

General Principles of Effective Health and Safety Management in Schools in the United Kingdom

General Principles of Effective Safety Management

Four Key Stages

1. PLANNING - Setting Policy and Formulating a Safety Plan
2. DOING - Delivering Safety Plan
3. CHECKING - Measuring Performance, i.e. monitoring
4. ACTING - Reviewing Performance and acting upon lessons learnt to feed back into Step 1.

The relationship between these stages is illustrated below:



Health and Safety Policy

- Safety Policies describe the organisation for managing safety and provide information on the hazards likely to be encountered.

- Schools/Departments (Management Units - MUs) are required to supplement the University's policy with a document tailored to their local situation.
- A [model safety policy](#) which MUs can adapt is available in an electronic format.

The Health and Safety Policy is a requirement under Section 2(3) of the Health and Safety at Work Act 1974. It is a crucial element in the promotion and maintenance of a positive health and safety culture and in achieving high standards of health and safety awareness at all levels throughout any organisation. The policy is also required to include the organisation and arrangements in place for implementing the policy and for bringing this and any subsequent revisions of it to the notice of all employees.

The University has the following to comply with the Health and Safety at Work Act:

- Safety Policy Statement
- Organisational Arrangements
- [Policies and Guidance](#) - general information on the broad range of health and safety issues that affect the University (A to Z of topics).

The above is available on the Safety Office website and therefore is visible to all members of the University for reference. Documents are reviewed periodically, either as routine or because of new information.

The University's senior management should define, document and endorse the health and safety policy. Management should ensure that the policy includes a commitment to:

- Recognising health and safety as an integral part of the its business performance;
- Achieving a high level of health and safety performance, with compliance to legal requirements as the minimum , and to continual cost-effective improvement in performance;
- Provide adequate and appropriate resources to implement the policy;
- The setting and publishing of health and safety objectives even if only by internal notification;
- Place the management of health and safety as a prime responsibility of line management, from the most senior executive to the first-line supervisory level;
- Ensure that the health and safety policy is understood, implemented and maintained at all levels in the organisation;
- Employee involvement and consultation to gain commitment to the policy and its implementation;
- Periodic review of the policy, the management system and audit of compliance to the policy;

- Ensure that employees at all levels receive appropriate training and are competent to carry out their duties and responsibilities.

The document will be the foundation for proactively managing health and safety within the organisation. It should be reviewed regularly to check that it remains relevant.

Management Unit (MU) Health and Safety Policies

However since the University information is of a general nature to be applicable across the University, it requires supplementation at MU level.

All MUs are therefore required to have in place their own document which reflects their specific organisation, arrangements and hazards.

Although this requirement will apply to small low risk MUs, the content will be minimal, the primary purpose being to describe the arrangements for managing health and safety within the MU and the arrangements for basic issues such as first aid and fire evacuation.

To assist small, low risk MU a model safety policy template has been produced is available electronically for easy editing to suit the local circumstances. Larger, more complex or higher risk MUs should also find that this forms a useful template around which to base their own more complex documents.

In defining the management arrangements, the appointment of people with specified safety responsibilities (see section below), arrangements for implementing University policies, and the local arrangements for identifying hazards and assessing and controlling risks, the document will be the foundation for proactively managing health and safety within the MU. **It should be reviewed annually to check that it remains relevant** i.e. there have been no significant changes within the MU or in working practices which invalidate the information.

2.3 Organisation and Personnel

- This section outlines the general principles.
- The arrangements in place centrally for the University are described in Section 3 - University Arrangements.
- Section 4 describes the arrangements which should be in place at School level - Section 4 - School Arrangements.

The following features are crucial in developing a successful organisation for managing health and safety:

- The formal delegation to specific individuals of responsibility for health and safety.

- The establishment of an organisational framework which enables safety issues to be identified and resolved and which provides reassurance through monitoring that standards are being maintained.
- The provision of effective arrangements for consultation with staff and safety representatives appointed by the recognised trade unions.
- The provision of sufficient information to staff about the risks to which they may be exposed and the appropriate control measures they should adopt.
- The provision and recording of training to enable staff to safely carry out their work and to enable them to effectively discharge specific health and safety duties.
- Provision of sufficient resources both in terms of time and finance.

2.4 Planning and Performance Standards

- Health and Safety Planning underpins the implementation of progressive improvements in safety standards by prioritising on the basis of risk. (Risk Assessment is described in [Section 2.8](#)).
- Health and Safety Plans should specify an appropriate timescale for resolving issues.
- Health and Safety Performance Standards, i.e. what should happen when, enable the effectiveness of systems of control to be verified.
- Each School should develop a plan which shows that issues are being identified and addressed in a systematic manner.
- The University Health and Safety Plan is formulated and monitored by the University Safety Committee. Schools may propose strategic, policy issues for inclusion in this.

The development, implementation and maintenance of an effective safety policy and its supporting organisation is not a static activity. The process needs to be sensitive and responsive to new legislation, to changes in working arrangements or processes, to the introduction of new hazards, or to the availability of new information on existing practices. It will also be necessary to respond to information obtained from monitoring activities.

Planning for health and safety involves making decisions about priorities, appropriate timescales and the allocation of resources. The two processes which support planning are risk assessment and the development of performance standards. Risk assessment provides the means for identifying new issues for control and these controls may involve specifying performance standards, either physical parameters of the process (e.g. noise/dust/light levels, containment measures) or certain actions which are required to be taken at predetermined intervals (e.g. maintenance checks, health surveillance). The performance standard specifies not only what is to be done (and the levels of acceptability) also who does it, how often, with what equipment and what records shall be created and maintained.

It is almost inevitable that situations will arise where all the health and safety issues identified cannot be dealt with immediately. The range of circumstances on the one

hand may preclude this and there may additionally be situations which require the development of further policy, investigation to gather more information to arrive at an appropriate decision or solution, or organisational changes possibly with additional resource requirements. The planning process confronts this by prioritising the actions required within an acceptable time period. Lower priority areas should not be omitted from the process but incorporated into the plan at a later stage when resources become freed following the completion of the more pressing items. This process is underpinned by performance standards.

Performance standards can be applied successfully across the various elements comprising the safety management system. For example at the organisational level who will specify the key safety posts and how they are filled, the structure and functioning of safety organisation i.e. membership of safety committees, the frequency of meetings and the distribution of minutes, and how monitoring is to be carried out i.e. the way in which accidents or near misses are investigated and reported, the frequency of inspections, who does them and how they are reported.

Performance standards also apply to specific aspects of working practice or particular equipment. For example the frequency and manner of checking the efficiency of a fume cupboard, of guards or other safety devices at dangerous machinery, the training requirements for various tasks or the operation of permit to work procedures prior to entry into hazardous environments or carrying out high risk operations usually entry into confined spaces.

By using performance standards those monitoring system at every level can be reassured that a particular performance level is being maintained or, if not, initiate action to remedy the failing.

Relationship to University and School Arrangements

Health and safety planning centrally is formalised in a University Health and Safety Plan. This is formulated by the Safety Committee on an annual basis and includes the overall health and safety objectives for the year. The primary nature of these objectives is strategic and they relate to the development or revision of overall safety policy and the effectiveness of its implementation.

Schools wishing to raise items for consideration or inclusion into the University health and safety plan should notify either their Faculty Representative or equivalent on the Safety Committee, or the Safety Office, at least two weeks before the summer term meeting of the Safety Committee (this is usually held in mid-May). The Statutory Safety Committee is also invited to identify matters for consideration.

Schools should also have a plan which deals with their specific problems. This should indicate that the School has considered its own priorities and timescales and that the necessary resources will be provided to implement it.

2.5 Measuring Performance

- Continuing improvement in health and safety standards requires knowledge of the effectiveness of the existing arrangements.
- The School's safety policy should describe how monitoring is to be carried out.
- The Head of School should be aware of the School's safety performance as identified through the monitoring arrangements.
- Active monitoring, i.e. inspections, are intended to identify problems at an early stage. Reactive monitoring aims to learn from incidents. Both systems should be in place.
- **School safety inspections** are described in [section 4.7](#). The minimum requirement is for all areas to be inspected annually.
- An **annual safety report** should be completed and returned to the Safety Office each September.

In order to demonstrate that safety policies and plans are effective and functioning efficiently it is necessary to establish both active and reactive monitoring systems.

- **Active monitoring** (before things go wrong) - involves regular inspection and checking to ensure that the standards of the University are being implemented and the management controls are working.
- **Reactive monitoring** (after things go wrong) - involves learning from ones mistakes, whether they result in injuries, illness, property damage or near misses.

Systems of both active and reactive monitoring will then support the effective review and improvement of the health and safety management system. Information from both active and reactive monitoring is also used at a more basic level to identify situations that create risk and to address these in a logical prioritised manner.

Active Monitoring

This comprises a range of checks to ensure that the safety systems are working effectively and thus reducing the likelihood of unsafe actions being taken. Monitoring should address each level of the safety management system and be carried out by those immediately above it. For example the immediate supervisor for any area should check that the correct working procedures are being followed and that the integrity of any physical safety features eg machinery guards is maintained. The supervisor's line manager will need to be satisfied that all the supervisors reporting to him or her are carrying out these checks and in turn their line manager will need to be similarly reassured. The main monitoring function is therefore a School responsibility passing up the line management.

The Head of School needs to be satisfied that the monitoring arrangements, which should have been described within the safety policy are being properly implemented. Monitoring of the School's performance is carried out by the Safety Office and reported via the Safety Committee to the senior management of the University and to University Council.

In addition to inspections or audits of Schools by the Safety Office, Schools will also be monitored by questionnaire based surveys relating to specific topics. Of central importance is the **Annual Safety Report** which Schools should complete and return to the Safety Office by 30th September each year. The findings from this will be incorporated into the Annual Safety Report which is presented to the December meeting of University Council.

2.6 Reviewing Performance

Periodic formal reviews are necessary to ensure that policies and standards are kept up to date and developed, that any deficiencies are identified and that the lessons of experience are incorporated. The review process applies both at the School level and at University level. The basis of the review is the information obtained from the monitoring processes which check the adequacy of the policies in place and the effectiveness of their implementation. In the light of this experience existing policies and organisation can be amended and new policies developed.

2.7 Audit

- Auditing the safety performance of Schools is a Safety Office function.
- This process supplements other monitoring activities carried out by the Safety Office and by the School.

Auditing involves an in-depth examination of the health and safety system by placing the emphasis on managerial and operational procedures and practices. It also ensures verification of the overall adequacy of preventative plans and action. It should support safety management by providing an independent measure of safety performance. Auditing needs to be independent of local line management.

The Safety Office will audit Schools to ensure consistency and to provide an external view of how a School is performing. This will give an overall view of how the University as a whole is managing health and safety.

The audit will explicitly check that:

- Management procedures for hazard identification, risk assessment, control and monitoring are being used and that they work in practice.
- Management is being successful in setting up and meeting performance standards.
- Progress is being made.

Specifically auditing will involve an examination of the School's systems ie documentation and policies; organisation; procedures; communications and practical implementation. The effectiveness of these will be verified by examining records, interviewing different members of the School and making a physical inspection of specific aspects of a School's activities.

The Universities Safety Association has produced a safety management and audit system "Safety Management Profile" which has been adopted by this University for auditing. The auditing package was developed in consultation with representatives of the Health and Safety Executive and provides a constructive measure for the quality of the School's or Institution's health and safety management by identifying its particular strengths and weaknesses and by recommending remedial action as appropriate. High risk Schools or Sections will be audited on a 3-yearly basis, low risk Schools and sections will be audited on a five-yearly basis.

In addition, the Safety Office will carry out short inspections to check physical conditions in each School and section on an annual or bi-annual basis.

2.8 Guidance for Risk Assessment

- Risk assessment to establish that workplace hazards are being safely controlled is a legal requirement. Written records of risk assessments are needed.
- At School level the objective is to ensure that the general risks have been identified and effective controls are in place. The findings will feature in the School's safety policy.
- Individual areas within the School should be able to demonstrate that specific activities not covered by the School's arrangements have been assessed and that effective controls are in place.
- Information, instruction, training and supervision requirements need to be considered in addition to physical controls.

Introduction

The assessment of risk is central to the management of health and safety. It is also a requirement which is implied in a considerable range of health and safety legislation, including the Health & Safety at Work (etc.) Act 1974, and made explicit in the Management of Health & Safety at Work Regulations 1992 (MHSWR). Certain specific Regulations also require narrow areas for risk assessment, e.g. display screen equipment and manual handling. Other Regulations also require assessments for exposure to noise or hazardous substances (COSHH). Assessment of the risks arising from work activities also leads to the selection of suitable work equipment or personal protective equipment (eye protection, clothing etc.).

The overriding requirement for risk assessment contained within MHSWR requires an assessment of the work related risks to employees, students, visitors and members of the public arising out of a School's activities. The purpose of this is to assist in identifying those measures which are needed to remove or otherwise control the risks and to mitigate any consequences. The provision of information, instruction and training, along with the degree of supervision, also constitute control measures. It is also necessary to consider whether there are any specific groups of individuals who could be at particular risk under some circumstances, e.g. disabilities affecting their ability to

evacuate the building in an emergency, adverse effects on pregnancy or other medical conditions.

Risk assessment in a School can be considered as falling into one of two groups, namely general or specific. General assessments would apply where there are common hazards or activities to the School such as emergency situations, field work, lone working or out-of-hours working, first aid requirements. Specific assessments are related to a particular task such as use of a particular piece of equipment or the carrying out of a specific procedure. Whilst assessments of procedures in general use across the School are best carried out at this level, e.g. by the safety committee or one or more individuals reporting to this, the specific assessments should be performed by the individuals responsible for the work areas where these work activities occur since they will have the greatest knowledge of the activities being carried out. The School Safety Officer will have a role in supporting or guiding the individuals doing this and thereby in achieving a degree of consistency across the School.

The School's risk assessment should identify the contents for the Safety Policy. This may need to be supplemented by the specific assessments which should be kept more locally, i.e. within the section. The Safety Policy should make reference to these arrangements where relevant.

It is important that the assessment only considers significant risk arising out of the work activity and does not get distracted by trivial problems which may be identified. A significant risk is one where it is foreseeable that an injury requiring first aid or medical treatment or resulting in an absence from work, or long term damage, e.g. to hearing or an asthmatic condition, could occur.

Simple Risk Assessment

Hazard and risk

It is important to understand the meaning of these two terms to effectively carry out a risk assessment:

- **Hazard** is defined as the potential to cause harm.
- **Risk** is defined as the likelihood of an event occurring which will allow the hazard to be manifested.

The level of risk depends upon a combination of these two factors, for example the act of carrying a heavy weight carries with it the attendant risk of it being dropped, thereby causing a foot injury. The likelihood of this being dropped will increase in line with the number of times the operation is carried out and the duration of the operation. Similarly a flammable liquid presents a fire hazard but the risk of this occurring is low whilst being correctly stored, but will be high if used in an area where there is a source of ignition.

To allow for the possibility of dramatic consequences which may arise, then the potential consequences from a single event should also be incorporated into the evaluation. In the vast majority of situations the consequences would be restricted to a single individual. A small number of situations could give rise to the event affecting a small number of people within the immediate vicinity of the incident, e.g. other occupants of a work room. At its most extreme an incident could endanger individuals beyond the locality, for example everyone else within the building. Higher consequence events will only be associated with higher hazard activities, typically activities which could result in a fire, explosion, toxic gas release or serious mechanical failure, e.g. of heavy lifting equipment.

Qualitative Ranking of Risk

To assist in prioritising areas requiring health and safety improvements then the level of risk may be qualitatively ranked. This can be done by scoring each of the three factors - hazard, risk and consequences from 1 to 3, 1 being the lowest, 3 being the highest. The product of this is numbered between 1 and 27 and the higher scoring action points will be seen as having the greater priority.

Risk severity = hazard x risk x consequences

The severity of the hazard may be scored as follows:

- 3 - Major (death or severe injury may result)
- 2 - Serious (injuries requiring medical treatment or more than three days off work)
- 1 - Slight (injuries requiring no more than first aid treatment, or brief absences from work)

Risk can be similarly ranked:

- 3 - High (event will occur frequently)
- 2 - Medium (event will occur occasionally)
- 1 - Low (event will seldom occur)

In determining the likelihood of an event occurring, account needs to be taken of both the chance of it happening each time the task is carried out and the frequency/regularity of that task. Hence an infrequently carried out task which entails a near certainty of injury would be high risk. Similarly a task which is carried out very frequently but for which the likelihood of mishap for each occasion is low, would also be high risk since it is inevitable that the mishap will occur within a realistic time period.

Consequences may be ranked as follows:

- 3 - School (endangers individuals within a wide area)
- 2 - group (endangers individuals within the immediate vicinity)
- 1 - individual (single individual affected)

Although scores up to 27 are possible, for most purposes the scoring range will be between 1 and 9 since usually the consequences will be restricted to a single individual. Hence scores in the range 6 to 9 should be considered as high priority, scores in the range 3 to 5 medium priority and scores of 1 or 2 as low priority.

Where higher consequence events are involved then scores greater than 9 will arise and will serve to further prioritise those actions requiring the highest priority.

The following table provides interpretation as to the timescale for appropriate action relating to the scores produced from the a

Risk Level	Action and Timescale
Trivial (1)	No action is required to deal with trivial risks, and no documentary records need be kept (insignificant risk).
Acceptable (2)	No further preventative action is necessary, but consideration should be given to cost-effective solutions, or improvements that impose minimal or no additional cost burden. Monitoring is required to ensure that the controls are maintained.
Moderate (3-5)	Efforts should be made to reduce the risk, but the costs of prevention should be carefully measured and limited. Risk reduction measures should normally be implemented within three to six months, depending on the number of people exposed to the hazard.
Substantial (6-8)	Work should not be started until the risk has been reduced. Considerable resources may have to be allocated to reduce the risk. Where the risk involves work in progress, the problem should be remedied as quickly as possible and certainly within one to three months.
Intolerable (9+)	Work should not be started or continued until the risk level has been reduced. While the control measures should be cost-effective, the legal duty to reduce the risk is absolute. This means that if it is not possible to reduce the risk, even with unlimited resources, then the work must not be started or must remain prohibited.

Application of Risk Assessment

A two-part form is attached ([Appendix 1](#)) which may be used to assist in carrying out risk assessments and recording the findings from these. The first part analyses the activities and the second part contains the action plan to remedy deficiencies noted.

Although the risk assessment process may be delegated, the person managing the work area or activities remains responsible for the findings and for ensuring that the conclusions relating to any remedial action are implemented. The assessment form requires that the responsible person confirms their acceptance of any delegated assessments.

In analysing the risks arising from any particular activity each of the hazards involved needs to be considered separately against the precautions which are already provided. These may or may not be satisfactory. Where the precautions are dealt with by other documents (such as local rules for working with ionising radiation; assessments and procedures for working with hazardous substances; comprehensive documentation for the use and maintenance etc. of dangerous machinery) then it is only necessary to refer to these documents and conclude whether the detailed contained therein is sufficient to control the hazards. Where deficiencies are identified then they can be evaluated and prioritised using the method described above.

As well as the action being specified in the action plan this also serves the important purpose of making sure that the action is completed within a predetermined time period.

Link with Training and Supervision

One of the most important elements of controlling the risks and making sure that the controls are properly used is the provision of information, instruction and training to those doing the work. This also needs to be supplemented with supervision to make sure that the information etc. has been properly understood and the task is being competently carried out. The extent of direct supervision can be relaxed as the person demonstrates competence but adherence to correct procedures must form part of the ongoing monitoring arrangements. Familiarity can lead to complacency with the result that corners may be cut and unsafe methods become part of the "custom and practice".

The manner in which the health and safety responsibilities of supervisors towards students may be discharged is described in [Safety Office guidance](#). This considers the relationship between training, supervision and competence and records this in a Project Supervisory Requirements Form (PSRF). The principles of this apply equally well to the training requirements for any member of staff whose job involves tasks where knowledge and skill are needed to carry these out safely. For any School, section or group of people it will be possible to produce a generic PSRF (or Training and Supervision Form) which lists the hazardous activities and identifies those applicable to that particular person. An example of how this may be applied in practice is included in Section 5. The list of activities is identified from the risk assessment of the School's work.

Strategy for Risk Assessment

It is important not to lose sight of the purpose of risk management such that the assessment seems to become an end in itself. The objective is to have in place the necessary physical or procedural controls and for the people doing the work to know what these are.

The following points summarise the steps to be taken:

- Identify the different areas of the School to which risk assessments will be devolved.
- Identify who will carry out the risk assessments in these areas.
- Identify the range of work activities carried out in each area.
- Identify those work activities which are carried out across the School for a general assessment.
- Identify all hazards relating to each activity (i.e. how could someone be hurt carrying out this activity?)
- Determine what control measures/precautions are already in place and whether they are working satisfactorily. If available, reference should be made to existing codes of practices, safe working procedures or other assessments.
- Identify any problems or deficiencies found.
- Make an informed estimate of the hazard, risk and consequences using the risk assessment criteria and thus determine the risk severity.
- Complete the action plan table using the risk severity figure to help decide on the action required and how soon it should be carried out.
- Review the action plan regularly entering completion dates as the measures are achieved.
- Review the risk assessment every three years to ensure that the information is still correct. The risk assessment process will need to be repeated as and when activities change.
- Ensure that all the personnel (staff, students or visitors) who could be affected by the work activities are made aware of the findings of the risk assessments as it affects them.

Much of this information can be imparted by way of the School's Safety statement.

The Role of School Inspections in Risk Assessment

School safety inspections should be carried out on an ongoing basis and at intervals which are much more frequent than the formal reappraisal of any risk assessments. When inspecting any work area the opportunity should be taken to examine whether assessments have been carried out and necessary action taken within the specified time. Checks should also be made to see whether the findings of the assessments are being disseminated to those concerned.

Readers may please note that D. L. Shah Trust brings out two e-journals on a fortnightly basis. These are mailed to those persons or institutions who are desirous of receiving them:

These two e-journals are:

- 1. Safety Info**
- 2. Quality Info**

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