



Health and Safety Policy – Framework: Arrangements

This document details the Arrangements for health and safety management within the University of Edinburgh. It should be read in conjunction with the Health and Safety Policy – Framework: Organisation, and the University Health and Safety Policy document itself.

This section of the Framework is divided into general arrangements which will be applicable to most staff and students at the University, and more specific arrangements on discreet topics. Both are arranged in alphabetical order.

General arrangements

1. Accidents, incidents, dangerous occurrences and occupational ill health

All accidents, instances of occupational ill health, fires and dangerous occurrences including near misses must be reported to the Health and Safety Department as soon as possible after the incident has occurred, and in any case within seven days, so that the requirements of the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) may be met. No accident should be considered too trivial to report.

Large and/or geographically diverse Schools must ensure that they have in place robust internal reporting procedures, to ensure that all incidents/accidents are reported via the University Accident and Incident system.

All accidents etc. reported using the University Accident and Incident reporting systems will be reviewed and investigated as necessary by the Health and Safety Department. All accidents and incidents must also be reviewed at School level and most accidents etc. should also be investigated by the School Safety Adviser or other nominated member of staff. Guidance on investigating accident is available online at <http://www.ed.ac.uk/schools-departments/health-safety/accident-reporting>.

The University's online Accident and Incident reporting system (known as AIR) can be found at www.accidents.is.ed.ac.uk. Accident and Incident reporting books can also be used and copies of the incident report sent to the Health and Safety Department. Further guidance is available online at <http://www.ed.ac.uk/schools-departments/health-safety/accident-reporting>. Potentially serious accidents should be reported to the Health and Safety Department via telephone and subsequently followed up by the submission of an online accident and incident form.

Instances of occupational ill health should be reported using the appropriate form at <http://www.ed.ac.uk/schools-departments/health-safety/occupational-health/ill-health-accident-reporting/ill-health-reporting>

2. Buildings

2.1 General access

Heads of Schools or Conveners of Multi-Occupancy Building Users Groups (see section 4.4 Multi Occupancy Building User Groups) will specify who shall be allowed access to the areas of the University under their control and the appropriate closing arrangements applicable to the occupation of their School or building.

2.2 Building hours and occupancy

The Heads of Schools or Conveners of Multi-Occupancy Building Users Groups, must specify the evening and weekend hours of opening of buildings under their control and communicate this to all building users.

Heads of Schools and/or Conveners of Multi-Occupancy Buildings Users Groups must consider and specify the permitted occupancy of individual University premises under their control, in consultation (where required) with the Estates Department and Fire Safety Unit.

Undergraduates and inexperienced technical staff should only be allowed to carry out practical laboratory or machine shop work in the evening or at weekends if explicit permission is given in writing on each occasion by a senior member of the academic staff, and adequate supervision is employed.

Heads of Schools must prohibit any work which entails a risk of serious personal injury or fire by persons working alone in the early morning or evenings or at weekends, irrespective of the status of the worker.

Heads of School should ensure that well publicised information is available on the procedures to be adopted if an accident or emergency occurs out-with normal building hours.

2.3 Bicycles

Bicycles should be kept outside in the many secure areas provided by the University, the locations of which can be found on the Transport and Parking Office website (<http://www.ed.ac.uk/transport/cycling/facilities/bike-parking>). In exceptional circumstances, bikes may be kept inside a University building only after the Head of School has given specific permission and appropriate storage has been identified. Bicycles must never be stored in an emergency exit route. During a fire evacuation, bicycles must not be taken into the emergency exit routes.

2.4 Confined spaces

Entry to any confined spaces, as defined by the Confined Spaces Regulations, within a University building must be risk assessed prior to access by any member of staff or student. A confined space is a place which is substantially enclosed (though not always entirely), and where serious injury can occur due to hazardous substances or conditions within the space or nearby (e.g. lack of oxygen) (further guidance on the Health and Safety Executive (HSE) website at <http://www.hse.gov.uk/confinedspace/>).

2.5 Access for maintenance and /or cleaning

Access for maintenance and/or cleaning must be arranged in conjunction with the relevant School. Certain areas will require a Permit to Work before access is granted.

Further guidance at <http://www.ed.ac.uk/health-safety/guidance/laboratories-workshops/cleaning-maintenance>.

3. Display Screen Equipment (DSE)

Under the Health and Safety (Display Screen Equipment) Regulations 1992, all staff who work with display screen equipment must be trained in its use, including the correct set up of the workstation and use of software. This training is available to all staff via the online system, <http://www.ed.ac.uk/schools-departments/health-safety/training/e-learning/cardinus/wsp>.

All staff who work with DSE must undertake a risk assessment for each workstation they work at. The online training system leads on to this risk assessment with guidance on remedial actions and improvements required. Guidance and paper risk assessments are also available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/personal-computing>.

University employees who are regular users of display screen equipment are entitled to a DSE eye test by the University's appointed Optometrists, see <http://www.ed.ac.uk/health-safety/guidance/workplaces-general/personal-computing> for further details.

The online system also offers a student training awareness course available at <http://www.ed.ac.uk/schools-departments/health-safety/training/e-learning/cardinus/student-ergonomics>.

4. Fire safety

4.1 Organisation

The Fire Safety Unit (FSU) within the Health and Safety Department carries out the majority of the assessment of fire safety risks on premises across the University in liaison with the Estates Department, who are responsible for implementing fire control measures within buildings. The occupiers of buildings have responsibility to ensure the standards of fire safety in their buildings are maintained and each Head of School should appoint staff to undertake specific duties with regard to fire safety. They are also responsible in assessing and managing any fire risks associated with their own work activities, see 4.5.2 Building occupiers fire risk assessments.

Advice on all aspects of fire prevention may be obtained from the FSU, <http://www.ed.ac.uk/schools-departments/health-safety/fire-safety/about/contacts>.

4.2 Fire Co-ordinators

A Fire Co-ordinator must be appointed for each building to gather relevant information and liaise with Fire Stewards, University Security, and the Fire and

Rescue Service, as appropriate. A list of duties for a Fire Co-ordinator is available at <http://www.ed.ac.uk/schools-departments/health-safety/fire-safety/stewards-and-coordinators/fire-coordinators>.

4.3 Fire Stewards

Heads of Schools must appoint an appropriate number of staff to undertake the extra duties of Fire Stewards. Instructions for Fire Stewards and Deputy Fire Stewards are published by the FSU at <http://www.ed.ac.uk/schools-departments/health-safety/fire-safety/stewards-and-coordinators/fire-stewards>.

Fire Stewards must carry out weekly fire safety inspections of their areas as part of their in-house risk assessments. This will normally include the weekly test sounding of the fire alarm. A template checklist to assist Fire Stewards to carry out these weekly inspections is available online at <https://www.ed.ac.uk/health-safety/fire-safety/stewards-and-coordinators/checklists>.

Advice is also available from the FSU on any special duties which might attach to Fire Stewards in respect of the presence of specific fire hazards or disabled persons.

4.4 Multi Occupancy Building User Groups

Buildings which are occupied by different Schools and/or other management units should establish a Multi Occupancy Building User Group (MOBUG) to oversee fire safety, security and any other communal building issues.

The convenor of this group is appointed by the relevant Head of the School (or other management unit) which occupies the largest area of floor space within the building. Other Heads of Schools must appoint a representative for their School or Unit. Heads of Schools and their representatives must fully support and enforce fire safety measures determined and agreed by the MOBUG members.

Heads of Schools should inform the MOBUG Convenor of the named representative for their School/Unit. A member of the FSU and Estates Department will also sit on each MOBUG and should be kept informed with regard to the dates and venue of each MOBUG meeting.

Further guidance on the role and remit of the MOBUG is available at <https://www.ed.ac.uk/health-safety/fire-safety/guidance/building-user-groups>.

4.5 Fire risk assessments

4.5.1 Building fire risk assessments

The FSU carry out a programme of building fire risk assessments as required by the Fire (Scotland) Act and Fire Safety (Scotland) Regulations. For each building a fire risk assessment report is produced, which notes any fire safety issues which have been identified and any remedial actions required. Copies of these reports are sent to relevant responsible persons, such as Heads of Schools and to the Estates Department, for information and action where

appropriate. Further information on the building fire risk assessment programme is available at <https://www.ed.ac.uk/health-safety/fire-safety/fire-safety-provision/fire-safety-risk-assessment>.

4.5.2 Building occupiers fire risk assessment

The assessment of fire risks associated with activities within a building is the responsibility of the building occupiers. It is the responsibility of the occupying Head(s) of School(s) to assess the risks associated with their School's work activities and to review these risks on a regular basis. Further information on fire safety responsibilities for those occupying University buildings is available at <https://www.ed.ac.uk/health-safety/fire-safety/management-resp> and advice on how to control these risks is available from the Fire Safety Unit and in section 4.6 Dangerous Substances and Explosive Atmospheres (DSEAR) below.

4.6 Dangerous Substances and Explosive Atmospheres (DSEAR)

DSEAR sets minimum requirements for the protection of people from fire and explosion risks arising from dangerous substances and potentially explosive atmospheres.

Guidance on what constitutes a 'dangerous substance' and how to complete the risk assessment is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/hazardous-substances/dsear>.

4.7 Means of Escape

It is essential that the means of escape from a building should function efficiently. Fire exit doors should be fastened so that they can be easily and immediately opened from the inside without the use of keys. Designated fire exit routes must not be obstructed or used as storage areas. Portable heating equipment or other sources of ignition must not be used in any part of an exit route. Building occupiers have a responsibility to ensure that means of escape are kept free from obstructions, and should report poor housekeeping issues to their Head of School / Fire Steward or MOBUG Convener as soon as possible. Issues relating to the function or integrity of means of escape should be reported to the Estates Department, via the normal reporting route, as a priority.

Fire doors must not be propped or wedged open and must remain closed when buildings are unoccupied, unless held on magnetic catches.

All personnel should become familiar with as many as possible of the exit and escape routes from the building in which they normally work, as well as buildings they are visiting.

Lifts must not be used in the event of a fire, unless clearly designated as a fire evacuation lift.

4.8 Information, instruction and training / fire routine procedures

Each Head of School must ensure that all members of School staff are instructed in the action to be taken should a fire break out. This information should be provided as soon as possible after an individual is appointed, for example during induction.

A general fire routine procedure applicable to all Schools and all University buildings during normal working hours is available from the Fire Safety Unit. The general fire routine procedure will require supplementary instructions if the work of the School, or of particular areas of the School, poses special or unusual fire hazards or when staff and/or students work outside normal working hours. These notices must be displayed in prominent locations throughout the building(s) and particularly within fire escape routes.

The Fire Safety Unit provide a range of fire safety training available to staff and students and should be contacted for further information and advice. Contact details at <http://www.ed.ac.uk/schools-departments/health-safety/fire-safety/about/contacts>.

4.9 Undergraduates, visitors and contractors

Each Head of School must ensure that all those who occupy the building(s), such as undergraduate students, visitors and contractors, are instructed in the action to be taken should a fire break out. This information should be provided to individuals as soon as possible after they arrive in the building.

4.10 Fire Evacuation Plan

The University is legally required to produce a fire evacuation plan, to cover a basic fire evacuation scenario, for each of its premises.

This is currently under review by the Fire Safety Unit.

4.11 Fire drills

It is essential that the fire alarm system and a pre-arranged plan specific for the evacuation of each building is tested regularly. Heads of Schools or Conveners of Multi-Occupancy Building Users Groups must ensure that fire drills are held, at least annually, within each University building. This is arranged proactively by the FSU. See <https://www.ed.ac.uk/health-safety/fire-safety/fire-safety-provision/drill-programme> for further guidance.

4.12 Fire Evacuation Procedures for Centrally Bookable Rooms and Lecture Theatres

In the event of the activation of the fire alarm system it is the responsibility of the room user to ensure that people under their control are evacuated safely from the building.

Further guidance is available at http://www.docs.csg.ed.ac.uk/Safety/fire/guidance/fire_evac_%20procedures_for_centrally_bookable_rooms.pdf.

4.13 New Facilities and Equipment

It will be necessary on every new building or major refurbishment project for the University Fire Safety Adviser to consult with representatives from the Estates Department to review fire risk assessments and/or agree any required necessary fire safety provisions.

Plan drawings covering the layout of the building, compartmentation and intended fire warning system schematics should be submitted to the Fire Safety Unit for comment at the earliest opportunity.

Further guidance on the fire safety requirements in new and refurbished buildings are available in the document - Design Guidelines, Fire Safety in New and Refurbished Buildings –

http://www.docs.csg.ed.ac.uk/Safety/fire/guidance/new_refurbished_buildings.pdf.

4.14 Disabled people

All disabled people using University buildings, who disclose a relevant disability, must be provided with a Personal Emergency Evacuation Plan (PEEP) to ensure they are aware of the evacuation procedures in event of a fire alarm. For the purposes of this document, disabled people will include anyone with either a mobility or sensory impairment who requires assistance to evacuate the building.

All disabled staff or students are strongly encouraged to liaise with their School in advance of their employment commencing, or their academic course starting, in order to ensure that a PEEP is formulated for emergency evacuation, including the planning / implementation of any remedial building arrangements which may need to be addressed, prior to commencing work or study in that building.

Guidance and advice on the formulation of a PEEP can be obtained from Fire Safety Unit. The Fire Safety Unit will provide training on the use of any equipment to be used in the event of an emergency evacuation of a disabled person e.g. evacuation chairs, evacuation lifts etc.

Guidance for the emergency evacuation of disabled people from University buildings is available on the Fire Safety Unit website at <https://www.ed.ac.uk/health-safety/fire-safety/fire-safety-provision/disabled-evacuation>.

4.15 Liaison with Enforcement Authorities

The Fire Safety Unit will represent the University in discussions with relevant enforcing authorities, such as the Scottish Fire and Rescue Service. Communications relating to fire safety, of a strategic nature, must be made in consultation with the Fire Safety Unit.

4.16 Commercial use of University buildings

The University permits buildings, or parts thereof, to be hired by University and non-University personnel to be used as venues for events such as conferences, lectures, exhibitions, and other purposes. It is important that those responsible for organising these events are aware of and adhere to relevant University requirements with regard to fire safety.

Guidance and instructions for persons hiring University buildings for conferences, lectures and exhibitions, is available online at

<https://www.ed.ac.uk/health-safety/fire-safety/guidance/events-use>.

Guidance for managers using University premises as places of public entertainment is available online at

<http://www.docs.csg.ed.ac.uk/Safety/fire/guidance/pope.pdf>.

5. First Aid

The Health and Safety (First Aid) Regulations, place a general duty on the University to make adequate first aid provision for all employees should they be injured or become ill at work. In each building under their control, the School or other management unit is therefore required to provide:

- a number of properly stocked first aid boxes appropriate to the risks of accidents or injuries that could arise from activities in the building and to place these boxes in the care of a qualified First Aider.
- access to the services of one or more qualified First Aiders as appropriate to the work of the School or area.
- notices giving the names and locations of the qualified First Aiders and the locations of the first aid boxes.

Certain high risk Schools may require to provide a first aid room; other Schools or buildings may do so if it is felt desirable.

Where a building is occupied out with normal working hours, the Head of School or Convener of the Multi-Occupancy Building Users' Committee must make arrangements to provide adequate and suitable first aid cover for potential accidents or injuries taking into account the type of activities being carried out during these times.

Specific details regarding first aid boxes, numbers of first aiders etc. can be found online at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/first-aid>.

5.1 First aid training

Schools must identify individuals willing to be trained as First Aiders and ensure there are enough First Aiders for the risk profile of the area in question. All First Aiders must undergo an initial statutory three day training course and then successfully complete a short practical and oral assessment. This training is provided by the Training and Audit Unit, <http://www.ed.ac.uk/schools-departments/health-safety/training/first-aid>.

First Aiders must be retrained every three years to ensure their certificate is still up to date, this entails undertaking a two day course with assessment. All First Aiders will be contacted directly with dates for this refresher training up to 3 months in advance of their certificate expiration.

University First Aiders are paid an allowance in recognition of their first aid expertise. This is organised by the Health and Safety Department with Human Resources directly after training has been completed. Details of this allowance can be found at <http://www.ed.ac.uk/schools-departments/human-resources/pay-reward/pay/pay-scales>.

5.2 First aid notices

Notices giving the names, telephone numbers and locations of persons qualified in first aid and the location of the nearest first aid equipment must be prominently displayed in each School, area or building. These notices are available from the Health and Safety Department (Firstaid.Training@ed.ac.uk)

6. Hazardous substances

Any person who introduces, or manufactures, a source of hazard in the University has a duty towards the control of the hazard and the eventual safe disposal of the material. Accurate records must be maintained.

In particular, persons who obtain hazardous substances for research or other purposes, must obtain from the supplier a statement detailing the known or potential hazards associated with the substance, the recommended precautions and control measures. Such information, in the form of Safety Data Sheets, must be made available by law by the supplier. A risk assessment for all work activities involving hazardous substances must be prepared before work commences, as required by the Control of Substances Hazardous to Health (COSHH) Regulations, and DSEAR, as applicable.

Biological, chemical or radiation hazards are covered in more specific detail individually in this document; Section 25 Biological safety, Section 26 Chemical safety and Section 32 Radiation. More general advice and guidance on hazardous substances can be found at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/hazardous-substances>.

7. Housekeeping

A major cause of accidents in general is undoubtedly poor housekeeping and, again in general, a safe working area is a tidy area. Apparatus and other materials which are not immediately required should always be returned to a safe storage place, and unwanted materials, particularly combustible and flammable items, should be disposed of safely and promptly. Any spillages must be cleaned up immediately by a person who fully appreciates the special hazards which the spilled material may possess.

Flammable and combustible materials must never be stored or left on emergency exit routes or blocking immediate access to fire alarms, fire equipment or electrical switchgear.

Gas, water and electricity, and any piped gas or liquid, supplies should always be turned off when not required, and especially at the end of the working day.

8. Health Surveillance

The Occupational Health Unit provides statutorily required health surveillance for individual staff members who have been identified by local risk assessment as being exposed to various hazards (e.g. allergens, respiratory or skin sensitisers, noise, etc.).

Further guidance on this is available at <http://www.ed.ac.uk/schools-departments/health-safety/occupational-health/managers/health-surveillance/overview>.

9. Immunisations

The Occupational Health Unit currently offers a variety of vaccinations for employees who are potentially exposed to the risk of infection through the course of their work whether that is in the UK or abroad. Further guidance is available at <http://www.ed.ac.uk/schools-departments/health-safety/occupational-health/about/services>.

10. Lifts and lifting equipment

Certain lifting equipment, including lifts, must be registered on the University's Engineering Insurance register and be subject to regular inspections undertaken by the University's appointed Engineering Insurers. More information is available at <https://www.wiki.ed.ac.uk/display/Finance/Insurance+Policy+-+Engineering>.

10.1 Lifts

Passenger lifts and goods lifts must only be used for passengers and goods respectively. Maintenance of lifts is organised by the Estates Department and any issues should be reported to them in the usual manner.

In buildings where lifts are not fitted with an emergency telephone giving direct access to the University Security Services, the lifts must not be used out with that specific building's operating hours. Supervised cleaning staff are, however, allowed to use the lifts during their own normal working hours. These lifts must be identified by Schools, in liaison with the Estates Department, and building users made aware of these restrictions.

10.2 Lifting equipment

All lifting equipment and tasks must comply with the Lifting Operations and Lifting Equipment Regulations (LOLER) including the formulation of a risk assessment (where required), regular maintenance and thorough examination of the equipment.

11. Manual Handling of Loads

All significant manual handling tasks must be risk assessed prior to undertaking the task. Manual handling should be avoided wherever possible by the introduction of mechanisation or manual handling equipment. A template manual handling risk assessment and guidance is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/manual-handling>.

Any staff regularly involved in manual handling must be suitably trained in safe lifting and handling techniques. Online training is available at <http://www.ed.ac.uk/schools-departments/health-safety/training/e-learning/cardinus/smhp> as well as practical sessions offered by the Training and Audit Unit, <http://www.ed.ac.uk/schools-departments/health-safety/training/general/manual-handling>.

12. Offices, Libraries and other general areas

Although offices, libraries and general areas may seem at first sight to be relatively non-hazardous compared to other areas of the University, they are the scene of a substantial number of accidents, some of which are serious. Virtually all such accidents are avoidable, and the relevant points noted in the guidance on the Health and Safety Department website should be considered in conjunction with the general safety advice mentioned elsewhere in this part of the Health and Safety Policy Framework.

Further guidance is available online at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/office-library-guidance>.

13. Physical hazards – including noise/vibration/temperature/lighting

There are many physical hazards in the workplace which could put staff and students' health and safety at risk. These include noise, vibration, excessive temperatures and lighting issues. Guidance on how to manage these issues is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/overview>. Most problems encountered can be remedied by changes in work practices, appropriate purchasing and maintenance of equipment, or reporting of faults in a timely manner.

For any issues which are not able to be managed locally, the Occupational Hygiene Unit can offer guidance and advice on monitoring of these types of hazards and implementation of remedial actions, <http://www.ed.ac.uk/schools-departments/health-safety/about/units/occupational-hygiene>.

Specific guidance is available online for the following;

- Noise - <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/noise>
- Temperatures - <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/temperatures>
- Lighting - <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/lighting>

14. Personal Protective Equipment (PPE)

Personal protective equipment includes, but is not restricted to, the following;

- Laboratory coats
- Safety eye wear, including safety spectacles, goggles and visors
- Gloves or other hand protection
- Protective coveralls
- Respiratory protective equipment

Most laboratories will require a certain standard of basic PPE for entry - this should be made clear at the entrance to the area. More detailed information on PPE required for radiation, chemical and biological activities can be found in

the specific sections in this Framework document and in the relevant Codes of Practice and guidance on our websites.

The provision of personal protective equipment should be considered appropriate only for short term or emergency situations. Every effort should be made either to eliminate the process giving rise to the hazard or to reorganise the operation so that the hazard is controlled at source. Where this is not possible, personal protective equipment should be issued only after it has been positively assessed as being suitable for protecting against that hazard.

Every person provided with personal protective equipment must take reasonable care of such equipment and must make proper use of it when there is a foreseeable risk of injury or ill health. Individuals must also be instructed on how to use and maintain the equipment with which they are issued.

Suitable storage out with the hazardous environment must also be supplied by the School or work area for any PPE provided.

General guidance is available at <https://www.ed.ac.uk/health-safety/guidance/ppe>.

14.1 Respiratory Protective Equipment (RPE)

The instances where there is need for the wearing of RPE should be few, as respiratory protection should only be considered necessary when engineering controls cannot be used effectively. Thus, work involving toxic gases, hazardous volatile substances and dusts should be kept away from people's breathing zone by placing such work in a glove box, fume cupboard or other well ventilated area. Further guidance on the types of mask and when they may be suitable is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/ppe/rpe>.

If RPE is required, negative pressure RPE (RPE which is tight fitting to the face and relies on this seal to protect the breathing zone) must be facefit tested before work commences. The Health and Safety Department provide a face fit testing service, further guidance on this is available online at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/ppe/facefit>.

14.2 Gloves

When protective gloves are required, these must be suitable for protection against the hazard in question. The use of latex gloves should be avoided wherever possible and in all cases where there exists a viable and practicable alternative to the use of latex gloves the alternative should be utilised. There are a few instances where the use of latex gloves remains the preferred first choice barrier (e.g. handling of blood-borne viruses, cytotoxic drugs, and some biological hazards) – this should be detailed in the relevant risk assessment.

Powdered latex gloves are prohibited in the University and non-powdered latex should be replaced with a non-latex alternative wherever possible.

Codes of Practice and guidance are available at <https://www.ed.ac.uk/health-safety/guidance/ppe/hand-protection>.

15. Pressure vessels

Pressure vessels must be installed and maintained in a safe manner. Specific, defined equipment must be registered on the University's Engineering Insurance register and have regular inspections undertaken the University's appointed Engineering Insurers. More information is available at <https://www.wiki.ed.ac.uk/display/Finance/Insurance+Policy+-+Engineering>.

Further guidance is also available at <https://www.ed.ac.uk/health-safety/guidance/laboratories-workshops/pressure-vessels>.

16. Queries and problems

The University Health and Safety Committee welcomes constructive suggestions where any area of the Policy might be improved, to further the aim of creating a healthy and safe working environment, and these should be sent to the Director of Health and Safety.

An employee or student with a health and safety problem or any query about health and safety should initially refer the matter to his or her immediate supervisor. If satisfaction is not achieved at that level, the matter should be raised with the Local or School Safety Adviser, Head of School or the Health and Safety Department (preferably in that order). It is open to all employees to raise the issue at any stage with a Trade Union Safety Representative. A flow chart for this procedure can be found at <http://www.ed.ac.uk/health-safety/safety-roles/local-committees>.

A list of all local and School Safety Advisers is available online at <http://www.ed.ac.uk/health-safety/about/contacts/school-safety-advisers>.

17. Reporting of faults

Common sense and basic good housekeeping are the predominant factors influencing the maintenance of high standards of health and safety during University activities and staff should always be conscious of dangers to themselves and their colleagues, presented by their working environment and activities.

Any unsafe conditions, e.g. faulty lifts, faulty fire doors, missing fire extinguishers, missing fire notices, defective equipment, poor lighting, damaged floor coverings, unsafe furniture, should be reported at once to an immediate supervisor or via the usual channel in your School/work area so that remedial action can be taken.

18. Risk assessments

Details of the individuals who have responsibilities for undertaking risk assessments have already been outlined in the Organisation part of the Framework document and a general statement is provided in the Policy document. However, it is worth repeating that, although the Head of School (or equivalent) is ultimately responsible for ensuring that risk assessments are being competently completed, on a day to day basis, risk assessment is the responsibility of the immediate supervisor of the work in question (e.g. Principal Investigator or Research Group Leader). The details of the particular risk

assessment will often be compiled by other employees or students concerned in the work, however the supervisor must always approve the risk assessment and system of work before the work commences and review at regular intervals.

It must be remembered that, as well as engineering controls and administrative procedures, the competence of staff and students carrying out the work needs to be assessed to ensure their knowledge, experience and training is commensurate with the risks involved.

A written risk assessment records the significant hazards, the risks arising therefrom, the system of work and control measures to be followed and the persons at risk. Particular attention should be paid to any risks which might be encountered by vulnerable workers such as pregnant women, young and/or inexperienced workers, particularly students, or those who may work alone. The level of detail in a written risk assessment should be in proportion to the risks and the complexities of each case.

There are no specific rules on how risk assessments are to be made or recorded. However the Health and Safety Department has published guidance and model templates to assist Schools and other management units to appropriately carry out and record risk assessments. It is expected that individual members of staff carrying out risk assessments will have the knowledge and understanding required as part of their skill set in their particular discipline. Training in the risk assessment process can be provided by the Training and Audit Unit of the Health and Safety Department.

Further information can be obtained at <https://www.ed.ac.uk/health-safety/online-resources>.

18.1 Vulnerable persons

18.1.1 Disabled people

People who have any form of disability which they feel might have particular relevance to their health and safety whilst working in the University, should contact their School Safety Adviser, or their Head of School, and the Staff or Student Disability Service, as appropriate. A risk assessment should then be undertaken to determine systems of work and precautionary measures relevant to each individual's situation can then be discussed and implemented.

Specific policy on emergency evacuation for disabled people is detailed at Section 4.14 Disabled people.

18.1.2 Pregnant or nursing mothers

When an employee notifies her School that she is pregnant, or has given birth in the previous six months or is still nursing, the School must review all the applicable risk assessments to ensure that she is not at any additional risk, taking into account factors specific to the individual.

The responsibility to ensure this is carried out is noted within the University's Maternity Policy, available from Human Resources

(<http://www.docs.csg.ed.ac.uk/HumanResources/Policies/Maternity-Policy.pdf>).

Further guidance is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/pregnancy>.

18.1.3 Young or inexperienced workers, including work experience

Special care must be taken of young or inexperienced workers, particularly students, as they may not appreciate the risks presented by a given situation.

There are specific requirements placed upon both those who send young persons on work placements and on those who offer young persons work experience placements.

Definitions

- Young Person - Anyone under the age of 18
- Child - Anyone below the minimum school leaving age (MSLA) - just before or just after their 16th birthday.

For the duration of the work placement, the young person is regarded as a University employee, under health and safety law. The University must ensure suitable arrangements are in place to ensure the health and safety of the young person BEFORE they start work at the University. Schools will need to consider the risks to which these young persons may be exposed and what measures will be required to control these risks, so that they do not put themselves or others at risk.

Further guidance is available online at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/students-young-persons>.

18.1.4 Lone and out of hours workers

Lone workers are those who work by themselves without close or direct supervision.

This may include those who work alone in a specific area or building (e.g. shop-workers, home-workers, cleaners, security, library workers, etc.) or may include mobile workers, who work alone but in a number of locations (e.g. maintenance, tradespersons, cleaning supervisors, drivers, Staff / Students carrying out research surveys, those who visit external organisations, i.e. home visitors, school liaison personnel).

Any risk to lone and out of hours staff must be assessed prior to the work commencing.

Further guidance is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/workplaces-general/looh>.

19. Safety Signs

Signs providing safety information must conform to the Safety Signs and Signals Regulations, and must be displayed appropriately.

Packaging for substances must also conform to the Classification, Labelling and Packaging Regulations, further guidance on this is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/hazardous-substances/ghs-clp>.

20. Stress

Stress is the reaction people have to excessive pressure or other types of demand placed upon them which are not matched by their ability to cope. Stress must be managed in the same way that any other hazards at work are. Guidance on risk assessment and ways of reducing stress are available online at <http://www.ed.ac.uk/schools-departments/health-safety/occupational-health/managers/general-health/stress> and on the Health and Wellbeing website at <http://www.ed.ac.uk/staff-students/staff/health-wellbeing/lifestyle/mental-wellbeing>.

21. Smoking

The University's policy on smoking is designed to secure a healthy and safe environment for students and staff as well as eliminating passive smoking from its premises in keeping with the Smoking, Health and Social Care (Scotland) Act. This is in the context that medical evidence continues to reinforce the link between the inhalation of tobacco smoke, and particularly the associated toxins and carcinogens, either directly or by passive smoking, and serious illness.

The full policy may be obtained from the University Secretary's Group at http://www.docs.csg.ed.ac.uk/HumanResources/Policies/Smoking_Policy_no.pdf.

"No Smoking" notices are available from Estates Operations, Estates Department.

22. Training and Supervision

All staff must be adequately trained in the processes and use of equipment relevant to their work activities to ensure they are working as safely as possible. Staff and students must be appropriately supervised at all times. Each Head of School must ensure there is an appropriate system in place to monitor the training needs of all staff and students and that this training is received, recorded and refreshed as appropriate.

As mentioned previously, the Health and Safety Department can provide general as well as specific health and safety training, please see <http://www.ed.ac.uk/schools-departments/health-safety/training> for further information.

23. Visitors to the University

23.1 Visitors

All visitors to the University do so only with the permission of the Head of School (or equivalent) and must follow all University and School health and safety procedures.

Visitors should be supervised at all times and must be instructed in any emergency evacuation procedures for every building visited if not being constantly supervised. There are some specific rules for entry into chemical, biological and radiation laboratories which can be found in the Specific arrangements sections (below) for those subject areas within this document.

23.2 Children

Children are only permitted to enter University buildings for short visits and must be closely supervised at all times. Children are not allowed into buildings outside normal working hours as, defined by the Head of School/MOBUG, except for specific work related activities which must be suitably risk assessed. Children are not allowed into laboratories and workshops, other than in connection with Open Days, and work experience courses, etc. There are specific requirements for risk assessments for children or young people on work experience, see Section 18.4 Young or inexperienced workers, including work experience. Further guidance is available at <https://www.ed.ac.uk/health-safety/guidance/students-young-persons>.

23.3 Animals

Dogs and other pets are not normally allowed in University buildings, with the exception of guide or assistance dogs, and animals being treated in the Royal (Dick) School of Veterinary Sciences.

24. Working at other institutions

Many staff and students may work within other institutions premises or sites. In such cases, staff and students must make themselves aware of local policies and must follow all local safety rules. Further guidance for placements of students is available at <https://www.ed.ac.uk/health-safety/guidance/students-young-persons>.

Specific arrangements

25. Biological safety

It is the policy of the University of Edinburgh to ensure that all work involving the use of biological materials is subject to standards that eliminate the hazards, or ensure adequate control of the resultant risks, thus preventing or minimising the risks to human health and to the environment.

This policy applies to all work involving biological agents, pathogens, genetically modified organisms (GMO) and other biological materials (e.g. microorganisms, cell cultures, parasites, human or animal tissue, including blood and other bodily fluids, or plant material), which have the potential to give rise to a risk of infection, allergy or toxicity or other harm to people or damage to the environment.

25.1 Compliance with legislation

Enacted under the Health and Safety at Work etc. Act, the Control of Substances Hazardous to Health Regulations (COSHH) are designed to protect people against risks to their health arising from exposure to hazardous

substances, including biological hazards (biohazards), associated with their work. An Approved Code of Practice, Appendix 2 of which details the additional provisions relating to work with biological agents, supports the Regulations. A brief summary of the requirements under the COSHH Regulations for work with biological materials is provided on the Biosafety website at <http://www.ed.ac.uk/schools-departments/health-safety/biosafety/policy/guidance-rules/lab-management>.

The COSHH Regulations are the principal Regulations covering work involving biological hazards. Particular work activities may fall within the scope of more specific Regulations, also made under the Health and Safety at Work Act. The most notable example is genetic modification (GM) work which is subject to the control of the Genetically Modified Organisms (Contained Use) Regulations. Some aspects of GM work are also controlled under the Environmental Protection Act and if work involves activities outside containment, then the requirements of Genetically Modified Organisms (Deliberate Release) Regulations may apply. A brief summary of the requirements of various GM Regulations for genetic modification work under containment is provided on the Biosafety website at <http://www.ed.ac.uk/schools-departments/health-safety/biosafety/policy/guidance-rules/gm-organisms>.

Biosafety is managed in the University in accordance with the requirement to comply with legislation including the following laws:

- Genetically Modified Organisms (Contained Use) Regulations
- Control of Substances Hazardous to Health Regulations
- Specified Animal Pathogens (Scotland) Order (SAPO)
- Plant Health Orders
- Anti-Terrorism Crime and Security Act.

25.2 Liaison with Enforcing Authorities

All contact and liaison with the enforcing authorities (primarily the Health and Safety Executive's Biological Agents Unit, and the Home Office) on matters relating to biological safety should be through, or in consultation with, the University Biological Safety Adviser (UBSA). The UBSA will undertake all statutory notifications for work with dangerous pathogens and for genetic modification work. Schools and Principal Investigators will need to obtain certain other licences themselves (e.g. SAPO licences, plant health licences, import and export licences etc.) by applying directly to the relevant government department or agency, although where needed this may involve or require consultation with the University Biological Safety Adviser.

25.3 Organisation

25.3.1 Genetic Modification Biological Safety Officer (GMBSO) / Biological Safety Adviser (BSA)

Each Head of School is required to appoint a local GM Biological Safety Officer (and deputy) to cover those areas where genetic modification work is undertaken. In some Schools, activities are split between different sites or buildings in which case it may be necessary to appoint more than one GMBSO. Guidance on the appointment and roles of GMBSOs is provided on the

Biosafety website (<http://www.ed.ac.uk/schools-departments/health-safety/biosafety/responsibilities/gm-bso>). Unless an additional appointment is made within a School, it is assumed the GMBSO will advise on all aspects of biological safety and that reference to biological safety includes GM.

For those areas where biological work is undertaken but this does not include genetically modified organisms, the Head of School may choose whether or not they wish to appoint a Biological Safety Adviser. If not, then the School Safety Adviser's role is assumed to include biological safety aspects. The appointment and role of a BSA would mirror that of a GMBSO, but with reference to GM aspects omitted.

25.3.2 Genetic Modification Safety Committee (GMSC)

Each relevant Head of School is required to appoint a local School GM Safety Committee to cover those areas where genetic modification work is undertaken. The UBSA is a member of all local Genetic Modification Safety Committees, whose membership should contain a wide range of experience and expertise, to ensure competence in consideration of the range of projects which may come before the GMSC.

The University Biological Safety Adviser maintains relevant information on GMBSOs, and also on certain biological materials held and used within the University which is in addition to more detailed and complete School records which must be maintained locally. Schools are required to update this information when requested. Further guidance is available at http://www.docs.csg.ed.ac.uk/Safety/bio/guidance/gm/GM_Committees.pdf.

25.4 Risk assessments

The COSHH and the GM (Contained Use) Regulations impose duties on the University to protect its staff and any other persons, whether at work or not, who may be affected by the University's work involving biological substances or materials which are potentially hazardous to health. In order to ensure compliance with the Regulations, Heads of School must ensure that work is not undertaken that is liable to expose any employees, or others, to any substance hazardous to health or that the exposure is kept to a minimum after a suitable and sufficient risk assessment is undertaken by a competent person. There are additional duties to carry out risk assessments and protect the environment from damage which may be caused by work activities involving biological materials. The results of these risk assessments, in the form of standard operating procedures (SoPs) or safe systems of work (SSWs), must be communicated to all relevant staff and students prior to work being undertaken.

It is the responsibility of the person in charge of the area or procedure to ensure that risk assessments are undertaken – this may be the Principle Investigator, Supervisor, Tutor or Laboratory Manager.

Template COSHH risk assessment forms and guidance, with a specific template BA1 for use with biological substances, are available at <http://www.ed.ac.uk/schools-departments/health-safety/biosafety/forms>.

Work with biological materials must not commence without a suitable and sufficient risk assessment being formulated and recorded, and suitable control measures put in place. All such work must be conducted according to accepted safe systems of work, in appropriate facilities, and by suitably trained and experienced personnel.

In addition work with certain pathogens or GM must not commence until the appropriate statutory notifications are completed, and where appropriate, permissions granted.

25.5 Instruction, information and training

The Biosafety Unit delivers training courses to provide the necessary basic knowledge in biosafety, genetic modification work and the transport of biological materials. The Health and Safety Department's Biosafety Training Institute (BTI) also provides professional training to the Biosafety Practitioner level 1, a SCQF level 11 course accredited by the University of Edinburgh and the Institute for Safety in Technology and Research (ISTR). Further guidance on training can be found at <http://www.ed.ac.uk/schools-departments/health-safety/biosafety/training> and at <http://www.bti.ed.ac.uk/>.

25.6 Supervision

Suitable and sufficient day-to-day supervision of work with biological agents is arranged by the research groups' line managers; GMBSOs/BSAs do not provide supervision of biological workers. It is for the line manager to determine what is an appropriate degree of supervision, although immediate supervision to a high degree is always required for undergraduates and other inexperienced individuals working with potentially biohazardous materials.

25.7 Control measures

Appropriate control measures to protect people and the environment will have been identified during the risk assessment process. It is the responsibility of the School to ensure these control measures are fit for purpose, implemented and any equipment maintained appropriately. Some equipment will be maintained by the Estates Department, however, Schools must ensure this equipment is available for testing and any defects are reported as soon as possible and the equipment removed from use if appropriate. Further guidance on equipment such as microbiological safety cabinets and autoclaves can be found at <http://www.ed.ac.uk/schools-departments/health-safety/biosafety/policy/guidance-rules/lab-management>.

Personal protective equipment (PPE), including respiratory protective equipment (RPE), must be worn at all times where stipulated by the relevant risk assessment. It is the responsibility of the PI/supervisor/manager to ensure it is worn and used properly by all staff, students and visitors. Any PPE (including RPE) required by the risk assessment, must be provided by the School to staff at no extra cost. The School may choose to provide PPE (including RPE) to undergraduates and postgraduates at no cost but are not obliged to do so, and can charge for this equipment. Provisions must also be made locally for visitors and contractors – either provided for them by the School or provided by the contractor as agreed, prior to access.

25.8 New facilities and equipment

Health and safety must always be given prominent consideration when planning a new facility or upgrading or refurbishing an existing one. It is essential that the designers/architects consult at an early stage with the users as to specific requirements and it is recommended that a member of the University's corporate Health and Safety Department is invited to attend early project and design meetings along with users representatives in order to ensure that health and safety matters are raised or considered and that appropriate expertise is available. Further guidance is available online at <http://www.ed.ac.uk/schools-departments/health-safety/biosafety/policy/guidance-rules/lab-management>.

Equipment should be chosen after careful consideration of all requirements including level of control or containment needed as well as space, utilities and cost considerations.

25.9 Health surveillance and immunisation

25.9.1 Health surveillance

Under the COSHH Regulations, work with certain hazardous substances, such as animal allergens derived from laboratory or other animals, or plant allergens, require statutory health surveillance to ensure controls in place are sufficient to protect those potentially exposed. Statutory health surveillance is undertaken by the Occupational Health Unit. It is the responsibility of the PI/supervisor to identify the need for health surveillance within the risk assessment process and ensure those identified attend for health surveillance. Guidance on the requirement for health surveillance is available from the Health and Safety Department.

Further guidance is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/hazardous-substances/sensitisers> and <http://www.ed.ac.uk/schools-departments/health-safety/occupational-health/staff/health-surveillance/overview>.

25.9.2 Immunisation

The University is required by law to offer immunisations to individuals who may potentially be exposed to pathogens at work, where an effective vaccine is available.

These include;

- Those who may be exposed in the course of their employment to human tissues, blood or body fluids are advised to receive Hepatitis B immunisation.
- A minimum requirement for animal house staff and veterinary workers should be immunisation against tetanus, for those not already immune.
- Various vaccines may be of value to workers conducting relevant overseas fieldwork.

If any member of the University chooses to reject advice to receive an immunisation, a signed declaration must be obtained to this effect.

Immunisation must always be regarded as a back-up rather than a control measure, and must never be regarded as a substitute for safe working practices.

25.10 Undergraduates, visitors and contractors

Access to University laboratories and other facilities where biological work is carried out (containment laboratories) must be limited to only those persons who have a valid reason to enter the laboratory. At containment levels 2 and above it is a legal requirement that access be restricted only to authorised persons.

Maintenance staff, contractors, undergraduates and visitors cannot, and indeed must not, be expected to make competent risk assessments as to the hazard potential of working in a specific area of a laboratory, or on an item of laboratory equipment. Such risk assessment can only be undertaken by persons with sufficient technical/academic knowledge of the activities being undertaken and substances/equipment being used.

It is therefore imperative that maintenance staff and contractors work only to the permit-to-work system provided and that any safety requirement, including the wearing of specific personal protective equipment (such as gloves, overalls, goggles etc.), is adhered to. The host laboratory should provide any specialist personal protective equipment that is required e.g. gloves of a specific material. Work must never be extended out with the area covered by the permit-to-work, without obtaining a new or signed alteration to the permit, from an authorised and competent member of the laboratory staff. Entry must be under a permit-to-work system unless in exceptional emergency situations where this is not practicable. The only exception to the latter is for containment level 3 laboratories where entry must always be under a permit-to-work even in the event of an emergency; access to these areas is tightly controlled and unauthorised persons should not be able to gain entry except by specific arrangement with one of the authorised laboratory managers/supervisors. In emergency situations below containment level 3, expert advice must be immediately sought from School etc. contacts, in order that an informal "permit" approach may be taken.

A downloadable Laboratory Permit to Work form in pdf format and further guidance on this important subject is available at: <http://www.ed.ac.uk/schools-departments/health-safety/guidance/laboratories-workshops/access>.

Undergraduates can assist in the formulation of a risk assessment but this must be signed off by a senior member of the project team before work is undertaken. Undergraduates should never work alone or out of hours in a laboratory without supervision.

All visitors must receive an appropriate induction including hazards in the laboratory, supplied with required PPE (including RPE) and informed of when to wear it, and emergency procedures. Casual visitors must never be left alone or out of hours in a laboratory. Visiting researchers may work alone and out of hours after appropriate training has been received.

Children are not allowed into University laboratories, except for organised open days with suitable supervision.

25.11 Transport of biological material outside of the University

Certain biological samples, cultures and other materials fall within the description of dangerous goods for carriage, and both national and international legislation demands that stringent requirements must be met if the goods are transported by any means. All workers in the University must ensure Regulations applicable to the transport of biological materials are complied with for each particular consignment and not carry, consign, package or play any other role in the transport chain if they are not competent to do so. Advice on the transport of biological materials is available from trained staff within Schools and/or the University Biological Safety Adviser.

There is a requirement under the COSHH Regulations that consignment (transport) of materials containing or suspected of containing Hazard Group 4 biological agents is to be notified in advance to the enforcing authorities. The University Biological Safety Adviser will make any such notifications to the Health and Safety Executive. However, there are no facilities in the University suitable for handling such materials and individuals, Schools or other management units must not, under any circumstances, either consign or receive Hazard Group 4 materials without first contacting the University Biological Safety Adviser.

Further guidance on transport of biological materials can be found at <http://www.ed.ac.uk/schools-departments/health-safety/biosafety/policy/guidance-rules/transport>.

25.12 Monitoring, review and audit

All laboratories should be included in a regular inspection programme. This could include weekly walk-throughs but also more formal monthly and annual inspections. Each School must formulate its own inspection regime as appropriate. Model templates and guidance are available on the Health and Safety Website at <https://www.ed.ac.uk/health-safety/online-resources/checklists>.

Accidents must reported using the standard University accident reporting system. Incidents can be reported online using the form at <http://www.ed.ac.uk/schools-departments/health-safety/accident-reporting>.

Potentially serious accidents should be reported to the Health and Safety Department via telephone and subsequently followed up by the submission of an online accident and incident form.

25.13 Decommissioning of laboratories

When a research group leaves a laboratory or a building which is being emptied for refurbishment or vacated, the research group or School must undertake a thorough decommissioning of the area, including the disposal of unused hazardous substances and cleaning of all surfaces. A checklist to assist in this process is available at http://www.docs.csg.ed.ac.uk/Safety/ra/lab_decom.pdf and should be made available to any future occupiers of the area.

26. Chemical safety

26.1 Compliance with legislation

The principle health and safety legislation affecting chemical laboratories is the Control of Substances Hazardous to Health Regulations (COSHH). These impose various duties on the University and its staff and students. Full guidance is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/hazardous-substances/coshh>.

It is important that senior management within laboratory areas identify the health and safety legislation relevant to their work activities and implement measures to ensure compliance. Guidance on some of the other more common legislation pertinent to chemical laboratories, including the Dangerous Substances and Explosive Atmospheres Regulations, the Classification, Labelling and Packaging of Substances and Mixtures Regulations and Registration, Authorisation and Restriction of Chemicals is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/hazardous-substances>.

26.2 Liaison with Enforcement Authorities

Any contact by the Health and Safety Executive (HSE) on matters of chemical health and safety should immediately be relayed to the Health and Safety Department. Further guidance on University policy on contact with the HSE is at <http://www.ed.ac.uk/schools-departments/health-safety/safety-roles/school-area-advisers>.

26.3 Organisation

There are no specific roles within chemical laboratories that University staff are required to undertake. However, all laboratory users must follow the risk assessments, laboratory rules and standard or safe operating procedures (SOPs) of that School. Laboratory managers and Principal Investigators must be appropriately experienced and trained. Technicians must be appropriately experience, trained or supervised (if appropriate).

The Occupational Hygiene Unit is available for help and guidance, contact details at <http://www.ed.ac.uk/schools-departments/health-safety/about/units/occupational-hygiene>.

Good laboratory practice should be followed by all laboratory users. Further guidance is available online at <https://www.ed.ac.uk/health-safety/guidance/laboratories-workshops>.

26.4 Risk assessments

The COSHH regulations impose duties on the University to protect its staff and any other persons, whether at work or not, who may be affected by the University's work involving substances hazardous to health. In order to ensure compliance with the Regulations, Heads of School must ensure that work is not undertaken that is liable to expose any employees, students or others, to any substance hazardous to health, or ensure that the exposure is kept to a minimum after a suitable and sufficient risk assessment is undertaken by a competent person. The results of these risk assessments, usually in the form

of standard or safe operating procedures (SOPs) or safe systems of work (SSW), must be communicated to all relevant staff and students prior to work being undertaken. Full guidance is available at <http://www.ed.ac.uk/schools-departments/health-safety/guidance/hazardous-substances/coshh>.

It is the responsibility of the person in charge of the area or procedure to ensure that risk assessments are undertaken – this may be the Principal Investigator, Supervisor, Tutor or Laboratory Manager.

Template COSHH forms and guidance are available at <https://www.ed.ac.uk/health-safety/online-resources/risk-assessments>.

26.5 Instruction, information and training

All persons working or studying in laboratories where hazardous chemicals are stored, used or prepared must receive information, training and supervision appropriate for the work undertaken, so that risks to the health and safety of all persons potentially involved are effectively controlled.

All such workers must undergo a local laboratory induction session. Specific COSHH training courses can be arranged by the Health and Safety Department. This central training must be augmented by local training in specific techniques, standard operating procedures or safe systems of work. Further guidance is available at <https://www.ed.ac.uk/health-safety/guidance/hazardous-substances/instruction-supervision-training>.

Training must also include what to do in an emergency. Further guidance is available at <https://www.ed.ac.uk/health-safety/guidance/laboratories-workshops/lab-management>.

Records must be kept of all such training given.

Laboratory workstations and equipment may have their own specific ergonomic hazards. An online training course is available to ensure these hazards are appreciated and how to control them, <http://www.ed.ac.uk/schools-departments/health-safety/training/e-learning/cardinus/lab-ergo>. A checklist for the use of microscope benches has also been developed, http://www.docs.csg.ed.ac.uk/Safety/includes/guidance/Microscope_workbench_checklist.pdf.

26.6 Supervision

All staff who supervise work carried out by students, research assistants, and technical staff are required to give careful attention to the health and safety of those under their supervision. This applies not only to work on University premises but also to University work carried out elsewhere either in the UK or abroad. To fulfil its function, the degree of supervision must have reasonable regard for the level of training and expertise of the staff or students being supervised.

The University has a duty to ensure that students do not create unsafe conditions by unauthorised initiatives and supervision must be adequate to meet this requirement. Accordingly, prior to the commencement of any

hazardous work or activity, the Principal Investigator (PI) or other supervisor should provide, obtain or agree to appropriate procedures which would minimise foreseeable risks and thereafter should keep in regular touch with the student's work. During any prolonged absence of the PI or supervisor, a second designated supervisor should be available to ensure that established health and safety procedures are maintained.

Further guidance is available at <https://www.ed.ac.uk/health-safety/guidance/hazardous-substances/instruction-supervision-training>.

26.7 Control measures

Appropriate control measures will have been identified during the risk assessment process. It is the responsibility of the School to ensure these control measures are fit for purpose, implemented and any equipment maintained appropriately. Some equipment will be maintained by Estates Department. However, Schools must ensure this equipment is available for testing and any defects are reported as soon as possible, and the equipment removed from use if appropriate. Further guidance on laboratory fume cupboards is available at <https://www.ed.ac.uk/health-safety/guidance/laboratories-workshops/general-laboratory-design-and-equipment>.

Personal protective equipment (PPE), including respiratory protective equipment (RPE), must be worn at all times where stipulated by the relevant risk assessment. It is the responsibility of the line manager/PI/supervisor to ensure it is worn and used properly by all staff and students. Any PPE (including RPE) required by the risk assessment, must be provided by the School to staff at no extra cost. The School may choose to provide PPE (including RPE) to undergraduates and postgraduates at no cost but are not obliged to do so, and can charge for this equipment. Provisions must also be made locally for visitors and contractors – either provided for them by the School or provided by the contractor as agreed, prior to access.

Further guidance is available at <https://www.ed.ac.uk/health-safety/guidance/ppe>.

26.8 New facilities and equipment

Health and safety must always be taken into consideration when planning a new facility or upgrading or refurbishing an existing one. It is essential that the designers/architects consult at an early stage with the users as to specific requirements and it is recommended that a member of the University's corporate Health and Safety Department is invited to attend early project and design meetings along with users representatives in order to ensure that health and safety matters are raised or considered and that appropriate expertise is available.

Equipment should be chosen after careful consideration of all requirements including level of control or containment needed as well as space, utilities and cost considerations. Further guidance is available at <https://www.ed.ac.uk/health-safety/guidance/laboratories-workshops/general-laboratory-design-and-equipment>.

26.9 Health surveillance and static/personal monitoring

26.9.1 Health surveillance

Under the COSHH Regulations, work with certain hazardous substances require statutory health surveillance to ensure controls in place are sufficient to protect those possibly exposed. Statutory health surveillance is undertaken by the University's Occupational Health Unit. It is the responsibility of the PI/supervisor to identify the need for health surveillance within the risk assessment process and ensure those identified attend for health surveillance.

26.9.2 Static/personal monitoring

In certain circumstances, static or personal exposure monitoring may be required to ensure control measures are adequate – contact the Occupational Hygiene Unit for further information, <http://www.ed.ac.uk/schools-departments/health-safety/about/units/occupational-hygiene>.

26.10 Undergraduates, visitors and contractors

Maintenance staff, contractors, undergraduates and visitors cannot, and indeed must not, be expected to make competent risk assessments as to the hazard potential of working in a specific area of a laboratory, or on an item of laboratory equipment. Such risk assessment can only be undertaken by persons with sufficient technical/academic knowledge of the activities being undertaken and substances/equipment being used.

It is therefore imperative that maintenance staff and contractors work only to the permit-to-work system provided and that any safety requirement, including the wearing of specific personal protective equipment (such as gloves, overalls, goggles etc.), is adhered to. The host laboratory should provide any specialist personal protective equipment that is required e.g. gloves of a specific material. Work must never be extended out with the area covered by the permit-to-work without obtaining a new or signed alteration to the permit from an authorised and competent member of the laboratory staff.

A downloadable Laboratory Permit to Work form in pdf format and further guidance on this important subject is available at: <http://www.ed.ac.uk/schools-departments/health-safety/guidance/laboratories-workshops/access>.

Undergraduates can assist in the formulation of a risk assessment, but the assessment must ultimately be signed off by a senior member of the laboratory team before work is undertaken. Undergraduates should never work alone or out of hours in a laboratory without supervision.

All visitors must receive an appropriate induction including hazards in the laboratory, supplied with required PPE (including RPE) and informed of when to wear it, and emergency procedures. Casual visitors must never be left alone or out of hours in a laboratory. Visiting researchers may work alone and out of hours after appropriate training has been received.

Children are not allowed into University laboratories, except for organised Open Days with suitable supervision.

26.11 Monitoring, review and audit

All laboratories should be included in a regular inspection programme. This could include weekly walk-throughs but also more formal monthly and annual inspections. Each School must formulate its own inspection regime as appropriate. Model templates and guidance are available on the Health and Safety Website at <https://www.ed.ac.uk/health-safety/online-resources/checklists>.

Accidents must be reported using the standard University accident reporting system. Incidents can be reported online using the form at <http://www.ed.ac.uk/schools-departments/health-safety/accident-reporting>. Potentially serious accidents should be reported to the Health and Safety Department via telephone and subsequently followed up by the submission of an online accident and incident form.

26.12 Decommissioning of laboratories

When a research group leaves a laboratory or a building which is being emptied for refurbishment or vacated, the research group or School must undertake a thorough decommissioning of the area, including the disposal of unused hazardous substances and cleaning of all surfaces. A checklist to assist in this process is available at http://www.docs.csg.ed.ac.uk/Safety/ra/lab_decom.pdf and should be made available to any future occupiers of the area.

27. Electrical equipment

The Electricity at Work Regulations require that any electrical equipment that has the potential to cause injury is maintained in a safe condition. Each Head of School must take appropriate measures to ensure that all electrical equipment is safe and suitable for the purpose intended. All relevant persons should be made aware of the associated hazards and of the requirements to adopt working procedures designed to keep the risks to their health, and to the health of other persons, as low as reasonably achievable. Local School (area) rules relating to the specific activities of the School (area) must be made to supplement the University's Code of Practice on safe electrical use, so that when read in conjunction with this Code of Practice, the two documents form an effective means of securing the safe use of electrical equipment. Where appropriate, written records of action taken should be maintained.

Further guidance on electrical hazards can be found at <https://www.ed.ac.uk/health-safety/guidance/electrical-hazards>.

27.1 Portable appliance testing (PAT)

Portable appliance testing is the term used to describe the examination of electrical appliances and equipment to ensure they are safe to use. Most electrical safety defects can be found by visual examination but some types of defect can only be found by testing. However, it is essential to understand that visual examination is an essential part of the process because some types of electrical safety defect can't be detected by testing alone.

Heads of School must ensure that suitable arrangements are in place for the examination of electrical appliances and equipment. Estates Department can carry out this service on request, on behalf of the School.

The recommended interval for testing are available online at http://www.docs.csg.ed.ac.uk/Safety/general/Electrical_inspection-testing_guidance.pdf.

28. Fringe/Festival arrangements

The Festival Office co-ordinate the University's involvement in Edinburgh's festivals and filming on campus. More information is available on their website at <http://www.ed.ac.uk/news/events/festivals>.

29. Fieldwork

As with other parts of the Health and Safety Policy Framework, the ultimate responsibility for matters of health and safety in connection with fieldwork exercises lies with Heads of Schools and others in overall authority, such as leaders and supervisors of fieldwork exercises.

Individual Heads of School must consider the special hazards that their staff and students might encounter during fieldwork exercises and must issue appropriate advice based upon written risk assessments and sets of safety instructions. Heads of Schools should ensure that all persons who supervise or undertake fieldwork are trained in the basic techniques and practices appropriate to the work and that they appreciate potential hazards and dangers that can arise. The risk assessment for the fieldwork must identify the risk controls necessary to ensure all fieldwork activities are undertaken in a safe manner and these must be brought to the attention of all relevant members of staff and students..

If an expedition is contemplated to a country where the political and social situation is unstable, Heads of Schools, Fieldwork Supervisors and Group Leaders should take into consideration such matters as the dangers associated with civil disorder, etc., during the planning stages of such field studies.

The University has effected a travel insurance policy at favourable rates for staff and students going abroad on University business. Details can be obtained from the Insurance Office (insurance@ed.ac.uk) and online at <http://www.ed.ac.uk/schools-departments/finance/about/sections/insurance>.

Extensive guidance, including a template fieldwork risk assessment, are available online at <https://www.ed.ac.uk/health-safety/guidance/transport-travel-fieldwork> as well as the UCEA/USHA fieldwork code available online at <http://www.ucea.ac.uk/en/publications/index.cfm/guidance-on-health-and-safety-in-fieldwork>.

29.1 Voluntary fieldwork

Fieldwork expeditions undertaken voluntarily (not in connection with the normal business of the University) and voluntary recreational and sporting activities are not covered by the University's health and safety policies and procedures, but it would be wise for persons undertaking these activities to pay heed to the

advice given in the various sections of this part of the Health and Safety Policy Framework and guidance, where these are relevant.

30. Mechanical equipment

Each Head of School must take appropriate measures to ensure that all mechanical equipment is safe and suitable for the purpose intended. All relevant persons should be made aware of the associated hazards, and of the requirements to adopt working procedures designed to keep the risks to their health and safety, and to the health and safety of other persons, as low as is reasonably practicable.

The University guidance on the safe use of mechanical equipment must be supplemented by local School rules for safe workshop practice, this will form an effective means of securing the safe use of mechanical equipment.

Further guidance is available at

http://www.docs.csg.ed.ac.uk/Safety/general/Workshop_guidance.pdf and <https://www.ed.ac.uk/health-safety/guidance/electrical-hazards>.

31. Radiation

31.1 Compliance with legislation

The legislation covering radiation safety is the Ionising Radiation Regulations. The Radiation Protection Unit (RPU) ensures that procedures and processes are in place in the University to ensure compliance. Environmental matters, such as waste management, are regulated by the Radioactive Substances Act - see section 31.15 Compliance with the requirements of the Radioactive Substances Act (RSA).

31.2 Liaison with Enforcement Authorities

The University Radiation Protection Adviser (URPA) is the normal point of liaison with enforcing authorities in relation to radiation safety, for example the Health and Safety Executive, and all contact and correspondence with these authorities should to be reported to the URPA. For contact regarding environmental matters, see section 31.15.1 Liaison with the Scottish Environment Protection Agency (SEPA).

31.3 Organisation

Within the Schools which use ionising radiation, one or more Radiation Protection Supervisors (RPS) are appointed to be responsible for monitoring the extent of radiation work, and compliance with safe working practices and the appropriate legislative requirements. The duties of the RPS and arrangements for appointment are outlined in Radiation Protection Code of Practice RP/CoP001 [insert link here]. The area covered by an RPS varies according to local arrangements, and is usually based around a campus, building or part thereof, rather than on School/departmental lines. The names of the RPSs are included in the relevant Local Rules (see below), and are also published on the Radiation Protection Unit's website at <http://www.ed.ac.uk/schools-departments/health-safety/radiation-protection/supervisors/rps-contacts>. An equivalent appointment is made for

those Schools using hazardous lasers, known as the Departmental Laser Supervisor (DLS). The duties of the DLS are outlined in Code of Practice RP/CoP101 [insert link here] and their names are included in the relevant Laser Local Rules and published on the Radiation Protection Unit's website at <http://www.ed.ac.uk/schools-departments/health-safety/radiation-protection/supervisors/sls-contacts>.

Professional advice on both ionising and non-ionising radiation safety is available to all staff, students and visitors to the University by the accredited University Radiation Protection Adviser. The URPA also acts as the Radioactive Waste Adviser for the application of the Radioactive Substances Act.

The Health and Safety Department's Occupational Health Unit (OHU) arranges access to a Doctor who is appointed by the Health and Safety Executive for the provision of appropriate health surveillance and advice under the Ionising Radiations Regulations. Access to him/her is arranged via the OHU. Further details can be found in Radiation Protection Code of Practice RP/CoP015 on classified workers - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP015.pdf

Where work involves the administration of a radiation dose to a human for medical purposes, the University has an arrangement with NHS Lothian for the provision of a Medical Physics Expert, in accordance with the Ionising Radiation (Medical Exposure) Regulations. NHS Lothian also arranges the provision of Certificate holders under the Medicines (Administration of Radioactive Substance) Regulations, as amended. Justification of a human radiation exposure for research purposes is considered through the NHS Health Research Authority.

31.4 Justification and authorisation

All persons wishing to work with ionising radiation sources or hazardous lasers without immediate supervision have to formally request authorisation, using a standard Health and Safety Department template known as a Proposed Scheme of Work Form. The arrangements for this are outlined in Radiation Protection Code of Practice RP/CoP007 - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_CoP007.pdf.

31.5 Risk assessments

The arrangements for radiation risk assessments are outlined in Radiation Protection Code of Practice RP/CoP019 - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP019.pdf.

31.6 Instruction, information and training

All University personnel intending to work with ionising radiation or hazardous lasers have to be adequately trained, by completing a suitable and sufficient training course at either the University of Edinburgh or elsewhere.

The arrangements for the provision of suitable and sufficient information, instruction and training are outlined in Radiation Protection Code of Practice RP/CoP008 - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP008.pdf.

31.7 Supervision

Suitable and sufficient day-to-day supervision of ionising, non-ionising radiation and laser work is arranged by the research groups' line managers; RPSs do not provide supervision of radiation workers. It is for the line manager to determine what is an appropriate degree of supervision, although immediate supervision to a high degree is always required for undergraduates or other inexperienced individuals working with radioactive material or hazardous lasers.

31.8 Control measures

Appropriate control measures are identified and recorded either in the ionising radiation or hazardous laser generic risk assessments, or in the additional specific risk assessments attached to the returned Proposed Scheme of Work forms. Control measures for other sources of non-ionising radiation are identified and recorded in the risk assessments prepared at School level. The implementation of these measures is undertaken by the relevant School.

The maintenance of control measures is arranged by the Schools, except for the periodic testing of radiation monitors and the integrity of sealed sources, which is undertaken by the RPU. Some sealed sources leakage testing is also carried out by service contractors.

31.9 New facilities and equipment

Where new facilities are proposed that will involve new or modified radiation sources, consultation with the URPA is arranged by the Estates Department. In the case of the acquisition of new equipment containing radiation sources, either the relevant School or the Procurement Department arranges consultation with the URPA.

31.10 Personal dosimetry

Guidance on the arrangements for personal dosimetry, including internal dosimetry, can be found in Radiation Protection Code of Practice RP/CoP018 [insert link here].

31.11 Undergraduates, visitors and contractors

Undergraduates are permitted to work with certain ionising and non-ionising radiation sources, with the appropriate degree of supervision. Their supervisor is responsible for completing an appropriate Proposed Scheme of Work form, and the URPA then advises on what are considered to be acceptable source and exposure conditions.

Since undergraduates are not normally exposed to ionising radiation in the course of their work, their annual dose is limited to 1 mSv. Entry into a radiation Controlled Area is therefore only permitted when the following conditions are met:

- I. the entry is for teaching or demonstration purposes;
- II. their potential annual radiation dose is restricted to the dose limits for members of the public;
- III. their attendance is closely supervised; and

- IV. the entry conditions are in writing, normally incorporated into the Local Rules.

Undergraduates are only permitted to work unsupervised with Class 1/1M, 2/2M and 3A/R lasers. Appropriate supervision must be applied for work with any other class of laser.

Visiting workers, who use radiation sources in the University, are required to work to the same arrangements as University staff, postgraduates and undergraduates.

Visitors to the University who are not, or cannot be, regarded in law as workers are limited to an annual dose of 1 mSv. It follows therefore that they are not allowed into a radiation Controlled Area except in accordance with written arrangements. Such arrangements have to be specific, and are prepared after consultation with the URPA.

When contractors are carrying out work in University-controlled radiation laboratories, the contractor follows the general safety guidance note "Guidance for Maintenance Staff and Contractors working in laboratories", which includes a permit-to-work scheme. The presence of Outside Workers, as defined in the Ionising Radiations Regulations, in University Controlled Areas is not anticipated. When a radiation designated area is required because of the contractors' work, the URPA must be consulted by the University contact responsible for the administration of the contract.

31.12 University staff working at external Institutions

University staff, postgraduates and undergraduates undertaking work with radiation sources at external institutions are required to complete the appropriate Proposed Scheme of Work (PSoW) form. It is nevertheless assumed that they will work to the standards imposed by the host organisation. Appropriate personal dosimetry, as stated in the completed PSoW form, will nearly always be required. Further information on work at organisations outside the UK is available in Radiation Protection Code of Practice RP/CoP016 - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP016.pdf

31.13 Transport of radioactive material outside of the University

Guidance on the transport of radioactive material is available in Radiation Protection Code of Practice RP/CoP017 - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP017.pdf

31.14 Monitoring, review and audit

When changes are proposed that might affect the existing relevant ionising-radiation or laser risk assessment, new Proposed Scheme of Work forms have to be submitted. Personal radiation dosimetry data is used by the RPU to monitor exposure, and may prompt a review of control measures or how they are being applied. Ad hoc monitoring of work is also carried out by the RPSs, by both observation and reference to radiation and contamination monitoring records. The URPA carries out ad hoc inspection of radiation work, or when necessary, formal audits. The results of inspections and audits are reported to

the Radiation Protection Committee (RPC). Personal doses in aggregate form are reported routinely to the RPC.

The RPSs monitor for changes in radiation facilities, and advise the RPU as appropriate.

Accidents involving radiation are reported using the standard University accident reporting system. Significant accidents and incidents, as judged by the URPA, are investigated by the RPU, and a report prepared and submitted to the appropriate line management and RPC. Incidents can be reported online using the form at <http://www.ed.ac.uk/schools-departments/health-safety/accident-reporting>. Potentially serious accidents should be reported to the Health and Safety Department via telephone and subsequently followed up by the submission of an online accident and incident form.

31.15 Compliance with the requirements of the Radioactive Substances Act (RSA)

In addition to the arrangements made for safe working with radioactive material, the University has to meet its obligations for the control of radioactive material and its disposal to the environment. These obligations are either formalised in campus-specific Certificates of Registration and Authorisation made under the Radioactive Substances Act, or standard conditions found in the Radioactive Substances Exemption (Scotland) Order. The URPA is the appointed Radioactive Waste Adviser for the University, and advises the University on compliance with the conditions. The URPA also prepares as necessary appropriate environmental radiation assessments.

Details of the University's arrangements for complying with the conditions of its Certificates are described in Radiation Protection Code of Practice RP/CoP012 - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP012.pdf

31.15.1 Liaison with the Scottish Environment Protection Agency (SEPA)

The URPA is the normal point of liaison with the SEPA, who are the enforcing authority under the RSA, and all statutory notifications, reports and applications are undertaken by the RPU. All contact and correspondence with this authority must be reported to the URPA.

31.16 Decommissioning

When a research group leaves a laboratory or a building which is being emptied for refurbishment or vacated, the research group or School must undertake a thorough decommissioning of the area, including the disposal of unused hazardous substances and cleaning of all surfaces. Full procedures for decommissioning radiation laboratories is available in Radiation Protection Code of Practice RP/CoP012 - http://www.docs.csg.ed.ac.uk/Safety/rpu/cop/RP_COP012.pdf.

32. Travel

Travelling on University business is a common undertaking by many staff within the University. However, each trip should be considered individually to ensure

it is safe to travel and that all aspects of the trip have been taken into consideration. Full guidance is available on the University Travel website at <http://www.ed.ac.uk/staff-students/staff/business-travel/home>

33. Vehicles

All vehicles owned or leased by the University must be suitable for their purpose and comply with all legal requirements. The Transport and Parking Office publish the University Vehicle Policy which must be complied with at all times.

This policy and associated guidance can be found at <http://www.ed.ac.uk/schools-departments/transport/policies-plans-reports/policies>

33.1 Minibuses

Minibuses which are leased or owned by the University must comply with the same policies as other vehicles, see above. However, there are other, minibus specific, regulations which must also be complied with. Please see <http://www.ed.ac.uk/schools-departments/health-safety/guidance/transport-travel> for more details.