

Carrying out a Health and Safety Risk Assessment Guidance

When carrying out a risk assessment of your work area it can be difficult to know how much detail is enough. Your risk assessment is not be about creating huge amounts of useless paperwork, but is all about identifying and putting into place sensible and proportionate measures that protect staff, students and others in your specific work area- the purpose of the risk assessment is to prevent injury and ill- health. Prior to recording your findings on the Risk Management System (RMS) you should have already identified and recorded details of:-

- The work environment, work processes, activities, tools / equipment / machinery used, chemicals etc. that could give rise to hazards.
- The persons who could be exposed to the hazards- including any vulnerable persons and how they could be harmed. You must make it clear how the hazards may be realised- just stating working at height doesn't give enough detail and doesn't show how hazardous events could occur and how to prevent them.
- The resulting risks to health and safety including an estimation of their likelihood and severity. You will need to take into account the types of injury / ill- health or harm likely to occur, the numbers of staff, students or others at risk, how often the activity is carried out and how widespread the risk is.
- How you already are, or how you will control any risks to health and safety:-
 - With these being sensible and proportionate.
 - They take into account the hierarchy of control (see below)
 - You identify action owners and timescales for the implementation of actions with these being reasonable / appropriate and justifiable e.g. a timescale of 1 month to replace a missing guard on a table saw would be considered unreasonable due to the risk of serious personal injury unless there was an interim control in place such as isolation and lock- off of the machine to prevent use until the guard was repaired replaced.
 - Where risk reduction is required then appropriate safety measures need to be applied and the procedure repeated until the risks are adequately controlled.
 - You must also ensure that you follow- up on the risk assessment to check that the actions have been carried out in line with timescales etc. The RMS is configured to give you notifications on actions.

You will also need to be able to identify:-

- The sources of information that you benchmarked against when deciding on control measures- e.g. industry guidance; relevant British, European or international standards, HSE Approved Codes of Practice / guidance etc.
- Who you spoke to e.g. staff carrying out the task / activity. It is also very important to fully involve and consult Trade Union Appointed Safety Representatives in the risk assessment process.

After you have completed your risk assessment it is important that you clearly communicate its significant findings to all relevant persons e.g. management who may be responsible for implementing actions or making resources available etc. but more importantly, you must communicate the significant findings with the staff and / or students, who will be carrying out the tasks / activities. You must record who this has been communicated to and when- e.g. a Team Meeting, or student lesson plan etc. Just saying that the risk assessment is available on the Risk Management System for people to read or printing it out and putting it on a wall is not sufficient and does not meet the requirements of H&S law.

The test for a risk assessment is that it is both “suitable and sufficient” In general this means that you must be able to clearly demonstrate that:-

- A proper check was made.
- You asked who might be affected by the hazards and risks.
- You dealt with all the significant risks taking into account the numbers of people who could be harmed.
- The risk precautions are reasonable and proportionate and the remaining risk is low.
- You fully involved staff and Trade Union Appointed Safety Representatives in the process and took their views into account.

Risk assessors should be mindful of the fact that staff, and students, may not implement control measures where:-

- The control measures interfere with other activities being carried out.
- The control measures are difficult to use.
- The control measures are not recognised as such, or is not accepted as suitable for its function.

This is one of the reasons why it is important to involve staff and their representatives in the process so that there is buy-in and an understanding of why control measures are required and also what could happen if the control measures are not followed. Depending on the circumstances, a level of supervision may also be required to ensure that controls are used effectively.

When considering risk control measures H&S law requires that the following hierarchy of risk control must be considered when evaluating risk in the order given:-

Hierarchy of Risk Control

1. Elimination:- Redesign the task / activity so that the hazard is removed or eliminated- e.g. avoid working at height by carrying out the work from ground level.

Substitution:- Replace a material or process with a less hazardous one- e.g. use a battery operated tool rather than a mains operated one.

3. Engineering Controls:- Use work equipment or machinery to control the risks where the work cannot be avoided- e.g. use of local exhaust ventilation to control a hazardous substance.

4. Administrative Controls:- Identifying and implementing procedures for working safely- e.g. training courses, safe systems of work, permit-to-work systems; local rules, work- instructions, safety signs etc. It is important to ensure that staff etc. are trained in safe systems / local rules etc. and know what steps to take to work safely and without risks to health.

5. Personal Protective Equipment (PPE):- Only after all the previous measures have been tried and found ineffective in controlling the risks is it reasonable to use PPE. PPE can also be used to control a residual risk- e.g. local exhaust ventilation is used to control wood dust however there is a residual risk of exposure if the equipment is not operating effectively and in these circumstances the use of a respirator would be reasonable. PPE selected must be capable of controlling the risks and staff and students must be trained in its safe use and the limitations of the PPE. It must fit the user, and must be maintained where necessary.

Most Effective



Least Effective

You must be able to demonstrate that you have worked logically through the hierarchy. For example rather than providing personal protective equipment for use with a hazardous substance you need to consider if you can avoid the risk altogether by using a non-hazardous substance and so on. Where PPE is used as a control, it is not enough to state that PPE is provided- you must indicate what type and standard of PPE is required and what specific hazards it is being used to control. A record of PPE issue may be required in some cases to back this up.

Training, experience and ability may reduce risk but none of these factors should be used as a substitute for risk reduction by design or safeguarding where such measures can be reasonably practicably implemented. Inappropriate reliance should not be placed on staff having to develop an unreasonable degree of skill or acquired knowledge to ensure safety. Again, where training is identified as a control measure it must be clearly identified what it is and proper records must be kept.

Likelihood and Severity

When considering likelihood and severity you need to consult the following tables that give examples of both likelihood and severity. These are guides only and it is important to understand that the absence of an accident history or a small number of accidents or low severity of accidents for a particular hazard should not be taken as an automatic presumption of a low risk- it could simply be the case that there has been no occurrence of a hazardous event.

In deciding on the likelihood / severity of harm you must also consider the effectiveness of any control measures already in place and how well these work in practice and how they are complied with e.g. permit- to- work systems, safety rules etc. You must then consider the following factors in addition to the work tasks / activities undertaken:-

- Number of persons exposed
- Persons who may be particularly at risk
- Frequency and duration of exposure to the hazard
- Failure of services- e.g. gas, water electricity etc.
- Failure of plant and machinery components and safety devices
- Exposure to environmental conditions- e.g. hot / cold / weather etc.
- Protection afforded by PPE / RPE and usage rate of PPE / RPE
- Unsafe acts (unintended errors or intentional violations of procedures) by persons who may, for example:-
 - May not know what the hazards are;
 - May not have the knowledge, physical capabilities or the skills required to work safely;
 - Underestimate the risks to which they are exposed;
 - Fail to understand and / or comply with safe systems of work

Likelihood of Harm

Rare	Unlikely	Possible	Likely	Certain
Could happen but probably never will	Not likely to occur in normal circumstances	May occur at some time	Expected to occur at some time	Expected to occur regularly under normal circumstances

Severity of Harm

	Insignificant	Minor	Moderate	Major	Severe
HEALTH	No measurable physical effects. No medical treatment required.	Nuisance and irritation e.g. headache. Temporary ill-health. May require medical attention.	Partial hearing loss; dermatitis; asthma; work-related upper limb disorder; ill-health leading to permanent minor disability. May require hospital treatment.	Serious ill- health conditions that will have permanent and irreversible effects. Will require ongoing hospital treatment.	Acute fatal disease; severe life- shortening disease; permanent substantial disability
SAFETY	Very minor injuries or discomfort. No medical treatment required.	Superficial injuries; minor cuts and bruises; eye irritation. Temporary Impairment. May require medical attention.	Lacerations; burns; concussions; serious sprains; minor fractures. May require hospital treatment.	Major physical injuries; multiple injuries; amputations. Will have permanent and irreversible effects. Will require ongoing hospital treatment.	Fatal injuries

Risk Level Estimator

Combine the likelihood and severity of harm to estimate the risk level. This will provide a guide as to whether you are already doing enough or whether you need to do more to control the risks to health and safety. The RMS will automatically calculate the risk when you enter details of the likelihood and severity, however you must have a clear picture of the risk level when determining what additional actions may be required to control the risks. Where you enter additional actions on the RMS to control the risks, you will be require to re- enter a new likelihood and severity taking into account the additional controls.

Likelihood of Harm	Severity of Harm				
	Insignificant	Minor	Moderate	Major	Severe
Rare	Low	Low	Medium	Medium	High
Unlikely	Low	Medium	Medium	Medium	High
Possible	Low	Medium	Medium	High	Very High
Likely	Medium	Medium	High	High	Very High
Certain	Medium	High	Very High	Very High	Very High

Risk- based Action Plan

The Risk- based Action Plan provides a guide to allow you to prioritise the actions required to control the risks. In general, you must prioritise higher risks over lower risks and be able to justify timescales for actions. Remember that your control measures must take into account the hierarchy of controls.

Low	No additional controls required unless implemented at low cost (e.g. time, effort, and money) Further actions may be a low priority. Ensure controls are maintained.
Medium	Careful consideration must be given as to whether risks can be lowered to an acceptable level, but costs of further action can be taken into account. Further action must be implemented within defined period. Ensure controls are maintained.
High	Substantial efforts must be made to reduce the risks. Further action must be implemented urgently and within a defined time period and it might be necessary to carefully consider suspending or restricting the activity, or apply interim control measures, until this has been completed. Further action must be implemented within a defined period of time. Ensure controls are maintained.
Very High	Risks are unacceptable. Substantial improvements in controls are necessary to ensure risks are reduced to acceptable level. Work activity must be stopped until further actions have been implemented that reduce risks from severe. If not possible to reduce risks then work must remain prohibited.

What does 'so far as is reasonably practicable' mean in terms of a risk assessment?

Most, but not all, H&S law is based on the principle of '**so far as is reasonably practicable**' So where there is a '**so far as is reasonably**' legal duty to protect the H&S of those persons in (e.g. staff) and not in your employment (students, members of public, contractors, visitors etc.) then this means that the degree of the risk in a particular activity can be balanced against the time; trouble; cost and physical difficulty of taking measures to avoid the risk.

If these measures are so disproportionate to the risk that it would be quite unreasonable to have to incur them to prevent the risk then an employer is not obliged to do so. However, the greater the risk, the more likely it is that it is entirely reasonable to go to very substantial expense; trouble and effort to reduce it.

Review

You must review your risk assessment in line with a reasonable timescale. You should take into account any timescales for the implementation of actions and also the level of risk involved- e.g. to ensure that risk controls are effective it may be necessary to review after a fairly short timescale. In addition, you must also review the risk assessment if you have reason to believe it is no longer valid e.g. as a result of an accident or near miss, a case of ill- health or as a result of a workplace inspection that may identify that risk controls are no longer effective.

Work Activity Questionnaire

This form is to help you to collate the necessary information to allow you to input a suitable and sufficient risk assessment into the Risk Management System.

1. List the tasks / activities carried out, their duration and frequency / who is directly involved in them / the sources of harm / who could be affected and how the harm could occur / anyone at particular risk / what the risks to H&S are.

2. Locations where the tasks / activities are carried out.

3. Describe the work environment where the tasks / activities are carried out and list any work environment related hazards.

4. Identify others who may be affected by the tasks / activities e.g. contractors, visitors, members of public, cleaning staff, maintenance staff etc.

5. List any relevant training that staff have received in relation to the tasks / activities.

6. List any plant / machinery / tools used in the tasks / activities.

7. How are the plant / machinery / tools maintained?

8. Description of any materials that may require to be handled including size and weight.

9. Distances and / or heights that any materials may have to be moved by hand. (If significant manual handling operations take place then contact the H&S Team for further information)

10. Services used- e.g. water, natural gas, bottled gas etc.

11. List any potentially hazardous substances used in tasks / activities and indicate which have been subject to a Control of Substances Hazardous to Health (COSHH) assessment.

12. Highlight any specific issues associated with interacting with the public.

13. List any existing control measures and indicate if they control the risk effectively.

Guidance on College Risk Assessment Requirements
Refer to the guidance where your general risk assessment identifies any of the following specific hazards.

Area of Risk	Action to be Taken
Manual Handling (MH)	If manual handling risks are considered to be significant (use the MH Filter as a guide) a full MH risk assessment must be carried out. Contact H&S Team for further advice.
Display Screen Equipment (DSE)	DSE users will have access to the Assessrite DSE training and assessment system. Contact the H&S Team if access for staff is required. Faculties / Directorates will be responsible for implementing corrective actions identified through DSE assessments.
Noise	If the risk is considered to be significant a full noise assessment may be required-contact H&S Team for further advice
Vibration	If the risk is considered to be significant a full noise assessment may be required-contact H&S Team for further advice
Control of Substances Hazardous to Health (COSHH)	Where hazardous substances are already used a COSHH assessment must be carried out. Where a new substance is proposed to be used then a COSHH assessment must be carried out prior to procurement.
Personal Protective Equipment (PPE) / Respiratory Protective Equipment (RPE)	An assessment of the suitability of the PPE / RPE in controlling the risk must be completed.
First Aid	You must consider any additional first aid requirements that may be posed by the tasks / activities and you may need to put in place specific local arrangements out-with the general First Aid provision.
Work Equipment	If work equipment poses specific risks then a full risk assessment must be carried out.
Asbestos	Contact the H&S Team for advice if there is any potential work involving asbestos containing materials.
Artificial Optical Radiation	If the risk is considered to be significant a full noise assessment may be required-contact H&S Team for further advice
Electromagnetic Fields	If the risk is considered to be significant a full noise assessment may be required-contact H&S Team for further advice

Identify a Hazard	Identify Associated Risk	Existing Controls	Likelihood / Severity / Risk Rating	Additional controls required
<p>Workshop activities</p> <p>Using 230 volt portable electrical equipment e.g. hand-tools.</p> <p>Workshop based staff and students use tools on a daily basis and throughout the day and could come into contact with live electrical conductors on equipment when using faulty / defective / damaged tools.</p> <p>Tools not designed for the specific work environment may also lead to electric shock e.g. use in wet environments.</p> <p>Tools may be subject to wear and tear due to the circumstances of use and the working environment.</p> <p>Faulty / damaged power sockets leading to contact with live conductors.</p>	<p>Staff and students and contractors maintaining tools.</p> <p>This could lead to electric burns, electric shock / electrocution and in the worst cases fatalities.</p>	<p>Distribution boards fitted with residual current device (RCD) which can switch off the power in case of an earth leakage.</p> <p>Maintenance in place- all equipment subject to a recorded annual check by a competent person.</p> <p>Portable appliance testing carried out at set frequency and equipment labelled.</p> <p>Staff and students have received training in carrying out a pre- use visual inspection to spot any defects.</p> <p>Selection of equipment- tools must be suitable for the environment they are used in e.g. water- proof where required.</p> <p>Fixed electrical installation subject to inspection / test by a competent person in line with relevant standards.</p> <p>Defect reporting / quarantine procedures for defective equipment.</p> <p>Trained first aiders available to treat electric shock casualties.</p>	<p>Likelihood- Possible</p> <p>Severity- Major</p> <p>Risk Rating- High</p>	<p>Planned replacement of mains 230v tools with reduced voltage 110v tools at next scheduled replacement. (within next 6 months +action holder)</p> <p>Alternatively, investigate replacement of mains 230v tools with battery or air- powered tools.</p> <p>Procurement of tools suitable for the work environment e.g. waterproof. (1 month+ action holder)</p>

Identify a Hazard	Identify Associated Risk	Existing Controls	Likelihood / Severity / Risk Rating	Additional controls required
<p>Working at height</p> <p>Using low- level (max. 2 metres) step- ladder to carry out maintenance activities. Typically 1 member of staff will use ladders for short duration only- max 20 minutes / location / several times over day. More people may be exposed to falling object hazards in the vicinity of the work.</p> <p>Ladder collapse due to overloading / not properly erected / defective ladder not inspected before use leading to falls from height / persons in vicinity struck by falling objects.</p> <p>Improper location of ladder- e.g. ladder struck by vehicle / pedestrians / doors etc. leading to falls from height / persons in vicinity struck by falling objects.</p> <p>Staff not trained in safe ladder use leading to falls from height due to improper set- up / improper use- e.g. failure to maintain 3 points of contact, ladder defects not noted etc. leading to falls from height / persons in vicinity struck by falling objects.</p> <p>Tools / equipment falling due to not being secured could strike persons in the immediate vicinity.</p>	<p>Staff and others in the immediate vicinity of the work.</p> <p>Struck by injuries, Bruising, sprains / strains, fractures or more serious personal injuries such as head injuries, internal injuries and fatality,</p>	<p>Staff trained in safe use of step- ladders (external step- ladder safety course) including pre- use inspection before use at start of day to check for defects.</p> <p>Defective ladders will be taken out- of- use / quarantined.</p> <p>Formal recorded inspection carried out by supervisor on a quarterly basis to check for defects.</p> <p>Exclusion zone maintained around ladder work area.</p>	<p>Likelihood- Possible</p> <p>Severity- Major</p> <p>Risk Rating- High</p>	<p>Procure stepladders to BS EN 131 professional standard. (1 month) All existing ladders will be subject to a thorough assessment before further use to ensure that they can be used prior to replacement. (1 day + action holder)</p> <p>Procure barriers to designate a safe working area. (1 month + action holder- in meantime this will be a 2- person task with 1 person to keep a look- out / direct persons away from work area)</p> <p>Provide staff with tool belts / tool lanyards to prevent falling objects. (1 month + action holder)</p>