

Simple Risk Assessment

BHSEA Meeting 9th May 2011 Tim Prestage CMIOSH. Safety Engineer

Object of this session

 To discuss and demonstrate a user friendly and inexpensive way for small to medium sized businesses with few resources to ensure they have identified their work activity hazards and specified suitable and sufficient control measures to eliminate or reduce the residual risks.

Programme Outline

- Historical Background.
- 5 Steps to Risk Assessment.
- Problems with existing risk assessments.
- Simple Risk Assessment System.
- Alternative methods of using Generic Risk Assessments.
- Risk Assessment Video (Safety Media).

Current Cost of Accidents (HSE)

	Human cost	Lost output	Resource costs	Total
Fatality	£991,200	£520,700	£900	£1,500,000
Major injury	£18,400	£16,200	£5,800	£40,500
Other reportable injury (O3D)	£ 2,700	£2,600	£500	£5,800
Minor injury	£200	£100	£50	£350
Average case of ill health	£6,700	£2,700	£800	£10,100

Source: http://www.hse.gov.uk/economics/eauappraisal.htm

Accidents in Factories 1968

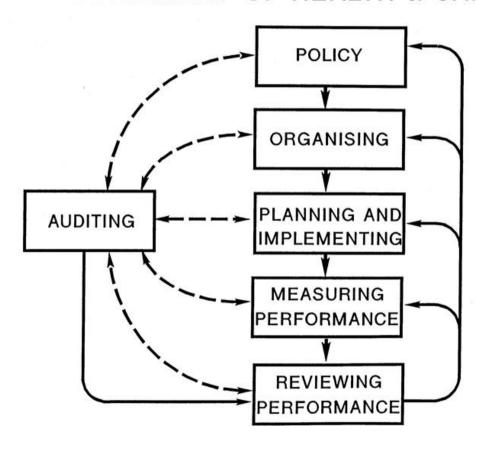
Scope for Prevention.

- Total in Sample: 621.
- Breaches of the Law: 114.
- Reasonably Preventable: 308.
- No reasonable precautions available: 313.

Source: Department of Employment, Accidents in Factories. HMSO.

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THE MANAGEMENT OF HEALTH & SAFETY



5 Steps to Risk Assessment

- Identify the hazards
- Decide who might be harmed and how
- Evaluate the risks and decide on the precautions you need to take
- Record your findings and implement them
- Review your assessment and update it if necessary

RA's

Problems with existing
Risk Assessments (RA's)

Problems with existing RA's

- Disparity between Construction and Manufacturing RA standards.
- Manufacturers and retail businesses have not caught up.
- Publishers providing expensive nonspecific RA's.
- RA's produced by people who do not have sufficient knowledge of their own risks or the H & S standards that apply and are not familiar with risk assessments.

Problems with RA's 2

- At least 40% of manufacturing and distributive companies visited do not have any risk assessments at all.
- HSE examples are technically good but need modifying to the employers needs and are not interactive so that you can change them.

Problems with RA's

- HSE Method is too labour intensive and too complex for many employers.
- Significant numbers of employers cannot write English it is not their first language.



Example risk assessment for a warehouse

Setting the scene

The warehouse manager carried out a risk assessment of the warehouse. The warehouse employed 12 staff, some were part of a union.

How was the risk assessment done?

The manager followed the guidance in Five steps to risk assessment (www.hse.gov.uk/pubns/indg163.pdf).

- 1 To identify the hazards, the manager:
- read the Essentials of health and safety at work publication to learn where hazards can occur (www.hsebooks.com – ISBN 978 0 7176 6179 4);
- walked around the warehouse, noting activities that might pose a risk and taking into consideration what she learnt from HSE's guidance;
- talked through the issues with the union safety representative and asked about concerns that staff had on health and safety;
- talked to supervisors to learn from their detailed knowledge of particular jobs and areas; and
- looked at the accident book to gather information on past problems.
- 2 The manager then wrote down who could be harmed by the hazards and how.

- 3 For each hazard identified, the manager recorded what controls, if any, were in place to manage these. She then compared these controls to the good practice guidance laid out in Warehousing and storage: A guide to health and safety (www.hsebooks.com ISBN 978-0-7176-6225-5) and Essentials of health and safety at work publications. Where existing controls did not meet good practice, the manager wrote down what further actions were needed to manage the risk.
- 4 Putting the findings of the risk assessment into practice, the warehouse manager decided who was responsible for implementing the further actions and when it should be done. She wrote this down and when each action was completed it was ticked off and the date recorded.
- 5 The warehouse manager discussed the findings with the safety representative. They decided to review and update the assessment at least annually, or at any time when major changes to the workplace occurred. The warehouse manager gave out copies of the risk assessment to all members of staff.

Important reminder

This example risk assessment shows the kind of approach a small business can take. Use it as a guide to think through some of the hazards in your business and the steps you need to take to control the risks. Please note that it is not a generic risk assessment that you can just put your company name on and adopt wholesale without any thought. This would not satisfy the law – and would not be effective in protecting people.

Every business is different – you need to think through the hazards and controls required in your business for yourself.

6 pages. 1800 word count

Solutions for Employers

Quickest Solution

• A Generic Risk Assessment for the work activity that Employers can edit and make specific.

Quick and Specific Solution

• A simple structured checklist where Employers can tick or circle the relevant factors and easily identify the hazards, and select suitable and sufficient control measures.

Solutions for Employers

Simple Risk Assessment.

Features:

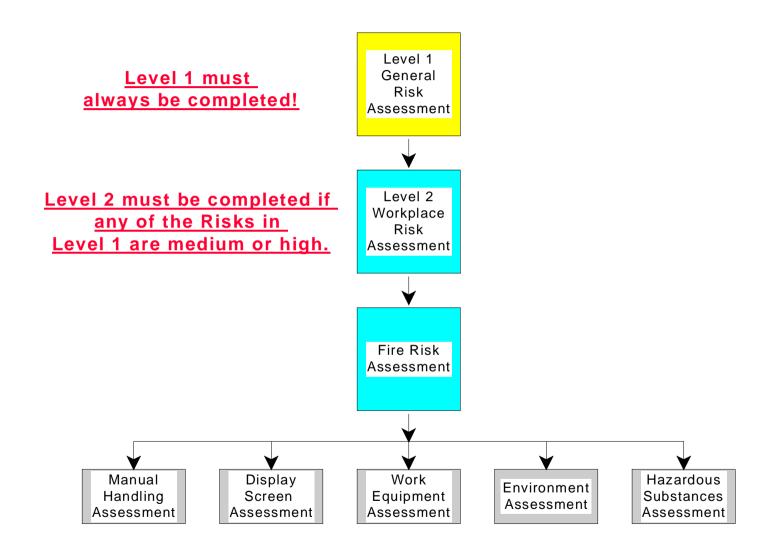
- Suite of blank Risk Assessments.
- General Level 1 to Specific Level 2.
- Foundations of an Integrated Risk Management System.

Solutions for Employers

Basic Suite comprises:

- Level 1 Risk
 Assessment Form.
- Level 2 Workplace Risks.
- Level 2 Work Equipment Risks.
- Level 2 Manual Handling Risks.

- Level 2 Hazardous Substances Risks.
- Level 2 Display
 Screen Equip Risks.
- Level 2 Fire Risks.
- Level 2 Environmental Risks.
- Level 2 Other Risks (one offs).



Work Activity Risk Assessment

Company:	Any Company Ltd	Risk:	Medium
2333050	Compacting Cardboard in Bailing Machine	Ref No:	Gen009
Activity: Compacting Cardboard in Baling Machin		Date:	17 March 2011
	Work Activity Risk Asse	ssment	700
. HAZARD	3		
4 Date	contributed by they court		
	crushed by the ram. hit by material ejected from the machine.		
	entangled in Ses, and string being compressed insid	e the machine.	
	drawn into the machine when it inadvertently starts a		ing operations.
2. RISKS			
	yees loading, operating, or working near refuse com; a injury and death, Providing the control measures di		
	s injury and death. Providing the control measures of s injury or death is very low. However the risks of out		
	and remains medium.	u, upremia diru s	resident mental facility
	The second secon		
3. PERSON	S EXPOSED TO THE HAZARD		
⊳ En	nplayees, Young Persons, Contractors and Visitors.		
4. INFORMA	TION TRAINING AND INSTRUCTION		
Employane et	hould take the following steps to protect themselves	denon initial cub	on operation or underso
	ing and being equipment	non injuly wi	ien operating or working
	med the power from the machine.		
2 Isolate	the power by locking the disconnect switch.		
3. Tag (li	abel) the disconnect switch to notify others that the p	ower must reme	ain off.
4. Mecha chamb	mically block any ram that has the potential to n	rove before ac	cessing the compacting
	quipment to ensure power has been de-energized be	fore beginning	work.
	all fellow Employees before activating power to the		
5 MANAGE	RIAL CONTROLS AND PROCEDURES		
D. MUTUTELLE	THE CONTINUE AND FROM LOCAL	no-contract	21 124
	ould take the following steps to reduce the risk of wo		
	ish procedures for periodic inspection and maintenar		
	in equipment guards according to the manufacturer's		
	for proper operation of all interlocks and emergency		
	Employees to recognize compactor and baler hazard nent standard procedures for dealing safely with met		
	e sefe access to feed openings for clearing material		
	it hazardous work by Employees under the age 18.	a no.	
	are common occurrences in compacting and balling in	achines Empl	tremelomi bil sode stevo
	and procedures for dealing safety with common events		
	train their workers in these safe work procedures an		
21 Commission	and the state of t	with a set of the second	A CONTRACTOR OF CASE

 Employers shall provide workers with instruction and training in safe work methods before essigning them to operate, clean, service, maintain, or repair the equipment.

these devices are fully functional.

10. The employer shall inspect safety interlocks, saftches, and other protective devices to ensure that they are not disabled or bypassed. The employer shall not permit operation of the baler unless.

Work Activity Risk Assessment

6. PHYSICAL CONTROLS

Compactors and baters should be equipped with machine guards and safety interlocks to prevent worker injury, and interlocks should be designed so they are not easily bypassed. All machines should be equipped with safety interlock devices that will immediately stop the machine should a worker attempt to gain access to a ram or the travel zone of the ram while the machine is operating. Currently menufactured compactors and baters conform to BSI standards that specify guards to dangerous parts of the machine to prevent Employees from reaching into an operating machine and interlocked control systems that interrupt or reverse the ram's motion if the compression chamber doors are opened.

7. PERSONAL PROTECTIVE EQUIPMENT

- Safety shoes always.
- Overalls always
- 3. Leather or knifted safety gloves always.

8. LEGAL REQUIREMENTS

> Provision and Use of Work Equipment Regulations 1998

9. GUIDANCE FROM THE HSE

- Waste industry safety and health: Reducing the risks Leaflet INDG359 HSE 2002 Web only: www.hse.gov.uk/pubns/indg359.pdf
- Guidance for the recovered paper industry Booklet INDG392 HSE Books 2004 (single copy free or priced packs of 5 ISBN 978 0 7176 2807 0) Web version: www.hse.gov.uk/pubns/indg392.pdf
- Guidance on permit to work systems: A guide for the petroleum, chemical and allied industries. HSG250 HSE Books 2005 ISBN 978-0-7176-2943-5.
- Supply of Machinery (Safety) Regulations 1992 SI 1992/3073 The Stationery Office 1992 ISBN 978 0-11-025719-8
- BS EN 294: 1992 Safety of machinery. Safety cletances to prevent danger zones being reached by the upper limbs British Standards Institution ISBN 978-0-580-21142-3.
- BS EN 1088: 1996 Safety of machinery. Interlocking devices associated with guards. Principles for design and selection British Standards Institution ISBN 978-0-580-25626-8.

10. SPECIFIC ASSESSMENT

Location:	Person in	charge:	
Date:	Job Title:		
Are precautions and controls adequate, and do they meet the standards described above?		Yes/No or Comment	
Recommended improvements:	CV.	12	
All improvements completed			Yes/No
All improvements completed Target date for completion. Target date for review.		Date	Yes/No

2 pages 10 Sections including Specific Assessment £5 each from "timprestage.com". Up to 40 assessments available

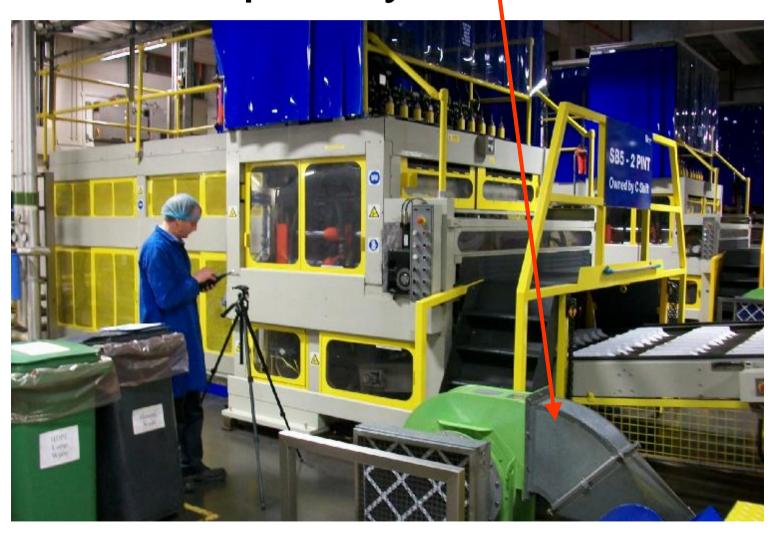
Step 1 Hazards

- Not as easy as it sounds!
- Not all hazards are obvious.
- Some only occur during maintenance or during emergencies.
- Some are not detected by our five senses.
- Some are new and not previously thought of as hazardous.

What is hazardous here?



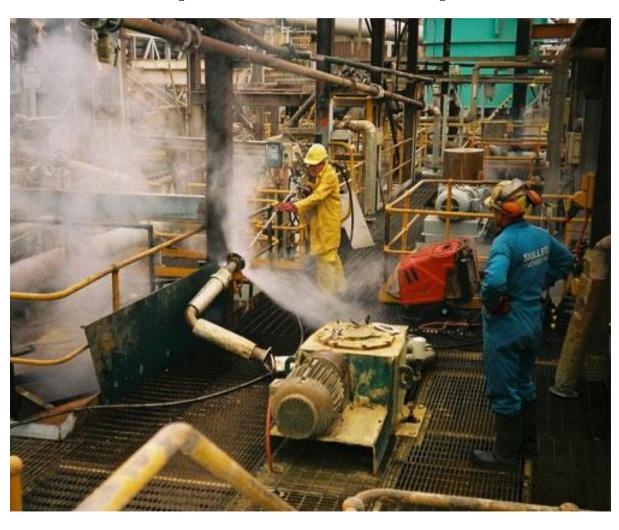
Low Frequency Noise 31.5 Hz



London Bell Foundry



Complex Workplace.



Low Risk Warehouses?



Practical exercise

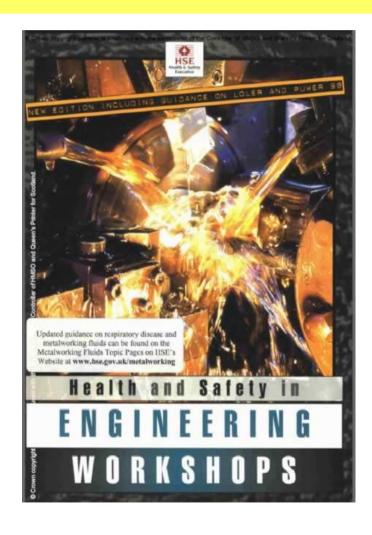
- Let us try the Simple Risk Assessment concept?
- First Level 1 a General Risk Assessment.
- Observe the Hazards Warehouse picture.
- 14 employees
- Some visitors
- 50 hour week.

Use Guidance for Controls

Trustworthy sources:

- Use HSE or Trade Association Guidance.
- HSE and CITB are the longest established.
- OSHA and Worksafe (Australia) also produce good quality guidance.
- OSH New Zealand good guidance.
- CCOHS Canada good quality guidance.

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Do not Rewrite the Book!



Recent Annual Statistics

- 241 people killed at work
- 140,000+ major & over-3-day injuries
- 2.2 million people with work-related illnesses

- 35 million working days lost (5:30)
- Ill health deaths?
- Annual number of Mesothelioma deaths 2,249. (compared with 153 in 1968).

Any Questions?

Simple Risk Assessments

With Questions for Engineering, Construction and Distribution Operations,
Will be available via the BHSEA Website in June 2011.

