

ASSESSING HAZARD AND RISK

Introduction

This document has been produced to provide simple guidance on techniques that will be appropriate to businesses on the Isle of Man. It builds on the “First Steps” and “Risk Assessment Basics” document and is aimed at those who want to take a more thorough approach to risk assessment. Whilst there are many more complicated techniques, the structured qualitative described in this leaflet provides a useful means of making a judgement about whether or not workplace hazards are being properly controlled and for driving forward a health and safety improvement programme. It is not likely that those employing less than 5 people will need to follow this guidance.

Remember that any risk assessment is a way of finding out what in your work could cause harm to people and deciding whether or not you have done enough to protect them. The purpose of a risk assessment is to make sure that nobody is hurt or made ill as a result of work, so feel free to use any approach to assessment that lets you do this properly. If you have decided that the simpler approaches described in the other 2 leaflets are not for you, you may want to complete your assessment by looking at all the hazards in your workplace and deciding what level of risk they pose. A step-by-step approach is described in this leaflet. It involves looking for hazards, seeing who could be harmed, identifying existing controls and deciding if these are adequate.

This leaflet talks about “hazard” and “risk”. These terms mean no more than:

Hazard - anything that can cause harm eg chemicals, electricity, working from ladders;

Risk – the likelihood that harm (an accident or injury) will occur.

What is the legal requirement for risk assessment on the Isle of Man?

The Management of Health and Safety at Work Regulations 2003 come into force on 1st October 2004. Regulation 3 requires employers to make an assessment of the risks your employees and other people are exposed to as result of your work. Self-employed people are required to do the same, but must consider themselves in place of employees. The assessment has to be made so that you can make a clear conclusion as to whether or not you are complying with the Island’s health and safety law. So long as it allows you to do this properly, it will be “suitable and sufficient”.

Regulation 4 requires you to have arrangements to make sure that the preventative and protective measures are properly implemented in the workplace. It refers to the need to plan, organise, control monitor and review the preventative and protective measures. Regulations 9 and 10 require you to share your assessment conclusions with your employees and with any others who may be at work in your workplace, such as contractors.

Your assessment has to make reference to Regulation 17 and its schedule so that you can be sure that you have put proper fire safety measures in place. If you employ anyone under 18 years of age you will need to make sure that your assessment covers the specific requirements listed in Regulation 3(5) and also consider Regulation 16.

Who should undertake these assessments?

Most of the duties imposed by the Isle of Man's health and safety legislation fall upon employers. There are additional duties for the self-employed and for employees, but in the most cases employers will be responsible for making sure the assessment is done. Employers can delegate to their employees the responsibility for doing the risk assessment, but the duties imposed by the Island's health and safety legislation remain with the employer.

You can ask the competent person you have nominated under Regulation 6 or other employees to do the work for you, but remember that the employer remains responsible for making sure that the assessment is done properly. You may wish to employ someone from outside your business. There is an HSWI leaflet on things to consider when choosing someone to help you.

Where do I begin?

Before conducting an assessment of the risks of your workplace, it is a good idea to spend some time thinking about the operations and considering the size of the task ahead. It may well be that you want to involve your employees in the assessment: after all, they often have the best knowledge as to how things are done on a day-to-day basis. Similarly, any improvements or changes you recommend are likely to affect your employers, and involving them from the start should make it more likely that any changes are quickly and thoroughly put into effect.

For most workplaces, it would be prudent to divide the activities into a number of categories. Examples might be:

- Separate work areas, (offices, stores, yard etc)
- Stages in the production process (machining, assembling, despatch)
- Defined tasks (scaffolding, excavation, driving)

Looking around for hazards

A hazard is anything that has the potential to harm any person. A simple example would be the blade of a circular sawing machine, which could cause severe cuts to anyone coming into contact with it. It is important that you look only for hazards that you could reasonably expect to result in significant harm under the conditions in your workplace. This means that you should ignore things that could only ever result in trivial injuries and things that no one could reasonably foresee.

Common hazards include electricity, falling from heights, tripping, or being struck by a moving vehicle. A simple way of identifying hazards is to use a hazard checklist. An example is given at the end of this document.

As well as simply looking for hazards, you can gain useful information about hazards that may exist in your workplace in other ways. Information can be found by checking accident records, by talking to employees and by reading manufacturer's manuals or data sheets.

Deciding who could be hurt

The assessment process is designed to help ensure that people are not hurt. You need to identify who could be hurt by any of the hazards you have spotted, whether or not they are employed by you. It should not be difficult to identify who is regularly exposed to the hazards, such as the machine operators or site employees, but you should not forget such groups as visitors, contractors, maintenance staff and members of the public if there is any chance they could be hurt by the hazards associated with your activities.

What about existing measures?

In reality, there will be very few hazards in your workplace that are not subject to some form of control already. For example, the circular saw blade mentioned above will most likely be fitted with a guard to protect operators. In other circumstances, you may have provided covers, barriers, training or personal protective equipment to ensure that people can work in safety. You should identify all the precautions that have already been taken, but should take care to do this honestly. There is no value whatsoever in claiming that a control exists when you know that it is not used in practice.

Calculating the risk

You are now in the position to identify what the level of risk is in your workplace and to then decide if this leaves you with an acceptable standard of health and safety.

A risk is the likelihood that someone will be harmed to some extent by the hazard. In order to evaluate the risk associated with the hazard, you should consider both the severity of the harm that could result and the likelihood of that harm actually occurring.

When considering severity, you should ask yourself: “realistically, what is the worst that could happen?” It could be death or permanent incapacity, a major injury or a minor injury requiring first aid treatment only. Similarly, when considering the likelihood that the harm will be realised, you should estimate the probability of the event actually occurring. It might, for example, be categorised as likely, possible or unlikely.

Again, it is important that you check to ensure that the controls you have identified really are being used in the workplace before you rely on them as part of your assessment. Once you have identified the likelihood and severity of injury, you can decide if a risk is acceptable and what priority should be given to addressing any unacceptable risks.

In the example assessment format given at the end of this document, conclusions as to the probability and severity are given value between 1 and 3, and a conclusion as to the level of risk is reached by adding these two figures. So a hazard which was likely to cause death would be given values of 3 and 3 giving a total of 6: an intolerable level of risk. However, something that was unlikely to cause a first aid injury would be given values of 1 and 1, giving a total value of 2, which equates to a trivial level of risk. This scoring approach allows you to identify what items need to be addressed first if levels of risk are to be reduced.

Planning for action

Where unacceptable risks are identified, you should decide how you are going to act to ensure that these are reduced to an acceptable level. If you find that something needs to be done to reduce the risks to the lowest level that is reasonably practicable, you will need to use the following hierarchy of options to determine the best approach:

1. Try to get rid of the hazard altogether. For example, you may be able to eliminate the need for the circular saw by buying material of the right length. If this is not reasonably practicable.
2. Try to substitute one process with something that is less hazardous: a good example would be changing from paint with a high solvent level to one with a low solvent level.
3. If this is not reasonably practicable, you should consider engineering controls. These are physical measures such as guards, fences, noise enclosures and the like.

All of the options we have discussed so far protect everybody that might be exposed to the hazards. If it is not reasonably practicable to do any of these things then you may consider the following options.

4. Create safe systems of work such that everyone who does a task is following a planned and established method that minimises the risks. Systems of work will need to be implemented in such a way that employees are trained, instructed and supervised. In many cases, a system of work will need to be backed up by written procedures that are known and understood by those affected.
5. If, having tried all of the above options, some level of risk remains, you should resort to personal protective equipment. Personal protective equipment is the last option on this list for a number of reasons. Most importantly, it only protects the individual who is wearing it. Additionally, certain types of personal protective equipment can be very difficult to fit to the individual, may be worn carelessly or not at all and may in the long term give rise to huge costs in terms of replacement, supervision and discipline issues.

Recording your findings

It is important that you make a clear record of the assessment to show what conclusions you have reached. Using the form at the end of this document is one way of doing this. It is straightforward to use and has the additional benefit of allowing you to show who is expected to take charge of any improvements needed and when they should do it by. Once the assessments are recorded, they should be reviewed and revised to keep them up to date. It's a good idea to revisit the assessments every year or so, but it is more important that the assessments are updated when new hazards are brought into the workplace, when the processes you use in your work are changed or when an accident or near miss causes you to reconsider the conclusions you reached when doing your initial assessments.

Is training available locally?

Whilst this guidance should be enough to get you started, those looking to arrange for formal training should contact the Department of Trade and Industry's Training Services Division at the Hills Meadow Training Centre (telephone no: 687150). A number of courses on risk assessment are run each year and a number of more general health and safety courses include sessions on the topic. Those working in the public sector are advised to contact Public Service Training, Employee Development (tel: 685724) to enquire as to what training is currently available.

Getting further help

There are a large number of publications available on risk assessment. The Health and Safety at Work Inspectorate keep a number of leaflets and guidance documents to support the information contained in this document. In addition, many employers' organisations provide guidance based on the hazards to be found in their industries. Certain bodies also provide examples of completed assessments that you may find could be readily adapted to your own workplace.

The information in this document is current as of August 2004 and has been prepared by the Health and Safety at Work Inspectorate. This document replaces the HSWI guidance entitled "Practical Risk Assessment" but does not affect any existing enforcement procedures. Copies of the document and the example proformas are available in electronic format from the Inspectorate.

Further guidance on Isle of Man health and safety legislation is available from the Health and Safety at Work Inspectorate, Murray House, Mount Havelock, Douglas, IM1 2SF, telephone 685952 or email WorkSafe@dlge.gov.im or website www.gov.im/dlge.

Hazard Checklist

1. Mechanical

Entanglement
Friction/abrasion
Cutting
Shearing
Stabbing/puncturing
Impact
Crushing/trapping
Ejection

2. Transport

Site transport
Deliveries
Visitors

3. Access

Slips, trips and falls
Falling or moving
objects
Obstructions or
projections
Confined spaces
Work near/above water

4. Handling/lifting

Manual
Mechanical

5. Electricity

6. Chemicals

Toxic
Irritant
Sensitising
Flammable
Corrosive
Explosive
Carcinogenic

7. Fire and Explosion

8. Particles and dust

Inhalation
Ingestion
Abrasion of skin or eye

9. Radiation

Ionising
Non-ionising

10. Biological

11. Workplace factors

Noise
Vibration
Light
Humidity
Ventilation
Temperature
Pressure/vacuum

12. Organisational

Lone working
Violence

HEALTH AND SAFETY AT WORK INSPECTORATE
INFORMATION DOCUMENT: RISK ASSESSMENT

RISK ASSESSMENT RECORD

Company.....

Date.....

Process/Task/Area

Completed by.....

Review date.....

Hazard Description	Who could be harmed? (Operator/Other Operators/Visitors)	Present Controls	Risk Rating with current controls			Further work required to give acceptable level of risk	Action Allocation	Completion Date
			L	S	RC			

LIKELIHOOD RATING

Low (1) = Unlikely
Medium (2) = Possible
High (3) = Likely

SEVERITY RATING

Low (1) = First Aid Injury
Medium (2) = Major injury or over 3 days off work
High (3) = Permanent incapacity or death

RISK CONCLUSION (Likelihood + Severity)

2 = Trivial Risk 5 = Substantial Risk
3 = Acceptable Risk 6 = Intolerable Risk
4 = Moderate Risk