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Risk Assessment Guidance

Introduction

The Management of Health and Safety at Work Regulations 1992 (revised in 1999), require employers to make a suitable and sufficient assessment of the health and safety risks to employees and non-employees, arising from their work activities. Risk assessment is now a common requirement of all health and safety legislation, the emphasis is now on preventing accidents and work-related ill health, rather than just reacting to incidents, and making improvements after the event.

What are we trying to prevent?

- Accidents causing injury or death
- Near misses (because they could well cause injury if they happen again)
- Work-related ill health
- Repetitive / accumulated strain injuries
- Damage to equipment and the environment
- Stress related ill health / mental health problems

This guide explains how Oakwood employees should allocate responsibilities for carrying out risk assessments. A step-by-step guide to the process of conducting assessments is provided and a hazard checklist is included to help you get started. Risk assessment forms are also provided, which should be used to record assessments. Examples of assessments are also included as appendices.

What do we mean by 'suitable and sufficient' risk assessment?

By law employers have to carry out risk assessments that are 'suitable and sufficient', this means that assessments should:

- Be comprehensive and cover the hazards and significant risk of all work activities, including routine and non-routine work, one off as well as regular activities, research work as well as teaching classes, low risk and high risk work, off campus activity as well as activities taking place on our premises;
- Be systematic in the way in which hazards are identified, risks are assessed and controls are implemented;
- Include risks to health as well as safety, and include risks to mental health;
- Take account of risks to non-employees, which in our case includes students, visitors, contractors and guests at events;
- Identify groups of people who may be particularly at risk, such as young or inexperienced persons, expectant mothers, visitors unfamiliar with the premises, and people with disabilities or health conditions.
- Be undertaken before new workplaces are built i.e. at the design stage (not as an after–thought when making modifications can be more difficult and very expensive.
- Ensure the findings of assessments are brought to the attention, in a meaningful and comprehensible way, of those exposed to the risks.

What is the difference between 'hazard' and 'risk'?

A *hazard* is something that has the potential to cause harm, i.e. an activity such as lifting and carrying, using machinery, moving vehicles, using chemicals etc. The *risk* is the likelihood that harm will result from the activity. For example, asbestos is a hazard, but the level of risk it poses will depend on its type and condition, where it is located and whether it is likely to be disturbed in the future. Appendix 4 contains a checklist of the common workplace health and safety hazards you may encounter.

How far should we go in reducing risk? - 'so far as is reasonably practicable'

Most health and safety legislation requires employers to reduce risk '*so far as is reasonably practicable'*. This means that we must aim to strike a balance between the level of risk on one hand, and the physical difficulty, time, effort and expense, which would be involved in taking steps to reduce or avoid the risk, on the other hand. Therefore higher risks justify greater effort to control and reduce them. In a court of law, it would be up the employer to prove that it was not reasonably practicable to do more. The risk assessment process outlined in this Guide should help provide the justification for choosing certain risk controls (and not choosing others).

Who Should Be Doing Risk Assessments?

Oakwood employees are responsible for ensuring that suitable and sufficient assessments of the work activities of their areas are undertaken. They are also responsible for ensuring that risks are adequately controlled and assessments are reviewed on a regular basis. Employees must provide staff with adequate support, time and resources to undertake assessments and ensure that assessors are competent.

In practice, the task of actually carrying out risk assessments is usually delegated to those people who are most familiar with the activity, project or equipment being assessed or who create the risk. These individuals, who must attend relevant training, may be local managers, supervisors or individuals directly involved in the work; they will understand the nature of the work and are best placed to ensure that on a day-to-day basis, risks are adequately controlled.

SPECIFIC GUIDANCE, RISK ASSESSMENT REQUIREMENTS & TRAINING

In additional to the general requirement for risk assessments, as required under the Management of Health and Safety at Work Regulations, there are other specific sets of Regulations which require risk assessment of particular hazards - indeed a requirement for risk assessment is now a common theme of all new health and safety regulations.

Oakwood health and safety guidance has been produced for many of the hazards and legal requirements that relate to the work carried out. Before embarking on your risk assessments, you should check what guidelines exist, so you are familiar with the legal requirements and standards, relating to the hazard in question.

FIRE RISK ASSESSMENT REQUIREMENTS

The Fire Precautions (Workplace) Regulations 1997 (amended 1999)) require employers to conduct risk assessments for fire safety as well as for general health and safety hazards. These Regulations place duties on employers and persons in control of premises to comply with requirements relating to:

- means of detection and giving warning in case of fire;
- the provision of means of escape;
- means of fighting fire;
- the training of staff in fire safety;
- the maintenance of building fire safety hardware (alarms, fire doors, etc).

Compliance with these Regulations depends on two related aspects of fire safety:

- **structural fire safety -** compartmentalisation, means for fire fighting and detection, the provision of emergency routes and exits, disaster plans for high risk buildings, etc; and
- **use of buildings by occupying department(s)** – prevention of fire, safe storage and use of flammable substances, minimising combustible materials, maintenance of unobstructed means of escape, provision of fire routine notices, definition of assembly points, conducting fire drills, keeping training records, co-ordinating maintenance work, managing the presence of disabled persons in the area, etc.

Assessing risks associated with the day-to-day use of the building, is the responsibility of Oakwood managers.

This process is separate from the general risk assessment procedure covered by this Guidance. However, fire safety risks should always form part of your general risk assessments, when applicable.

HOW TO GET STARTED WITH YOUR RISK ASSESSMENTS – initial survey of activities and hazards

a) You should start by listing all the activities that you are responsible for or that affect the health and safety of your staff or others who work in, use, or visit your premises. This should not be a detailed list but broad descriptions of functions.

b) List all the locations you are responsible for (these will vary according to the type of work and may include temporary sites such as for social events or fieldwork).

c) It is a good idea to take a walk around to check the accuracy of your lists. It is easy to forget activities that happen outside normal office hours or only infrequently. Talk to supervisors and other employees to check the completeness of your list.

d) Remember that risk assessments are required for <u>all</u> Oakwood work activities, although assessments can be generic (see below) and should therefore include the following:

- Work areas and work activities (including those conducted out of hours)
- Work equipment and use of machinery (including when new equipment is purchased and installed)
- Research projects
- Social events
- Field work
- Emergency situations which may arise – such as fires, explosions, spillage and accidental contamination.

e) Decide which assessments can be generic in nature and which need to be more specific.

Are generic or specific risk assessments needed?

It is not necessary to carry out an assessment for each and every work activity or for every worker. If risks are of a similar nature in a number of areas, or the work activities of a group of staff are similar, then generic risk assessments can be carried out.

For example, generic assessments of general office-based or workshop-based health and safety risks can be undertaken. However, specific assessments will be needed for activities not covered by these generic assessments, or sometimes for individuals who are particularly at risk, such as staff with disabilities or expectant mothers. Similarly a generic assessment can be topic or hazard based. For example, an assessment may look at manual handling activities throughout a section or for a particular group of staff, or the storage of highly flammable liquids, throughout your school.

f) Divide your list into manageable chunks and decide who is the best person to carry out each risk assessment. You may, for example, decide that a supervisor has a more detailed understanding of a particular function. Each risk assessment should take no more than half a day to complete otherwise it should be further subdivided.

g) Do not split the task by asking different people to look at different hazards within the same activity, as the inter-relationship of the hazards and possible control measures is important.

h) Prioritise the risk assessments you have decided on and set deadlines for their completion. Try to think forward and decide whom you will need to consult for information and who may be useful to assist you with the assessments.

RECORDING RISK ASSESSMENTS – ASSESSMENT FORMS

It is important that you have a means of easily and logically recording the relevant information from your risk assessment and that the format used meets the requirements of the law. We are legally obliged to record the 'significant findings' of each assessment. While the legislation does not prescribe <u>how</u> risk assessments should be recorded, there are specific requirements about <u>what</u> is recorded. You should use one of the forms included in this guide. If you wish to use a different form, you should discuss this with your manager, who will advise you whether your form is a suitable alternative.

Records of risk assessments can be electronic, but they must be easily retrievable for use by managers and auditors and external bodies, when required, such as the Health and Safety Executive or Insurance assessors.

Two Risk Assessment Forms have been produced in recognition that some activities are more complex than others and one form seldom suits all situations. The two forms RA1 and RA2 are attached as Appendix 1 and 2.

(i) Area Risk Assessment Form (RA1)

You can use this form for fairly simple assessments where the amount of detail required is limited but the activity or area gives rise to a number of different, but fairly straightforward hazards. For example, the form could be used for generic risk assessments of offices, workshops and communal areas. This form enables you to assess a number of hazards using the same form.

(ii) Project / Activity Risk Assessment Form (RA2)

This is a more comprehensive form most suited to more complex or higher risk tasks or projects when you wish to consider an activity or piece of equipment in detail. Each section of the form RA2 corresponds to one of the steps in these guidelines, while RA1 follows the same principles, but requires less information and incorporates a hazard checklist.

THE RISK ASSESSMENT PROCESS: STEP BY STEP APPROACH

Once you have carried out your initial hazard survey and decided on <u>what</u> needs to be assessed, <u>who</u> is going to do it, <u>how</u> you will record assessments, and you have ensured that the people involved in the process have received sufficient instruction and training in risk assessment, then you are ready to begin. The various practical steps required to conduct a risk assessment are described in the following text. Each step corresponds to a section of Risk Assessment Form RA2.

STEP 1: Choose an area, activity, project, or piece of equipment to concentrate on.

You will have already decided what risk can be covered by generic assessment and where specific assessments will be needed instead.

STEP 2: Identify the significant hazards associated with these.

You can use the Hazard Checklist provided in Risk Assessment Form RA1, to help you identify all the relevant hazards.

STEP 3: Identify relevant standards.

Find out if there are any health and safety policies, best practice guidance, standards or minimum requirements relevant to the activity or hazard you are considering. Managers are expected to know about the hazards in their workplaces, and the main legal requirements relating to their work (even if only in outline). If you do not know you must find out. In form RA2 you are provided with space to record this, but not in form RA1.

STEP 4: Decide who is at risk and might be harmed.

In addition to staff actually involved with the activity, you should also consider risks to cleaners, contractors, maintenance workers and agency workers who may not be in the

workplace all of the time and may not be familiar with the risks. Also do not forget visitors (including children) or other organisations you share your workplace with, if there is a chance they could be harmed by your activities. Also consider workers who might be at particular risk like young workers, trainees, new and expectant mothers or people with reduced mobility or disabilities.

STEP 5: Consider how people might be harmed from these hazards.

Consider what kind of injury or ill–health people might suffer if exposed to the hazards and how severe the outcome is likely to be. In form RA2 you are provided with space to record this, but not in the simplified form RA1. You can use Table 2 on the next page to help you categorise risk according to the severity of the outcome. Try to avoid always choosing the worst case scenario. For example, if someone tripped on a trailing cable, they could, in theory fall and bang their head, experience a blood clot and end up dying, so you might be tempted to record the severity (Table 2) as 'fatal'. Indeed you may conclude that any injury could in theory be fatal. Taking this approach will skew your risk assessments, and it will be very difficult to prioritise any action needed, if everything ends up as a 'high risk'. Instead, a more realistic approach is needed. Most slips and trips lead to minor injuries, but sprains and strains leading to time off work are not uncommon, so you should choose a severity of either 'minor' or 'serious', depending on the work environment.

STEP 6: List what risk controls are currently in place to reduce the risks identified.

In other words what steps do you currently take to protect the health and safety of the groups of people identified, from the hazards under consideration?

Risk controls might be:

(i) *Physical* - such as machine guards, enclosures, interlocks, restricted access or local exhaust ventilation;

(ii) *Administrative* - such as established safe working procedures, emergency procedures, information, supervision and training, or

(iii) *Personal protective equipment* - which is provided and worn. Remember to include any relevant preventive maintenance programmes and regular inspections, such as those carried out by insurance company engineers, as these too are risk control measures.

You also should consider if these risk controls are adequate, compare them with the relevant legal requirements, standards or guidelines, as identified in Step 3. It is important to find out if the controls put in place are actually used in practice. Also think about what is done to check that these controls are in good working order, is any preventive maintenance or servicing carried out, or any visual checks and inspections?

STEP 7: Assessing the level of remaining (or residual) risk.

It is essential to now consider whether, given the existing measures that are taken or risk controls that are already in place, what the remaining level of risk actually is. This is where knowing how your current arrangements compare with best practice and legislative

requirements is important - how else do you know whether you are doing all you should be doing to reduce health and safety risks?

On Risk assessment form RA1, you are provided with columns to indicate whether you have assessed the risk as 'low', 'medium' or 'high'. Making this kind of judgement can be very subjective and results can vary considerably from one assessor to another. More objective assessments will be produced if the approach taken to evaluating risk considers the factors that contribute to increased risk in a consistent way, these are:

(i) The **severity** of the harm that exposure to the hazard could cause (S)
(ii) The **probability** of exposure to the hazard (P)

To help you evaluate the level of risk you can do a very simple calculation to produce a risk score which corresponds to a risk level of *low, medium* or *high*. Simply decide the level of severity (S) (Table 2. over page) and a level of probability (P) (Table 3. over page) for the hazard in question and multiply the scores together as described. On risk assessment form RA2 space is provided to record these scores (and the scores are given in brackets for each category selected). For more simple or generic risk assessments recorded on Risk Assessment form RA1 – you are just invited to select from the categories 'low', 'medium' or 'high', but you can use the scoring system described above, if you wish to take a more objective approach.

Table 2: Risk Severity (S) - The severity of any resulting injury or ill–health.

Category	Example	Score
MINOR	Superficial injuries - cuts, bruises, mild skin irritation, mild aches and pains – requiring first aid only. Minor property damage.	1
SERIOUS	More serious injuries or ill-health, requiring time off work or study or a hospital visit, e.g. burns, sprains, strains and short-term musculoskeletal disorders, cuts requiring stitches, back injuries, fractures to fingers or toes. More serious property damage.	2
MAJOR	Broken limbs, amputations, long-term health problems resulting from work, or acute illness requiring medical treatment, loss of consciousness, serious electric shock, loss of sight. Major property damage.	3
FATAL	Injury or ill-health which leads to death either at the time or soon after the incident, or eventually, as in the case of certain occupational diseases, such as asbestos-related cancers.	4

Table 3. Risk Probability (P) - the likelihood of the hazard causing harm.

Category	Example *(for guidance only - some or all may apply for each category)*	Score
VERY UNLIKELY	Good control measures are in place. Controls do not rely on a person using them (i.e. personal compliance). Controls are very unlikely to break down. People are very rarely in this area or very rarely engage in this activity.	1
UNLIKELY	Reasonable control measures are in place but they do rely on a person using them (some room for human error). Controls unlikely to breakdown. People are not often in this area / do not often engage in this activity / this situation is unlikely	2
POSSIBLE	Inadequate controls are in place, or likely to breakdown if not maintained. Controls rely on personal compliance. People are sometimes in this area or sometimes engage in this activity / this situation sometimes arises	3
LIKELY	Poor or no controls in place. Heavy reliance on personal compliance (lots of room for human error). People are often in this area / engage in this activity on a regular basis / this situation often arises.	4

The scores can be represented in a matrix, shown as in Table 4 below. Risk scores correspond to a risk level – high, medium, low etc.

Table 4. Risk Score Matrix

RISK SCORE = S X P

PROBABILITY (P)	SEVERITY OF OUTCOME (S)			
	Minor	Serious	Major	Fatal
Very Unlikely	1	2	3	4
Unlikely	2	4	6	8
Possible	3	6	9	12
Likely	4	8	12	16

Risk Level

Low

Medium

High

Very High

What about the number of people at risk?

Another risk factor that should be considered when evaluating the level of risk is the actual number of people at risk at any one time (sometimes known as *the extent of risk*). In general, for risks at a similar level, a higher priority should be given to actions which reduce risks affecting a greater number of people.

Why use a quantitative (numerical) system of categorising risks?

Expressing risk levels as scores can very useful when making decisions about prioritising action and allocating resources. Scores derived using a common method will enable comparisons to be made between one activity or part of the organisation, and another.

STEPS 8 & 9: Deciding what further action is required - now and in the future

What if you discover that the existing measures in place for controlling risks are not adequate to protect the health and safety of staff or others? This may be either because controls do not meet the required standard, are not working properly, are not being used, or are deteriorating due to lack of maintenance and checking. In this case, you must establish what further action is required to reduce risks, so far as is reasonably practicable (see definition on page 2), and by when this should be achieved.

If action can be taken immediately to improve health and safety standards, such as replacing machine guards or clearing obstructed gangways or fire exits, then this should be carried out without delay, and recorded on the risk assessment form.

When considering what further control measures you should adopt to reduce or manage health and safety risks, you should follow the *Hierarchy of Risk Controls*. Priority should be given to collective protective measures, over individual protective measures. Controls such as personal protection should only be a last resort, if there is no other way of reducing risk at source. In practice a combination of these risk controls is often required.

Hierarchy of Risk Controls

(Priority should be given to the controls at the top of this list)

- Prevent the hazard from arising, so that risk can be avoided *(eliminate or avoid the hazard)*
- Find a less hazardous alternative *(substitute the hazard)*
- Reduce the risk at source to protect all *(e.g. improve workplace layout or design or introduce engineering solutions like machine guards or fume / dust extraction)*
- Introduce administrative controls such as written safe systems of work, information, instruction and training on risk reduction
- Personal protection e.g. protective clothing *(last resort as only individuals are protected)*

It may be necessary to clarify the safe systems of work you introduce by issuing them to staff as written procedures, guidelines or policies. Remember to ensure people receive adequate training in any new procedures.

Action plans – implementing risk controls

It is strongly recommended that you draw up a health and safety action plan to ensure that improvements needed are prioritised according to the level or risk identified. Remember to include realistic time scales in your action plan and identify who will be responsible for checking that the objectives of the plan have been met. It is up to you to decide on appropriate time scales for action, but some typical timescales, according to risk are given as a guide in Table 5.

Table 5: Scores and Typical Action Plan Time Scales

SCORE	RISK LEVEL	TYPICAL TIME SCALES FOR ACTION REQUIRED
1	Insignificant	No further action needed
2 – 3	Low	Action within 12 months if improvements are reasonably practicable
4 – 6	Medium	Action within 6 months based on reasonable practicability
8 – 9	High	Action within 1 month to reduce risk (immediate action may be needed in some circumstances)
12 – 16	Very high	Immediate action required – work should stop / not commence until risk has been reduced to acceptable levels

STEP 10: Reviewing risk assessments

Risk assessments should be reviewed regularly and modified if necessary. They should not be a once-and-for-all activity, but equally, they do not have to be re-written every year. As the nature of work changes and our appreciation of hazards and risks develops over time, so risk assessments should evolve accordingly.
Assessments should be reviewed:

- If significant changes are made to existing workplaces, work activities, projects or equipment, such that the original assessments are no longer valid;
- If new or temporary members of staff are employed who may be more at risk due to inexperience, age or physical or mental health conditions and disabilities;
- If female staff announce that they are pregnant, and their work could give rise to a health risk to the mother or unborn child;
- If new legislation / guidance / codes of practice or national standards are introduced;
- Following accidents or near misses which highlight deficiencies in existing risk control measures or previously unforeseen hazards;
- AND on a regular basis – every 12 months is recommended (although every 2 years would be acceptable for low risk administrative departments).

INFORMING OTHERS OF RISK ASSESSMENT FINDINGS

All employees exposed to risks to their health and safety must be informed, as part of their induction, about these risks and the control measures introduced to manage and reduce risk. This is so that people understand the reasons behind the safe working procedures they are expected to follow and the personal protective equipment they have to wear etc. An understanding and acceptance of health and safety procedures by staff and students is more likely to ensure their cooperation.

The information provided must be meaningful and easy to comprehend. Staff can be given copies of individual assessments, and this would be particularly appropriate for hazardous activities, such as work with machinery or for research projects, where a very clear understanding of the risks and control measures employed is essential. Alternatively, the findings of assessments can be incorporated into local written health and safety procedures, Area Health & Safety Codes or Policies, Health and Safety Manuals

etc. as appropriate. It is a good idea to get individuals to sign a record to confirm they have received and understood the information provided to them.

MONITORING HEALTH AND SAFETY PERFORMANCE

It is important to ensure that once risk control measures are introduced; there is a system in place to regularly check that risks are still being adequately managed in the workplace on a day-to day basis, and that standards are not left to deteriorate over time.

It is therefore essential that health and safety performance is monitored by the Staff. One form of *proactive* monitoring, which is required, is for each area to undertake regular workplace health and safety inspections. The frequency of such inspections depends on the risk, but an inspection at least every 6 months is recommended in low risk office-based environments, while every term would be a more appropriate frequency for higher risk environments like workshops.

Ideally, these inspections should be undertaken using an inspection checklist. As workplace inspections should provide a check that the controls listed in your risk assessments are still in place, still effective and still relevant - the findings of your risk assessment (i.e. the 'controls' listed) should be used to develop your inspection checklist. For example, if one of your risk controls is the regular inspection of portable electrical appliances, this should be listed as an item to check during your workplace inspection.

In addition to *proactive* monitoring, *reactive* monitoring of health and safety performance, in the form of reporting and investigation of accidents and incidents, including 'near misses', should also be undertaken. The results of investigations may point to inadequate initial assessment of risk, or poorly managed or absent risk controls. This should prompt a review of the relevant risk assessment.

Assessment Reference No.		**Area or activity assessed:**	
Assessment date			
Persons who may be affected by the activity (i.e. are at risk)			

SECTION 1 : Identify Hazards - *Consider the activity or work area and identify if any of the hazards listed below are significant (tick the boxes that apply).*

1.	Fall of person (from work at height)		**6.**	Lighting levels		**11.**	Use of portable tools / equipment		**16.**	Vehicles / driving at work		**21.**	Hazardous fumes, chemicals, dust		**26.**	Occupational stress	
2.	Fall of objects		**7.**	Heating & ventilation		**12.**	Fixed machinery or lifting equipment		**17.**	Outdoor work / extreme weather		**22.**	Hazardous biological agent		**27.**	Violence to staff / verbal assault	
3.	Slips, Trips & Housekeeping		**8.**	Layout , storage, space, obstructions		**13.**	Pressure vessels		**18.**	Fieldtrips / field work		**23.**	Confined space / asphyxiation risk		**28.**	Work with animals	
4.	Manual handling operations		**9.**	Welfare facilities		**14.**	Noise or Vibration		**19.**	Radiation sources		**24.**	Condition of Buildings & glazing		**29.**	Lone working / work out of hours	
5.	Display screen equipment		**10.**	Electrical Equipment		**15.**	Fire hazards & flammable material		**20.**	Work with lasers		**25.**	Food preparation		**30.**	Other(s) - specify	

SECTION 2: Risk Controls *- For each hazard identified in Section 1, complete Section 2. For more complex activities or projects you are advised to use Form RA2.*

Hazard No.	Hazard Description	Existing controls to reduce risk	**Risk Level** (tick one)			Further action needed to reduce risks *(provide timescales and initials of person responsible)*
			High	Med	Low	

APPENDIX 1.

Name of Assessor(s)		**SIGNED**		Number of continuation sheets used:
Review date				

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