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Risk Assessment
Practical Application

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Did you know that ...

As a rule employers and the self-employed are required to assess the risks created by their undertaking for the purpose of identifying the measures they need to have in place to comply with their duties under health and safety legislation.

Principles

Employers can delegate assessments to a responsible employee, safety representative or safety officer, but the legal duty remains with the employer.

Very specialised risks such as fire, major hazards, ionising radiation, genetic manipulation etc are outside the scope of this paper.

Risk assessment for a small company with few or simple hazards should be a straightforward task based on sound judgement On the other hand, a large complex chemical process plant may need to expand the assessment into a safety case incorporating quantified risk assessment (QRA) and other risk assessment techniques.

There are a number of practical steps to follow when carrying out risk assessments:

First - identify the hazards

Observe what actually happens in the workplace and then identify the hazards which can reasonably be expected to be present. Attention should be directed to significant hazards which can result in serious harm or affect a number of people. Employees or their representatives may be aware of hazards which may not be immediately obvious to the assessor and they should be asked for their views. Regulations specific to certain industries may be helpful in identifying hazards.

Second - identify who can be harmed by hazards

All employees, whether in groups or singularly, should be taken into consideration during the assessment, including people who may not be present at the workplace at all times, such as cleaners, visitors, contractors, maintenance personnel, etc. Members of the public should also be included if there is a chance they may be injured in workplace activities. Groups of workers who may be particularly at risk should also be identified, such as newcomers to the company, young, inexperienced people and disabled staff.

Third - evaluate the risks arising from the hazards and decide if the precautions already in place are adequate

The intention here is to assess the likelihood, the chance, that harm from a particular hazard may happen, taking into account the precautions already in place. The risk may vary from nil where there are no hazards (with no need to consider any precautions) to a potential high risk process, such as hand feeding a power press where the precautions need to be substantial and are enforced by PUWER 1998. Here the hazard is trapping of the operator's hand(s) between closing tools and the risk is high, because of frequency of access (say 400 times per hour) and the potential for severity of injury i.e. amputation of fingers or hands. If the evaluation reveals that existing precautions are inadequate, determine if the hazard can be eliminated. If this is not possible decide how the risks can be controlled so that the possibility of harm being done to people is minimised. The intention should be to reduce risks to a low level by adding, if necessary, to the precautions already in place. Begin by checking that all statutory obligations are being met, for instance, there are legal requirements for guards to be fitted to machines to prevent access to dangerous moving parts of machinery. Then determine if published guidance on industry practice is being followed - membership of a relevant trade association normally gives access to this type of information. Finally, as there is a legal obligations to do so, decide if the precautions taken to keep the workplace safe are reasonably practicable.

Fourth - record significant findings

If 5 or more employees are employed, significant findings of the assessment must be recorded by writing them down. Details on how the assessment was made are unnecessary, provided it can be shown that a proper assessment was carried out, all the significant hazards and groups of people identified as being affected by these hazards were taken into account, the precautions were reasonably practicable and any residual risk was low. In simple terms, show that the precautions are reasonable and that a proper check was made.

Written documents should be kept for future reference as they may help to demonstrate that legal obligations have been met.

Fifth - review assessment and revise if necessary

New processes or procedures introduced into the workplace can lead to possible new hazards and significant changes in workplace activities need to be included in the assessment. In any case, a review of all assessments should be carried out at periodic intervals to keep them up to date with current practice.

UK legislation and implementation

Under the Management of Health and Safety at Work Regulations 1999, employers and the self-employed are required to assess the risks created by their undertaking for the purposes of identifying the measures they need to have in place to comply with their duties under health and safety legislation.

Further information

Further information on risk assessment, legal requirements and standards can be found in the following HSE publications. The HSE also has a series of web pages on risk management at www.hse.gov.uk/risk/

- Risk Assessment INDG 163(rev4), http://www.hse.gov.uk/pubns/indg163.pdf
- Managing for health and safety http://www.hse.gov.uk/managing/index.htm

available from:

HSE Books
PO Box 1999
Sudbury
Suffolk CO10 6FS
Tel: 01787 881165

The IET is unable to provide further information on this topic. Please contact the HSE. http://www.hse.gov.uk/

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