Introduction

Section 2 of the Health and Safety at Work etc. Act 1974 implies the need for risk assessment as part of the general duties of employers to their employees. Section 3 of the Act extends this duty to anybody else affected by activities of the employer to include contractors, visitors, customers and members of the public. However, other regulations such as the Management of Health and Safety at Work Regulations (1999), and the Control of Substances Harmful to Health Regulations (2006) are more specific concerning the need for risk assessment.

Failure to comply with the relevant legislation can result in fines and/or imprisonment for senior managers or directors. If the failure is deliberate and amounts to Gross Negligence, and a person dies as a result, then the Corporate Manslaughter and Corporate Homicide Act 2007 as amended may be used to charge and prosecute the body corporate, as well as those directly responsible. By identifying hazards in the workplace and the likelihood of an accident occurring (the risk), employers can take action to deal with the most pressing problem areas. Reducing accidents in the workplace benefits both employer and employee through the creation of a safer working environment and savings due both to a reduction in lost time and productivity, and fewer accident claims.

Risk assessments comply with Health and Safety legislation and make accident prevention easier by identifying hazards before there is a problem. Carrying out risk assessments helps to improve workforce morale by conveying a "caring" attitude, however, it will require resources (in staff time) if they are to be undertaken thoroughly.

When carrying out a risk assessment be sure to involve everyone within the organisation, check the accident or "near-miss / near-hit" log regularly and ensure that assessors are adequately trained.

This checklist does not aim to cover the complex legal issues, for which expert advice should be sought, but provides a plan of action for those carrying out a risk assessment in their company or organisation.

Definition

A Health and Safety risk assessment is a planned procedure in which all hazards in the workplace are identified and their risk potential evaluated. The risk potential is a combination of the likelihood (when could an accident happen) with the severity (what could result) if an accident did happen. Once the risk potential has been identified, it will enable you to decide whether you have taken sufficient precaution or whether you need to do more to prevent harm.
**Action checklist**

1. **Risk assessments**

   Risk assessments should be an integral part of any Health and Safety management system. They are the basis of providing organisations with a safe and effective working environment. It is a continual process that looks at the risk potential of any workplace hazard. All risk assessments should be reviewed on a regular basis depending on the level of the risk potential and if there have been changes to any aspect of:

   - working practices
   - machinery location
   - new equipment
   - the capability of operators
   - alterations to the working environment
   - alterations to buildings
   - dangerous materials.

   In addition, the Regulatory Reform (Fire safety) Order 2005 requires fire risk assessments to be made. These look at the organisation's premises and classify what hazards are present, escape methods and fire fighting provisions.

   Risk assessments may need to be undertaken for various aspects of an organisation's operations and at differing levels within the organisation, these may be defined as:

   - Corporate Risk Assessments
     - E.g. Travelling on business, lone working, new contracts and stress
   - Area / Building Risk Assessment
     - E.g. lighting, ventilation, traffic routes, fire and first aid provision
   - Specific Risk Assessments
     - E.g. task or process based

2. **Train assessors in identifying risk**

   Identifying risks in the workplace is not an easy task. Where the individual who is to carry out the risk assessment is not a health and safety officer, it is essential to obtain appropriate training, either from an internal source if available, or from an external agency in order to be sure that the appointed persons are 'competent'. The suppliers of equipment, machinery or chemicals can be a good source of advice.

   It is important to train the assessors in rating the severity of a risk. Examples of hazards should be discussed with the trainee(s) to obtain some degree of standardisation.

3. **Identify hazard types**

   The number and type of hazard will vary from place to place. Some of the more common are:

   - fire - flammable materials, heat sources, inadequate escape routes, obstructions
   - manual handling - lifting or reaching for items, carrying heavy or bulky loads long distances
   - damaged electrical equipment or cable, cracked or damaged plugs and sockets, overloaded sockets
   - slips, trips and falls - trailing leads, slippery floors, liquid spillage, leaks, inadequate guard rails
   - environment - inadequate lighting or ventilation, insufficient space, noise, dust, fumes
   - chemicals - lack of COSHH information, insufficient first aid measures, inadequate storage
   - machinery - inadequate or insufficient guards, lack of clear gauges, control labels or emergency stops
   - display screen equipment - inadequate workspace or seating, lack of breaks from inputting.
   - situations that may cause emotional hazard or trauma to people (e.g. frequent human traffic of aggressive customers or visitors to a firm's reception area).
4. **Define the scope and coverage of risk assessments**

You can choose to be strict in the extent of risk assessments. However, blanket coverage in most circumstances would be a waste of time and effort. You need to consider which areas and tasks are likely to present the greatest hazards and concentrate on those to begin with. Look at accident books and near-miss / near-hit reports; walk around your organisation; talk to management, operators and Health and Safety representatives, draw up a 'hit list' of areas and tasks that may constitute the highest risk. Plan your programme around this list and make this known to the workforce.

Take account of current legislation and ACOPs (Approved Codes of Practice) when drawing up any guidelines for assessments. These include, but are not limited to:

- Control of Noise at Work Regulations 2005
- Environmental Protection Act 1990
- Health and Safety (Display Screen Equipment) Regulations 1992
- Lifting Operations and Lifting Equipment Regulations 1992
- Personal Protective Equipment at Work Regulations 1992 as amended in 2002
- Control Of Substances Hazardous to Health (COSHH) 2002 and 2005 amendment
- Control of Asbestos at Work Regulations 2006
- Construction (Design and Management) Regulations 2007
- Electricity at Work Regulations 1989
- Workplace (Health, Safety and Welfare)Regulations 1992

Be aware that several regulations require a specific risk assessment to be made.

5. **Record the assessments**

Create a document to record the assessments. This should be easy to understand and supported by explanatory notes. Make the text simple and clear, avoiding the temptation to over elaborate both the likelihood and severity ratings.

A pure quantitative risk assessment is one based on known facts and figures; these are more frequently used in high hazard industries and by engineers and architects as part of a (re)design process. A pure qualitative risk assessment is one based on defining threats (to people, equipment or infrastructure) and predicting any likely loss. For most organisations a risk assessment is a mixture of qualitative data, with predictions of likely losses, and this is what is described below. A risk assessment attempts to quantify the risk level in terms of the likelihood of an accident and its subsequent severity. A simple 3x3 matrix scoring system, suggested by the Health and Safety Executive, is a simple way to determine risk levels.

<table>
<thead>
<tr>
<th>Likelihood of occurrence</th>
<th>Likelihood level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harm is certain or near certain to occur</td>
<td>High 3</td>
</tr>
<tr>
<td>Harm will often occur</td>
<td>Medium 2</td>
</tr>
<tr>
<td>Harm will seldom occur</td>
<td>Low 1</td>
</tr>
</tbody>
</table>

When considering the likelihood of occurrence, it is good practice to record the period that has been considered, and the population that has been considered. Is harm likely to happen seldomly to any one of 100 employees over the next 10-years? Or is harm almost certain to happen to any one of 10 employees in the next 12-months? By ensuring these considerations are part of the risk assessment helps to define the likelihood level.

<table>
<thead>
<tr>
<th>Severity of harm</th>
<th>Severity level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Death or major injury (as defined by RIDDOR)</td>
<td>Major 3</td>
</tr>
<tr>
<td>3 day injury or illness (as defined by RIDDOR)</td>
<td>Serious 2</td>
</tr>
<tr>
<td>All other injuries or illnesses</td>
<td>Slight 1</td>
</tr>
</tbody>
</table>

Risk = Severity x Likelihood
<table>
<thead>
<tr>
<th>Likelihood</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slight 1</td>
<td>Serious 2</td>
</tr>
<tr>
<td>Low 1</td>
<td>Low 1</td>
</tr>
<tr>
<td>Medium 2</td>
<td>Low 2</td>
</tr>
<tr>
<td>High 3</td>
<td>Medium 3</td>
</tr>
</tbody>
</table>

Thus:
- 6-9 High risk
- 3-4 Medium risk
- 1-2 Low risk

A lot of organisations emphasise the risk level by assigning colour codes, such as red for high risks, amber for medium risks, and yellow or green for low risks. Clearly the higher the likelihood and severity, the higher the risk will be. The likelihood is dependent on such factors as the control measures in place and frequency of exposure to the hazard. The severity will depend on the magnitude of the hazard, e.g. voltage, toxicity, etc.

6. **Carry out the assessments**

When conducting a risk assessment, score the risk potential with your existing controls in place. This will help to identify whether your existing controls are sufficient. Record all the findings on the risk assessment record. Decide what action is needed to either eliminate any hazards or reduce them to a more acceptable level. Then re-do the risk assessment as if the new controls are now in place, this helps check that the new controls are suitable and sufficient, and also provides an opportunity to see if the new controls have imported a hazard that was not previously there.

7. **Carry out any action**

The level of the risk potential will determine how quickly you need to take any action. In extreme circumstances this may mean stopping a machine or operation until the measures have been put in place. Consider if hazards can be reduced by such measures as:

- elimination of the task or process (e.g. changing from manual to automated)
- substitution (e.g. using less hazardous materials or tools/equipment)
- control the risk at source (e.g. having suppliers use lighter materials or supply in smaller pack sizes)
- changing the environment
- providing warning signs
- giving operators further training
- moving a machine or job
- modifying the machine by installing more guards or emergency stop buttons
- issuing personal protective equipment – a last resort, as it only protects the individual
- changing the operator – accident prone individuals, and high hazard equipment should be kept apart.

When changes have been made, carry out a follow up assessment to check that they have proved effective.

8. **Review and revise your assessment**

Once a risk assessment has been carried out you will need to determine how long it will be before it is carried out again. This will depend on the risk potential but can also be influenced by the factors listed in action point 1. It is important to ensure that all employees are made aware of the risk assessments and all findings are incorporated into any Health and Safety training programme. As a measure of success you can evaluate the improvement by the number and type of accidents and near misses / near-hits before and after carrying out the assessments. Remember that a risk assessment programme should be pro-active, not reactive, and properly managed will give long term benefits to every organisation.
Following a series of risk assessments accident figures should decline, however, as risk assessments involve staff, and generally lead to an increased health and safety culture, is it likely that near-miss / near-hit reports will increase as employees feel that their reporting leads to a better working environment. This should be applauded and encouraged as it grows the culture, and helps find the tasks and processes that would benefit from being risk assessed again.

Whenever there are advances in related technology then these may also be used as a prompt for re-visiting a risk assessment. Incorporation of new technology, and adaptation to new technology, are drivers in growing an organisation, and should also be drivers for increased health and safety management.

**Managers should avoid**

- thinking of it as a one-off assessment - action must be taken on the results, reviewed and updated regularly
- ignoring any risk as being too small
- over complicating the process
- forgetting to keep written documentation of the assessment
- failing to provide information, instruction or training
- thinking PPE is effective.

**National Occupational Standards for Management and Leadership**

This checklist has relevance to the following standards:

E: Using resources, units 2, 3

**Additional resources**

**Books**

*Employment law and occupational health a practical handbook*, Joan Lewis
Chichester: Wiley, 2010

*Health and safety at work An essential guide for managers*, Jeremy Stranks
London: Kogan Page, 2010

*The risk management of safety and dependability a guide for directors managers and engineers*, Wong W


*Health and safety for small businesses*, Tom O'Reilly

*Health and safety issues*, Geoffrey Holgate
London: LexisNexis, Tolley, 2008

*Leading health and safety at work: leadership actions for directors and board members*, The Institute of Directors and Health and Safety Executive
Sudbury: HSE Books, 2007

This is a selection of books available for loan to members from CMI’s library. More information at: [www.managers.org.uk/library](http://www.managers.org.uk/library)
Organisations

Health and Safety Executive, Rose Court, 2 Southwark Bridge, London SE1 9HS
HSE Infoline tel: 0845 345 0055 Web: www.hse.gov.uk

Royal Society for the Prevention of Accidents, RoSPA House, Edgbaston Park, 353 Bristol Road,
Birmingham B5 7ST
Tel: 0121 248 2000 Web: www.rospa.co.uk

British Safety Council, 70 Chancellor's Road, London W6 9RS
Tel: 020 8741 1231 www.britishsafetycouncil.org

Institution of Occupational Safety and Health, The Grange, Highfield Drive, Wigston, Leicester, LE18 1NN
Tel: 0116 257 3100 Web: www.iosh.co.uk

Related checklists

Health and safety fire precautions planning (184)
Health and safety managing the process (157)

Internet resources

BusinessLink
http://www.businesslink.gov.uk/bdotg/action/layer?topicld=1074409568
An overview of the legal procedure and practical process of risk assessment.

Health and Safety Executive
http://www.hse.gov.uk/risk/
Practical information on risk assessment.

HSE guide to risk assessment - five steps to risk assessment
www.hse.gov.uk/pubns/indg163.pdf

HSE Podcast - Health and safety Mad simple
Free audio and video clips that can be accessed online, or downloaded

RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences),
www.riddor.gov.uk
Incident Contact Centre launched by the HSE. Provides information on RIDDOR Regulations 1995 and has
information on how to report accidents, diseases and dangerous occurrences.

This is one of many checklists available to all CMI members. For more information please contact
t: 01536 204222 e: enquiries@managers.org.uk w: www.managers.org.uk

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