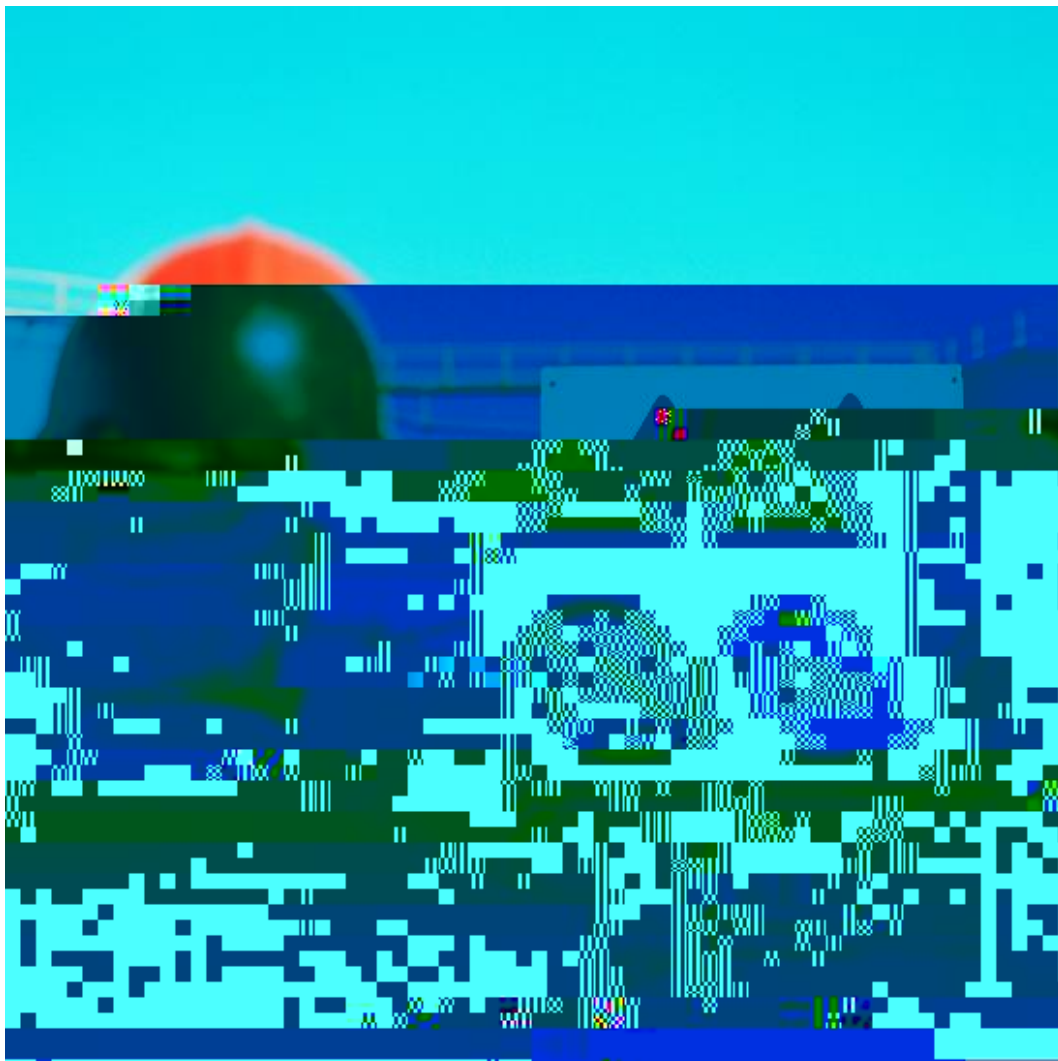


Safety Code of Practice 01

1st Edition, January 2012

HEALTH AND SAFETY STANDARDS

For Heads of Schools and Directorates



1 SUMMARY

“Good health and safety standards depend on good management”.

Heads of Schools/Directorates:

2.2 Organisation

Management

Key H&S roles need to be defined and staff need to be appointed to these roles. You need a good team who understand what is required, who have the authority to implement systems, and who are accountable. However this has to be balanced against the fact that some of them will be volunteers!

It is absolutely essential to obtain the support of academic and research staff, technical and administrative staff to incorporate safety into their day-to-day work. Members of School Boards, senior management teams, group leaders and Principal Investigators must understand what standards apply to their work activities, and ensure that those below them also understand and comply. They must be prepared to set their own standards, and identify where decisions they make in the course of their normal duties have safety implications.

Examples of standards are:

- lab rules e.g. lab coats and eye protection must be worn;
- all staff working with liquid nitrogen must attend a School/H&SS training course on safe working practices and be assessed as competent;
- workplace inspections must be carried out and findings recorded;
- all deficiencies must be acted upon within the timescales set out in the report;
- staff and students engaged in GM work must be referred for Occupational Health surveillance before work starts;
- all proposed new research activities that introduce new safety risks must be discussed with and approved by the Head of School.

Director of Safety/Area Health & Safety Co-ordinator

Most Heads of Schools appoint a Director of Safety or lead Area Health and Safety Co-ordinator to advise them, act on their behalf, and monitor compliance. They should have a letter of appointment that explains what the role encompasses. This may be part of their wider job role, especially in the science Schools, or it may be an extra task given to a member of staff, under the umbrella of their administrative duties.

They must:

- have the respect and confidence of other staff
- be competent (and hence will need training in H&S management and university procedures)
- be well organised.

You should check that arrangements are in place to appoint, and keep up-to-date the following appointments:

Building Manager

Building Managers have been appointed primarily to co-ordinate fire safety arrangements within buildings. In addition they act as first point of contact for FMD to communicate with 4(gs)-3(. In ad)6(d5e2024 (FMT

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2.5 Monitoring performance

As a Head of School/Directorate, no news is not necessarily good news. Don't wait for problems to be reported, they may not be until it's too late.

There must be effective systems for monitoring that the procedures and standards that you have put in place are working to keep people safe, and that staff and students are following them.

Active monitoring involves:

- departmental checks that systems are working and standards are being met (e.g. training has been provided; maintenance is carried out; people are following lab rules; portable appliances are in test etc.);
- departmental inspections to look for physical hazards and unsafe working practices;
- identifying possible problems and gaps in systems;
- encouraging near miss reporting.

It is recommended that you take part in some **workplace inspections**. It is a good opportunity to speak to people and check their understanding of what they are doing. Formal inspections should be carried out at least twice annually, of all areas, with action points recorded and followed up on a timescale commensurate with the risk and ease of solution.

Likewise staff in leadership/management positions must check compliance e.g. regular formal or informal tours of the workplace. If people are observed not following safe working practices, they must be challenged. If it is observed that systems have broken down e.g. routine maintenance, this must be followed up with the persons/departments responsible.

There must also be arrangements for other staff to report non-compliance or safety concerns, and these must be acted upon.

Reactive or passive monitoring involves:

- investigation of accidents – look for underlying causes, and make sure lessons learnt are shared throughout the School/Directorate where it is relevant to do so;
- receiving periodic reports of accidents/incidents so that you are aware of what is happening and can identify if trends are developing.

2.6 Audit

H&S audits are carried out by Health and Safety Services. If you are in a low risk School, the audit may only take place once every 5 years.

If you are in a higher risk science or engineering School, you should be audited every 3 years. You may also be subject to specialist topic audits e.g. gas, pressure systems, lasers, radiation.

Because H&SS can only carry out audits at 3 year intervals, at best, you should not wait for the next audit, but should carry out your own review to check that systems are satisfactory.

2.7 Reviewing the system

There should be an annual review/report to your School Board and to your Faculty Board or senior management team.

The review should identify if systems are working as designed and are achieving the desired objectives, or if improvements are needed. [A template for an annual review is available from Health and Safety Services]. This is an opportunity to take a step back, with your senior team and/or Director for Safety/AHSC, and note positive achievements; significant problems;

3 LEGAL REQUIREMENTS

a huge amount of management time taken up

4 GENERAL WORKPLACES

See: Safety Code of Practice 2: Management and Organisation, Safety Code of Practice 4: Risk assessment, Health and Safety Services web site for the health and safety training programme

This section outlines the general requirements that apply to all workplaces. There are risks in all departments that account for at least 50% of the university's reported injuries. These risks need to be managed.

4.1 Risk assessment

All hazards which present a significant risk must be assessed to identify:

- what should be done to manage the risk so that injury or ill health does not occur, so far as reasonably practicable
- who is responsible for taking actions forward.

The risk assessment approach must be systematic in the way that hazards are identified, risks are assessed and 'controls' are implemented. Controls are the procedures/facilities/ways of working, checks, supervision etc. which should prevent injury or ill-health occurring.

The law states that the following hierarchy of risk control must be adopted:

- Eliminate** – remove the need for, do the work a different way
- Reduce** – combat risks at source by e.g.

local rules, Area Health and Safety Codes etc., but in some cases the information may need to be presented in a different way e.g. verbal briefing, demonstrations, pictures.

The level of detail should be proportionate to the risk. For low risk office environments, it is a straightforward process based on informed judgement and reference to guidance (University Codes of Practice, Safety Notes, and external sources such as the HSE web site).

Where the work is unique i.e. not covered by standard protocols or procedures, such as in research work, a specific risk assessment will be necessary. This must consider the options for doing the work, and identify a method that will reduce any risks to as low as reasonably practicable. The results must be shared with the research staff and students who will be doing the work. They must understand:

- how to work safely
- what could go wrong
- if it does, what the emergency procedures are

Ultimately, only a court can decide if risk assessments are 'suitable and sufficient' and if risks have been reduced to a level as low as reasonably practicable. If you are in doubt, Health and Safety services can advise, and depending on the task, national standards, codes of practice, industry guidance, and other institutions can be consulted on what it is normal to expect. You may have to defend your decision or working practices in a court of law. This will be very difficult to do if you have not found out what would be regarded as 'normal', or have not followed those standards.

4.2 Competency

All staff must be competent for their job role. This means that:

- Health and safety training requirements must be identified

4.3

4.5

Safe systems of work may be required.

Electrical systems (mains voltage) must be inspected and tested to verify that they are safe.

NB Building supplies are the responsibility of FMD.

Equipment must be CE marked.

Live working is NOT allowed except in exceptional circumstances.

4.9 Events

There must be a Safety Co-ordinator for each event.

Events must be approved by the University in advance so that all relevant departments (Security, Campus services, Communications, FMD, H&SS etc.) can either provide support or check that the proposed event can be managed safely and will not clash with other events on campus.

The approval process is co-ordinated by the office of the Deputy Director, FMD. The submission must be made 28 days in advance to allow time for assessment and your planning. Some events also require a Temporary Event Notice from the local Council (e.g. if the event involves the supply of alcohol, provision of various forms of entertainment etc.). H&SS will advise if this applies.

If the event involves the supply of food (whether free or not), the food must be prepared hygienically by competent people (preferably they will have attended a H&SS food safety course).

If outside caterers are used, the University preferred suppliers should be used, in accordance with Procurement policies. If they are not, the School inherits the responsibility for

Staff who drive their own vehicles for work must have business insurance. This must be drawn to their attention e.g. via the Area Health & Safety Code.

4.12 Buildings and maintenance

No-one should interfere with the fabric of a building unless they have obtained prior authorisation from FMD. This applies to all work, from installation of fittings to construction work.

FMD will check whether or not the proposed work will interfere with building services (power cables, IT services, water etc.) or disturb asbestos.

4.13 Work at height

Ladders and stepladders are not banned – but staff need to know how to use them properly. Where materials need to be accessed at height, make sure footstools, stepladders etc. are provided.

Where the work will go on for some time, or is beyond the reach of a standard ladder, consider other alternatives such as tower scaffolds. However those erecting this equipment need to be properly trained.

4.14 Incidents and accidents

All incidents and accidents must be reported. The current system is to use Accident Books,

Where staff, students or visitors have a disability that means they cannot evacuate without assistance, a Personal Emergency Evacuation Plan must be offered. In some cases, it may be possible to rely on generic arrangements for a building. However staff and students should be assisted to find out what these arrangements are. For staff, this may fall to the AHSC to co-ordinate. For students, the School Disability Officer should take the lead.

Fire drills must be held at least twice per annum.

Those involved in managing evacuations must be trained for their role.

Flammable materials must be stored safely when not in use. This is particularly important in science laboratories which use solvents. It also applies to office environments where excessive amounts of paper can increase the fire loading and provide fuel for an electrical fire. These issues should be identified during workplace inspections.

Mandatory personal protective equipment rules (e.g. laboratory coats or eye protection) are being followed and enforced.

Spillages and breakages cleaned up immediately – staff and students should understand how to do so safely. This may require special spill kits, and training in their use.

Identify and **assess the risks to health** from hazardous substances used in or created in the workplace

Decide what **precautions** are required e.g.
Use less hazardous materials

Prevent or adequately **control exposure** e.g. Adopt good lab practice
Training and supervision
Restrict activities
Minimise quantities
Use engineering controls e.g. microbiological safety cabinets, fume cupboards, Local Exhaust Ventilation, autoclaves

Ensure that **control measures are used and maintained and are effective**
e.g.
Train staff and students in correct use of fume cupboards, MSCs, LEV systems, centrifuges, correct use of PPE
Check that they understand when equipment is not operating or being used satisfactorily
Monitor correct usage
Maintain engineering controls and other equipment (check with FMD, do not assume that all equipment is maintained by them)
Inspect and test engineering controls (normally annual test is required to meet statutory requirements. In some cases more frequent testing/calibration/validation may be required).

Prepare and practice **emergency procedures** to deal with e.g.
Spillages
Fires
Toxic and asphyxiant gas release

Have appropriate first aid training and provision e.g. for HF acid burns.

Review in the light of:
Experience, incidents
Changes of process, new research
New regulations, best practice
H&SS audits, HSE inspections

Protection depends on assessment of the risk and correct use of controls such as fume cupboards, microbiological safety cabinets. **Remember ERICPD!**

Chromatography equipment); x rays; and other equipment and instrumentation that have gaseous tritium light sources (e.g. instrument dials, gauges etc.).

Work with radioactive sources is strictly regulated by the HSE (for worker protection) and the Environment Agency (to minimise potential harm to the environment through improper use, loss, disposal etc.).

University procedures MUST be followed:

- All work with sources of ionising radiation MUST be approved in advance by the Radiation Safety Sub-Committee. This includes techniques; workers; and facilities.

- All acquisitions, purchases, transfers, and disposals of sources (excepting pre-agreed

Industry guidance from the British Compressed Gases Association should be complied with. Gas regulators need to either be serviced and tested, or replaced, at designated intervals, depending on the gas each is designed to be used for. You should plan for regular replacement or servicing costs.

Each regulator must be inspected annually, and a record kept. The inspection should include a functional test to ensure the correct operation of internal components.

All gas cylinders are hazardous, either because of their toxic or asphyxiant properties, or because of the cylinder pressure. In a fire situation, they can kill. Therefore all cylinders should be stored in a locked external gas store, where practical. This is particularly important for acetylene, which becomes highly unstable when heated. Only use acetylene where it is the only option.

7.12.4 Cryogenic gases

In large quantities, cryogenic liquids/gases can kill. **The use of oxygen deficiency monitors is a last resort; the primary goal is to remove the risk of an oxygen deficient atmosphere by good planning and design.**

Check that 'worst case' calculations are carried out to ensure that an asphyxiant atmosphere cannot result from a leak or spill. If the room isn't big enough, or the ventilation is inadequate, either find a more suitable laboratory, improve the ventilation, or minimise the quantity of gas stored.

High risk workplaces will require a pre-placement visit to check arrangements, supervision, working conditions etc.

Placement organisers must check that participant's tasks do not involve any prohibited by law. Particular care must be taken to check requirements where young 1st year students may be under the age of 18.

There should be a written document or contract between the University and the placement provider which sets out what each party is responsible for.

Students must be briefed on the expectations and standards that will apply. It must be clear who is responsible for doing so – the University or the placement provider or both.

There must be a means for the student to raise concerns with the University.

There must be a means for the University to keep in touch with the student at appropriate intervals.

10 INTERFACE ISSUES

10.1 Services provided by FMD

FMD are responsible for the maintenance of the University campuses and buildings. FMD is not responsible for department -owned equipment. Any doubt about ownership and responsibilities should be discussed and clarified with FMD.

FMD personnel should report to Building Managers before starting work in a building, to ensure that the proposed work will not disrupt work or research. Advance notice should be given if services need to be turned off – unless it is an emergency.

10.2 Contractors

Where Schools engage contractors to undertake work on their behalf, they should follow Procurement rules, including using preferred contractors. This provides some assurance that the competency of the contractors has been vetted.

