altogether, you must do anything 'reasonably practicable' to control the risks. This means you will balance the money, time and effort you need to spend to manage the risks effectively, against the actual level of risk. The higher the risk, the more effort, money and other resources are warranted to manage it.

The '**Hierarchy of Controls**' (HSE: <http://www.hse.gov.uk/risk/faq.htm#hierarchy>) below helps you choose precautions for reducing the risks to "as low as reasonably practicable". Measures near the top of the hierarchy are more effective at achieving this than those at the bottom:

Hierarchy of Controls

Risk Control Measures	What to consider
Elimination	Can you redesign the activity or do something else to remove the hazard altogether? For example, working at height while window cleaning is now more unlikely as window cleaners use long-handled washing systems while standing on the ground.
Substitution	Can you try a less risky option? For example, if a substance is hazardous only in powder form, can you buy it as a paste or in solution? Make sure the alternative is safer than the original.
Engineering controls	Can you use work equipment, guards, interlocks or other measures to prevent anyone in the area being exposed to the hazard? For example, can you install a fume hood to catch any vapours from hazardous substances or shielding to protect all from radiation produced by X-ray generators or guarding to keep hands away from moving parts of a lathe? Always give priority to measures that protect everyone, over those protecting only one person.
Management or administrative controls	Can you organize the work or put in procedures to protect people? E.g.: <ul style="list-style-type: none"> • Reduce the time people are exposed to hazards (e.g., by job rotation) • Prohibit unsafe behaviour, such as eating and drinking in labs • Provide training in the correct procedure
Personal protective equipment (PPE)	If unacceptable risk of harm remains after the above measures are in place, provide the correct PPE, train people in wearing it correctly, and check it is worn and maintained/replaced as needed. For example, even if chemicals are used in a fume cupboard, people must wear eye protection and lab coats to avoid splashes which could damage their eyes or skin. Workers must be trained in the function and limitation of each item of PPE and be comfortable wearing it. Respiratory protective equipment should be rarely needed and will require a 'face fit test' by a competent person.
Welfare facilities	Make sure there are suitable first aid and washing facilities, so people are treated correctly if they are affected, and do not take the hazard home with them.
Consultation & communication	Make sure the people likely to be exposed to the hazard understand why it is a problem and ask them for their input into controlling the risk. If people are involved in choosing control measures, they are more likely to use them.

You may need to use several control measures together to control the risks adequately. Always consult and involve the workers in this process so that they understand, propose and adopt practicable controls.

Health surveillance – Some hazards cause long-term health effects and may require the exposed person to be put under health surveillance depending on the level of risk. Advice on these is available from your DSO and the Occupational Health Service. An example of health surveillance is hearing checks for people exposed to excessive noise over long periods.

Record significant findings and tell others

Recording 'significant findings' – This means writing down the main points including the hazards, how people are harmed and details of control measures. If you have used a Cambridge University Safety Office generic risk assessment form, or the specialist forms for specific hazards like radiation or hazardous substances, you will have been guided to record what is legally

required. You do not need to record all the scientific research that has gone into identifying hazards, risk levels and precautions, but you should make any assumptions clear.

Risk assessment forms and some completed examples are in the Appendices of this guidance.

If necessary to justify how a risk evaluation was reached (e.g., for use of asphyxiating gases in a room), include a summary of your assumptions, observations, diagrams, operating procedures, method statements and other relevant documents as an appendix. The purpose is to explain your conclusions to anyone reviewing the risk assessment after an accident.

Remember:

- busy people will need to read the assessment so keep it short and to the point
- some people (often frontline staff) do not have online access at work

Telling others means communicating the significant findings to people who could be affected by the risks in a task or area, so they understand the hazards and risks, and know what they must do to keep themselves and others safe. For example, cleaners do not need to understand the process in a lab but must know how to clean without be affected by research chemicals.

How you store the risk assessment is up to you – make sure it is easily accessible to all who need to know about it, can be reviewed and revised, and is secure (not easily lost or destroyed). An electronic version shared by all those involved in the project works well for some, while others prefer to keep a paper copy in the area where the work takes place. For hazardous substances, it is helpful to keep the Safety Data Sheets and the risk assessment close to the work area, so that they can be found quickly and taken by any injured person to hospital.

See the Appendices for the General Risk Assessment Form.

Review/revise your risk assessment

Nothing stays the same forever - most experiments and other works change significantly over time. Risk assessments and control measures must be reviewed and if necessary revised whenever there is a significant change to your method of work, to the people involved or if you suspect the assessment is no longer suitable for the circumstances.

Typical reasons for **review and revision**:

- Significant changes to equipment, way of working, layout or change of premises
- An incident that caused, or a near miss that could have caused, injury or damage
- New personnel with special requirements - e.g., pregnant workers, people with special mobility or other needs, young workers or anyone with severe allergies
- Poor results from health surveillance
- Changes to technology or materials – e.g., safer items are on the market
- Changes to legislation or knowledge about hazards (ask DSO)

Even if none of these changes happen, carry out an annual review to keep your risk assessment up to date. If no revisions are needed, make a note on the document to say so.

Accidents and ‘near miss’ investigations often show risk assessments were:

- Not done, or
- Not reviewed or revised even when the process/personnel changed, and/or
- Unrelated to the specific task/area (not ‘suitable’), and/or
- Missing important details of the risks/parts of the tasks (not ‘sufficient’), and/or
- Missing details of appropriate or effective control measures, and/or
- Not implemented (precautions not put in place) properly, and/or
- Not communicated to or known by all users, and/or
- Not understood by everyone who used them.

Appendices - Aids to risk assessment

Appendix 1: Risk Assessment Forms

The following specialist risk assessment forms are available on the Safety Office webpages:

- [Display Screen Equipment Self-Assessment Checklist](#) (for computer/laptop use)
- [Expectant and new parents at work](#) (read this [guidance](#) too).
- [General Risk Assessment Form \(RA1\)](#) – and in [this document](#)
- [Genetically Modified Organisms, Microorganisms and Plants](#)
- [Hazardous Substances](#) (including explosive atmospheres)
- [Ionising Radiation risk assessment forms and guidance](#)
- [Laser use risk assessment and guidance](#)
- [Manual handling risk assessment and guidance](#)
- [Stress risk assessment](#)
- [Travel \(and work away\)](#)

Appendix 2: References

- 1 **Safety Office webpages:** <http://www.safety.admin.cam.ac.uk/>
- 2 **Safety Office Risk assessment pages:** <http://www.safety.admin.cam.ac.uk/risk-assesment>
- 3 **HSD044M: Examples of completed risk assessment forms:**
http://www.safety.admin.cam.ac.uk/files/hsd044m_examples.pdf
- 4 **Safety Office publications**
A number of documents cover risks and provide guidance for complying with legislation:
See: <http://www.safety.admin.cam.ac.uk/policy-guidance>
- 5 **HSE Website – Risk Management** Webpages: www.hse.gov.uk/risk/
A Brief Guide to Controlling Risk in the Workplace: www.hse.gov.uk/pubns/indg163.htm
- 6 **The HSE Health and Safety Toolbox – How to Control Risks at Work** covers a number of different risks: <http://www.hse.gov.uk/toolbox/index.htm>
- 7 **Managing for Health and Safety – HSG 65** – A guide for people leading H&S management:
<http://www.hse.gov.uk/pubns/books/hsq65.htm>
- 8 **Please note:** The Management of Health and Safety at Work (Management of Health and Safety at Work Regulations 1999) **Approved Code of Practice and Guidance L21**, has been withdrawn and is no longer available. Instead, see above HSE pages for guidance.

Appendix 3: Legislation with a specific requirement for assessment of risks

The following is a list of regulations with a specific requirement for assessment of risks relevant to the usual work of the University - this list is not exhaustive. The links are to the relevant HSE webpage index for each. Related University guidance is at "[Safety Office Publications](#)" link.

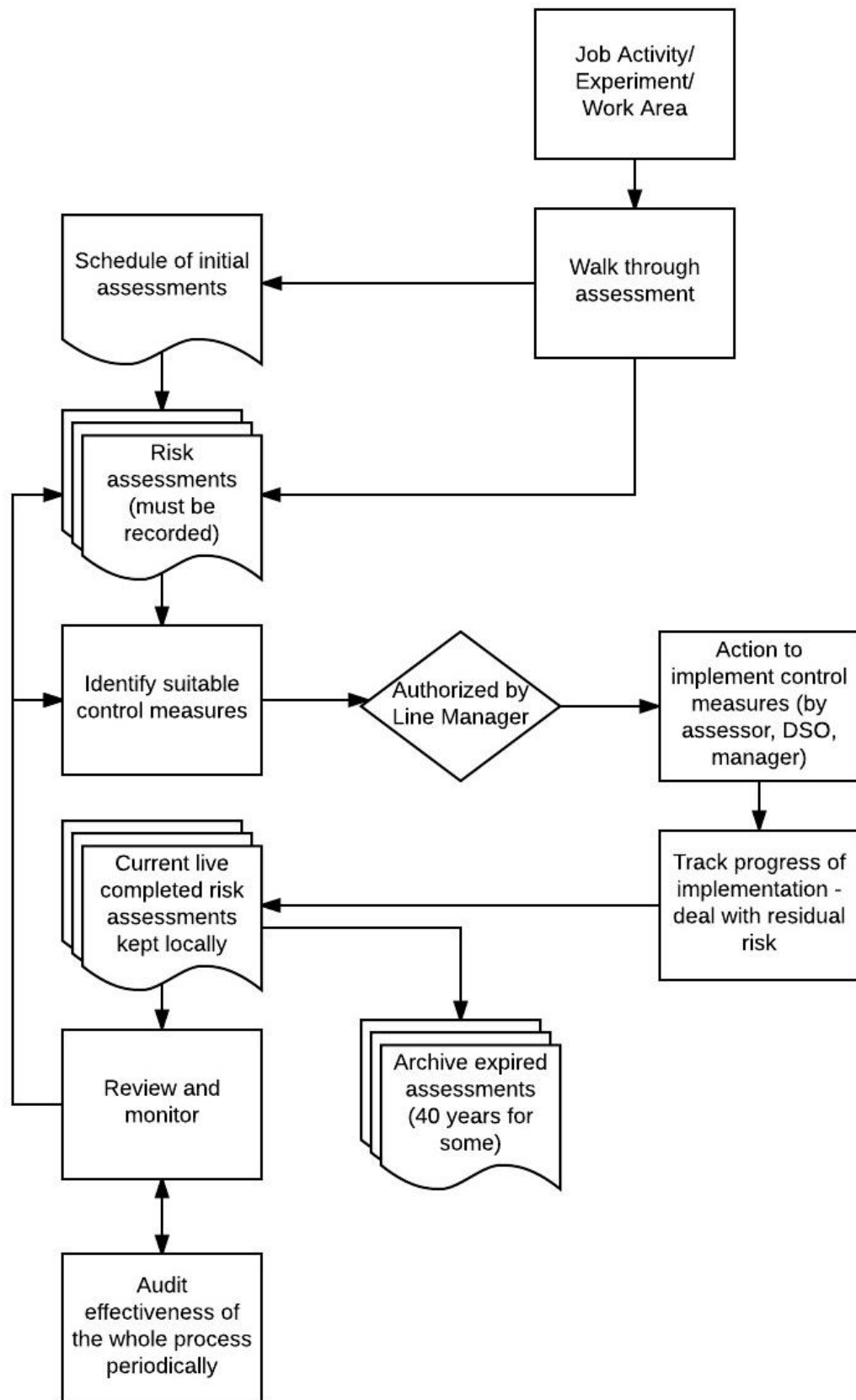
- [The Confined Spaces Regulations](#)
- [The Construction \(Design and Management\) Regulations](#)
- [The Control of Noise at Work Regulations](#)
- [The Control of Substances Hazardous to Health Regulations](#)
- [The Genetically Modified Organisms \(Contained Use\) Regulations](#)
- [The Health and Safety \(Display Screen Equipment\) Regulations](#)
- [The Ionising Radiations Regulations](#)
- [The Management of Health and Safety at Work Regulations](#) – The related Code of Practice (L21) is now withdrawn, but guidance on the topic is [here](#).

- [The Manual Handling Operations Regulations](#)
- [The Personal Protective Equipment at Work Regulations](#)
- [The Provision and Use of Work Equipment Regulations](#)
- [The Work at Height Regulations](#)
- [The Control of Vibration at Work Regulations](#)

Appendix 4: Examples of Common Precautions according to the Hierarchy of Controls

Control Measure Categories	Examples of Common Control Measures (Precautions)
Elimination	Work at height eliminated for window cleaning by using long-handled cleaning equipment used from the ground.
Substitution	Nanoparticles bought in paste form rather than powder to prevent exposure by inhalation, lower power of LASER used, and lower concentration of hazardous substance bought to reduce severity of consequences, less harmful pesticide used.
Engineering Controls including Physical Safeguards	<ul style="list-style-type: none"> • Fixed guards for moving parts of machinery (lathes) • Trip guards over cables on the floor • Handrails and footplates on stairs (prevent falls) • Screens for lasers and radioactive substance use • Remote operation (other room) for x-ray generators • Fume cupboards, glove boxes and general ventilation for use of hazardous substances (prevent inhalation) • Isolators for electrical safety • Interlocks linked to live or hazardous parts to prevent access (e.g. in x-ray generators) • Pressure relief valves on pressure vessels (to avoid explosion) • Sprinklers in place to deal with fires (reduce consequences)
Administrative and Management Controls	<ul style="list-style-type: none"> • Access to high-risk rooms or machinery restricted to people with training/competence • Standard operating/safe working procedure put in place • Permit to work issued for high-risk work (e.g., on roofs) • Emergency response plan in place (e.g., for spillages or fires) • Validation protocols used for biological safety cabinets/autoclaves • Maintenance, examination and testing of equipment in place to ensure all working to correct safety standards (e.g., fume cupboard testing) • Exposure time restricted (e.g., work with noisy machinery)
Welfare Facilities	First aiders, handwashing facilities, emergency showers, and eye wash stations in place in case of exposure to hazardous substances/organisms
Consultation and Communication	<ul style="list-style-type: none"> • Discussion of risk assessment and reason for precautions, safety signs, safety alerts, instruction manuals, labelling of some hazards, safety data sheet, involving users in the risk assessments, Safety Committee • Training: Induction, on-the-job training, demonstrations, job-specific or equipment-specific training, attendance at courses, test of understanding
Personal Protective Equipment (PPE)	<ul style="list-style-type: none"> • Eye protection when using chemicals even in a fume cupboard, because splashes to the eye cannot be entirely ruled out • Cotton Lab coat with poppers (not buttons) and nitrile gloves when using chemicals – special gloves for use with hydrofluoric acid – so contaminated clothing can be removed quickly

Appendix 5: Risk assessment and control – Process summary and audit trail



Appendix 6: General Risk Assessment Form (RA1)

Risk Assessment for:

[RA1]

Institution and location:

Briefly describe the activity, experiment or area under assessment.

Significant hazard(s) ¹	Who might be harmed and how? ²	Existing risk Control Measures ³	Level of risk with existing controls ⁴	Additional risk controls required ⁵	Who will carry them out and by when?	Level of risk with all controls ⁶

Significant hazard(s) ¹	Who might be harmed and how? ²	Existing risk Control Measures ³	Level of risk with existing controls ⁴	Additional risk controls required ⁵	Who will carry them out and by when?	Level of risk with all controls ⁶

Emergency and contingency procedures:⁷

List related Standard Operating Procedures, Safe Working procedures⁸

List specific training or competence required to do this work safely:⁹

Monitoring or health surveillance required?¹⁰

If Personal Protective Equipment (PPE) is required, give details: ¹¹

Please complete this section to confirm that this constitutes a suitable and sufficient assessment of risk:

Name of assessor: ¹²	Signature:	Date:	Name of supervisor:	Signature:	Date:
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Review history ¹³

Reviewed by (name)	Signature	Date	Brief details of changes

NOTES for Completing the Risk Assessment – Please delete this section once you have completed the risk assessment

Ensure you have read the University's [Risk Assessment Handbook](#), which gives more information about each heading.

¹ An alphabetical list of common hazards at the University is provided below to help you, but is not exhaustive. If any of these hazards can be eliminated altogether or can be reduced at source by making an inherent change then you must consider doing so. Hazards in **bold** will also need an additional, more technical assessment on a specialist form - please ask your Departmental Safety Officer or the University Safety Office for further advice.

Animal houses	Electricity	Genetically Modified Organisms	Machinery hazards	Slip, trip and fall hazards
Biological hazards	Falling or flying objects	High or low temperatures	Magnetic fields	Vibration
Chemical hazards	Flooding	High pressures	Manual Handling	Work at height
Collapsing structures	Gases - flammable	Ionising radiations	Noise	
Dusts	Gases - cryogenic, asphyxiant or compressed	Lasers ; optical radiation	Sharp objects; needle sticks	

² Give a brief description of how a *reasonably foreseeable* injury or ill health condition could happen.

³ University HS policies and guidance give details of suitable control measures expected, in line with the Hierarchy of Control Measures (see Risk Assessment Handbook) that are 'reasonably practicable' to implement.

⁴ Level of risk with existing control measure in place – see the Risk Assessment Handbook for determining risk level (low, medium or high) based on likelihood and severity of consequences.

⁵ Include what more needs to be put in place to control risks. If these are extensive, revise the risk assessment once the extra measures are in place.

⁶ What is the level of risk once all the control measures are in place? Is this as low as is reasonably practicable?

⁷ Details of action to take if there is a spillage, something breaks, someone is exposed to the hazard, the alarm sounds etc.

⁸ If it is necessary to have a written safe method of work, refer to it here – the user must also read and follow it.

⁹ Details of specific training, e.g., for work with chemicals: Complete the University Safety Office Chemical Safety training

¹⁰ For some hazards, health surveillance or monitoring will be needed. E.g., high noise levels will require a noise assessment. If this shows exposure levels are high enough, those exposed must be referred to Occupational Health for regular hearing checks.

¹¹ IF PPE is still needed, give details of make, model, type, with instructions on maintenance if appropriate.

¹² The "assessor" is the person(s) carrying out this risk assessment. This should be a person who understands the process/equipment and how to do a risk assessment.

¹³ The assessment should be reviewed regularly (usually every 12 months), or earlier if there is a material change to the process, the equipment, location or relevant safety technologies. It should also be reviewed when new people are involved, or after an accident or incident has taken place. If there is no change, write in "no change".

Those who create risks must manage them.



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